FINAL

Remedial Investigation Report
Site 80/166 – Main Post

U. S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey

Directorate of Public Works



January 4, 2005

201 Gibraltar Road, Suite 100
Horsham, Pennsylvania 19044

Contract No. DACA 51-00-D-004
Delivery Order No. 19

U.S. Army, Directorate of Public Works
Planning & Environmental Branch
Attn: IMNE-MON-PWE, 173 Riverside Ave.
Fort Monmouth, NJ 07703

TRANSMITTAL

TO:
Gregory Zalaskus,
Case Manager
NJ DEP
Bureau of Case Management
401 E. State St., 5th Fl, West Wing
PO Box 028
Trenton, NJ 08625-0028
Telephone Number: (609) 984-2065

FROM:
Douglas C. Guenther,
Environmental Protection Specialist
Phone: 732-532-0986;
Fax: 732-532-6263; DSN: 992-0986
E-mail:
Douglas.Guenther@Mail1.Monmouth.Army.mil

DATE:
May 10, 2005

☐ URGENT ☑ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

SUBJECT:

Document Submittal

Enclosed Please Find:

(1) One copy of the *Remedial Action Progress Report, April 2002 through September 2004, Building 699, Main Post Gas Station,* April 2005 prepared by Handex, Inc.

(2) Two copies of the *Remedial Investigation Report, Building 80/166-Main Post,* January 2005, prepared by Versar, Inc.

(3) Two copies of the *Remedial Investigation Report, M-4 Landfill Site,* January 2005, prepared by Versar, Inc.

(4) Two copies of the *Remedial Investigation Report, CW-3A Landfill Site,* January 2005, prepared by Versar, Inc.

(5) Two copies of the *Remedial Investigation Report, CW-6 Former Pesticide Storage Building*, January 2005, prepared by Versar, Inc.

Greg,

For Bldg. 699 RAPR - This is a standard RAPR indicating effective contaminant recovery at this site and the need for continued system operation and ground water monitoring.

Remaining four RIRs – These are no further action requests. We can prioritize these to discuss at future meetings. Additional copies are for John Prendergast.

Any questions let me know.



DOUGLAS C. GUENTHER
Environmental Protection Specialist

United States Army
Fort Monmouth, New Jersey

Remedial Investigation Report
Site 80/166 – Main Post

Fort Monmouth, New Jersey

January 4, 2005

PREPARED BY:



201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044

January 4, 2005

VERSAR PROJECT NO. 4936.119

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
1.0 INTRODUCTION **1-1**
1.1 Objectives 1-1
1.2 Report Organization 1-2
2.0 SITE BACKGROUND AND ENVIRONMENTAL SETTING **2-1**
2.1 Site Location and Description 2-1
2.2 Site Background 2-1
2.2.1 UST Closure and SI Report for Former Building T-80 (BCM, 1998) 2-2
2.2.2 UST Closure and SI Report for Building 166 (ATC, 2000) 2-2
2.2.3 SI Report for Main Post and Charles Wood Areas (Weston, 1995) 2-3
2.3 Current Conditions 2-4
2.4 Environmental Setting 2-4
2.4.1 Regional and Local Geology 2-4
2.4.2 Hydrogeology 2-6
2.4.3 Soils 2-7
2.4.4 Topography and Surface Drainage 2-8
3.0 SITE ACTIVITIES **3-1**
3.1 Well Installation 3-1
3.2 Sample Collection Activities 3-1
3.2.1 Groundwater Sampling Collection Activities 3-1
3.2.2 Geoprobe® Investigation 3-3
3.3 Groundwater Depth Measurements 3-3
3.4 Slug Testing Procedures 3-3
3.5 Sensitive Receptors/Well Search 3-4
4.0 SITE PHYSICAL CHARACTERISTICS **4-1**
4.1 Lithology 4-1
4.2 Groundwater Flow 4-1
4.2.1 Groundwater Flow Direction 4-2
4.2.2 Hydrogeologic Properties 4-2
5.0 SITE CHEMICAL CHARACTERIZATION **5-1**
5.1 Groundwater Sampling Results 5-1
5.1.1 VOCs 5-2
5.1.2 SVOCs 5-2
5.1.3 Pesticides and PCBs 5-2
5.1.4 Metals 5-3
5.2 Geoprobe® Investigation Results 5-4
5.2.1 Geoprobe® Soil Sampling Results 5-4
5.2.2 Geoprobe® Groundwater Sampling Results 5-4
5.3 Contaminants of Concern 5-4
5.4 Aquifer pH and DO 5-7

6.0 CONTAMINANT MIGRATION AND GROUNDWATER USE DESIGNATION 6-1
6.1 Groundwater Model Development 6-1
6.1.1 Conceptual Site Model 6-1
6.1.2 Chlordane Biodegradation Model 6-2
6.1.3 Dissolved Oxygen 6-3
6.1.4 MODFLOW Input Parameters 6-4
6.1.5 MODFLOW Calibration 6-7
6.1.6 MODFLOW Results 6-8
6.2 Sensitive Receptor Survey Results 6-8
6.3 Aquifer Classification 6-9
6.4 Contaminant Migration Summary 6-10
7.0 CONCLUSIONS AND RECOMMENDATIONS 7-1
8.0 REFERENCES 8-1

TABLES

Table 2-1 Well Construction Summary
Table 3-1 Groundwater Sample Collection Summary (April 1997 to January 2001)
Table 3-2 Geoprobe® Investigation Sample Collection Summary
Table 3-3 Groundwater Elevation Summary
Table 4-1 Data for Geologic Cross-Section A-A' (Figure 4-2)
Table 4-2 Data for Geologic Cross-Section A'-A" (Figure 4-3)
Table 4-3 Slug Testing Results Summary
Table 5-1 Groundwater Quality Sampling Results
Table 5-2 Soil Sampling Results from Geoprobe® Investigation
Table 5-3 Groundwater Sampling Results from Geoprobe® Investigation
Table 5-4 Determination of Contaminants of Concern
Table 5-5 Groundwater Sampling Results for Contaminants of Concern
Table 5-6 Aquifer pH and Dissolved Oxygen
Table 6-1 g-Chlordane Biodegradation Model for Well 80-MW2
Table 6-2 MODFLOW Input Parameters
Table 6-3 MODFLOW Results
Table 6-4 Well Search Summary

FIGURES

Figure 2-1	Site Location Map
Figure 2-2	Site Layout
Figure 2-3	Monitoring Well Location Map
Figure 2-4	Former UST Location Map
Figure 2-5	Underground Utilities Location Map
Figure 2-6	Geologic Map of New Jersey
Figure 2-7	Outcrop and Thickness of the Composite Confining Unit
Figure 2-8	Soil Map of Monmouth County, New Jersey
Figure 3-1	Geoprobe® Boring Location Map
Figure 4-1	Geologic Cross-Section Location Map
Figure 4-2	Geologic Cross-Section A-A'
Figure 4-3	Geologic Cross-Section A'-A"
Figure 4-4a	Groundwater Contour Map (Aug 00)
Figure 4-4b	Groundwater Contour Map (27 Oct 00)
Figure 4-4c	Groundwater Contour Map (Jan 01)
Figure 5-1	Groundwater Contaminant Distribution Map
Figure 5-2	Geoprobe® Sample Results
Figure 6-1	Geologic Cross-Section B-B’
Figure 6-2	Predicted g-Chlordane Concentration at 80-MW2
Figure 6-3	MODFLOW Boundaries and Grid
Figure 6-4	Cross Section of MODFLOW Area
Figure 6-5a	Initial MODFLOW Concentration: g-Chlordane
Figure 6-5b	Initial MODFLOW Concentration: Arsenic
Figure 6-5c	Initial MODFLOW Concentration: Lead
Figure 6-6	Flow Directions and Groundwater Elevation Contours
Figure 6-7	MODFLOW Calibration: Calculated Versus Observed Head
Figure 6-8a	Predicted g-Chlordane Concentration: 20 years
Figure 6-8b	Predicted g-Chlordane Concentration Versus Time
Figure 6-9a	Predicted Arsenic Concentration: 20 years
Figure 6-9b	Predicted Arsenic Concentration Versus Time
Figure 6-10a	Predicted Lead Concentration 20 years
Figure 6-10b	Predicted Lead Concentration Versus Time
Figure 6-11	Domestic and Irrigation Wells

APPENDICES

Appendix A	UST Closure and Site Investigation Report for Former Building T-80, (UST No. 90010-06), ATC Associates, Inc., BCM Engineers Division, July 1998
Appendix B	UST Closure and Site Investigation Report, Building 166 (UST No. 90017-17), ATC Associates, Inc., May 2000
Appendix C	Boring Logs and Monitoring Well Construction Records
Appendix D	Site Investigation Report – Main Post and Charles Wood Areas, Fort Monmouth, New Jersey, Roy F. Weston, Inc., December 1995
Appendix E	Current Conditions Site Photographs
Appendix F	Laboratory Data Sheets for Monitoring Well Samples
Appendix G	Laboratory Data Sheets for Geoprobe® Soil and Groundwater Samples
Appendix H	Slug Test Analyses and Raw Data
Appendix I	Sensitive Receptor Survey
Appendix J	Well Survey and Well Search Summary

EXECUTIVE SUMMARY

VERSAR, Inc. (Versar) has been contracted by the United States (U.S.) Army Garrison, Fort Monmouth (Fort Monmouth), Directorate of Public Works (DPW), Fort Monmouth, New Jersey to prepare a Remedial Investigation Report (RIR) to document groundwater and surface water conditions at Site 80/166 located in the Main Post Area of Fort Monmouth, New Jersey. This report addresses the remedial investigation activities performed at this site to investigate groundwater conditions from April 1997 through August 2001.

Site 80/166 is located in the eastern part of the Main Post at Fort Monmouth, north of Riverside Avenue and south of Building 166. Site 80/166 is located approximately 500 feet northwest of Oceanport Creek. Two Underground Storage Tank (UST) closures have been performed at Site 80/166 as part of the DPW's UST management program. The groundwater monitoring program associated with the DPW's UST management program includes six monitoring wells at Site 80/166 that were installed in September 1994 and July 2000.

The *UST Closure and Site Investigation Report for Former Building T-80, NJDEP Registration No. 090010-06*, prepared by ATC Associates, BCM Division (ATC) for the DPW, July 1998, documents the removal of one single-walled, steel UST located immediately north of former Building T-80. This UST was cleaned, excavated and disposed of in accordance with New Jersey Department of Environmental Protection (NJDEP) requirements. In addition to the UST removal, approximately 56 cubic yards of potentially contaminated soil was removed and disposed offsite. Six post-excavation samples were collected and analyzed for Total Petroleum Hydrocarbons (TPHC). All samples contained either non-detectable concentrations of contaminants or detections at concentrations below NJDEP cleanup criteria.

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well was installed at the former Building T-80 area. On May 19, 1995 and June 13, 1995, monitoring well 80-MW1 was sampled and analyzed for volatile organic compounds (VOCs) plus 10 Tentatively Identified Compounds (TICs) and semi-volatile organic compounds (SVOCs) plus 15 TICs. One VOC, benzene, was detected in both rounds at concentrations exceeding the NJDEP Groundwater Quality Criteria (GWQC). No other VOCs or SVOCs were detected in these two groundwater samples at concentrations exceeding the NJDEP GWQC. No product or sheen was observed in well 80-MW1 during either of the sampling rounds.

The *UST Closure and Site Investigation Report, Building 166, UST No. 90017-17*, prepared by ATC, May 2000, documents the removal of one UST located under the pavement approximately 20 feet west of the southwest corner of Building 80/166. The DPW closed UST No. 90017-17. Stained soils were observed in the excavation and organic vapors were detected with an organic vapor analyzer (OVA). Soil screening was also conducted along the former UST piping. No contamination was observed anywhere

along the piping length. Based on visual observations, approximately 24 cubic yards of potentially contaminated soil was excavated and disposed offsite during the UST closure. Nine post-excavation soil samples were collected from nine locations along the sidewalls of the UST excavation. Following removal of the fuel lines (on the same date of the tank closure), one additional post-excavation sample was collected along the former piping length, which was approximately 10 feet long. These ten post-excavation soil samples were analyzed for TPHC. TPHC was detected in each of the ten samples below the NJDEP cleanup criteria.

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well was installed southwest of Building 166. Monitoring well 166-MW1 was sampled in two sampling rounds, and the samples were analyzed for VOCs plus 10 TICs and SVOCs plus 15 TICs. No VOCs or SVOCs were detected in these two groundwater samples at concentrations exceeding the NJDEP GWQC. No product or sheen was observed in well 166-MW1 during either of the sampling rounds.

Roy F. Weston, Inc. (Weston) conducted soil sampling, monitoring well installation and sampling and geophysical surveying as part of an SI of the Fort Monmouth military installation. Weston established background concentrations for soil and groundwater for the Fort Monmouth installation, as reported in the Weston SI Report (1995).

As presented in the Weston SI Report, several natural and anthropogenic factors contribute to the wide range in concentrations of metals in soils, which further impact the concentration of metals in groundwater. A low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of entrained sediments on the dissolved phase metals concentrations at Fort Monmouth.

Fort Monmouth DPW has conducted a Remedial Investigation (RI), including a groundwater sampling program, to define the areal extent of potential pollutants and evaluate impacts to groundwater in the vicinity of Site 80/166. Remedial investigation activities were performed from April 1997 and continued through August 2001.

A total of six monitoring wells comprise the quarterly groundwater monitoring program conducted by the DPW. Two of the six wells were installed in September 1994 during UST closures and site investigations. The remaining four wells were installed by the DPW on July 24, 2000. The locations of these four wells were strategically selected by the DPW to monitor possible contaminants released into the groundwater due to the former USTs located at Site 80/166.

Monitoring wells 80-MW1, 80-MW2, 80-MW3, 80-MW4, 80-MW5 and 166-MW1 were sampled during 17 quarterly groundwater sampling rounds and two low-flow rounds. The groundwater samples were analyzed for VOCs plus 15 TICs, SVOCs plus 15 TICs, pesticides, polychlorinated biphenyls (PCBs) and Target Analyte List (TAL) metals. During 19 quarterly sampling events, one VOC, four pesticides and eight TAL metals were detected in groundwater samples at concentrations above their respective NJDEP GWQC.

Geoprobe® soil and groundwater samples were collected in March and May 2000 at Site 80/166. A total of 18 subsurface soil samples and 18 groundwater samples were collected from 18 distinct Geoprobe® borings. The soil samples were analyzed for VOCs plus 15 TICs and percent solids. A total of three VOCs were detected below their respective NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) and the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC).

The 18 Geoprobe® groundwater samples were also analyzed for VOCs plus 15 TICs. A total of eight VOCs were detected in the Geoprobe® groundwater samples. Two VOCs were detected at concentrations that exceeded their respective GWQC.

Based on the magnitude of the exceedances, the frequency of occurrences, and the wide-ranging results, two pesticides (a-chlordane and g-chlordane) and two metals (arsenic and lead) are identified as potential COCs at Site 80/166 and are given further consideration with regard to contaminant migration potential in this RIR.

The RI also included the collection of groundwater depth measurements, the performance of slug tests, evaluation of the aquifer classification, and the completion of a sensitive receptor survey. The results of the field and laboratory investigations were used to develop a conceptual site model to provide a basis for the development of a three-dimensional computer model. The conceptual site model considers the site-specific topography, groundwater recharge, groundwater flow conditions and the geologic formations present at the site. The MODFLOW computer model was used to simulate groundwater flow and contaminant transport beneath the site. The purpose of developing a groundwater model for Site 80/166 was to predict the migration of the identified COCs in site groundwater.

Due to the low concentrations of COCs at the site and the slow migration rates for the COCs in the groundwater, there is little potential for significant COC impact by migration into Oceanport Creek. The Wenonah Mount Laurel aquifer, which is approximately 125 feet bgs, is too deep to be affected by the COCs near the ground surface. The sensitive receptor survey indicates that there are no domestic or irrigation wells close enough to Site 80/166 to be adversely impacted by COC migration.

No Further Action (NFA) is recommended with regard to pesticides and metals contamination in groundwater at Site 80/166.

1.0 INTRODUCTION

Versar has been contracted by the U.S. Army Garrison, Fort Monmouth, DPW, Fort Monmouth, New Jersey to prepare an RIR to document groundwater and surface water conditions at Site 80/166 located in the Main Post area of Fort Monmouth, New Jersey. This report addresses the remedial investigation activities performed at this site to investigate groundwater conditions from April 1997 through January 2001.

1.1 Objectives

The objectives of this RIR are to define aquifer chemical and physical characteristics and to determine the requirement for further remedial activities at Site 80/166. The remedial investigation was conducted in accordance with NJDEP *Technical Requirements for Site Remediation* (July 1999), NJAC 7:26E, et seq.

The remedial investigation and subsequent preparation of the RIR encompassed the following:

- Characterization of groundwater quality at Site 80/166 through quarterly groundwater sampling events conducted from April 1997 through January 2001.
- Characterization of the Site 80/166 groundwater quality during two low-flow sampling events in September and October 2000.
- Characterization of Site 80/166 subsurface soil and groundwater conditions through Geoprobe® borings conducted in March and May 2000.
- Comparison of the groundwater sample results with the NJDEP GWQC and subsurface soil sample results with NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC).
- Investigation and evaluation of the designated aquifer uses, the associated aquifer classification, and the appropriate groundwater quality criteria for groundwater resources beneath Site 80/166. The NJDEP Ground Water Quality Standards (GWQS) specify the quality criteria and designated uses for groundwater and also contain technical and general policies to ensure that the designated uses can be adequately protected.
- Performance of slug tests at Site 80/166 during August 2001 to characterize the hydraulic conductivity and groundwater flow regime.
- Development of a groundwater flow and transport model for Site 80/166 based on the hydrogeologic data, field investigation programs and technical research to evaluate the migration of potential contaminants of concern (COC) beneath Site 80/166.
- Formulation of recommendations for future remedial investigation or remedial action alternatives for Site 80/166.

1.2 Report Organization

This report is organized to minimize repetition. **Section 2.0** provides background information and a general description of Site 80/166 located in the Main Post Area of Fort Monmouth. **Section 3.0** describes and summarizes the field activities conducted at Site 80/166 including groundwater sampling from monitoring wells, groundwater and soil sampling from Geoprobe® borings, and aquifer testing. **Section 4.0** presents the physical characterization of Site 80/166 including lithology and groundwater conditions. The chemical characterization of Site 80/166 is presented in **Section 5.0**, which includes groundwater and soil sample results and the determination of potential COCs. **Section 6.0** discusses the potential for contaminant migration in the vicinity of Site 80/166 and presents groundwater modeling involving the COCs. Conclusions and recommendations for Site 80/166 are presented in **Section 7.0**. References used to prepare this report are listed in **Section 8.0**.

2.0 SITE BACKGROUND AND ENVIRONMENTAL SETTING

The following sections describe Site 80/166 background and the environmental setting of the area surrounding Fort Monmouth and Site 80/166. Included is a description of the location, background, current conditions and environmental setting of Site 80/166.

2.1 Site Location and Description

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County, approximately 45 miles south of New York City and 70 miles northeast of Philadelphia (**Figure 2-1**). In addition to the Main Post, the installation includes two subposts, the Charles Wood Area and the Evans Area. The Main Post encompasses approximately 630 acres and is bounded by State Highway 35, Parkers Creek, Lafetra Brook, the New Jersey Transit Railroad and a residential area to the south. The post was established in 1918 during World War I (WWI) as an Army Signal Corps training center. The Main Post currently provides administrative, training, and housing support functions, as well as providing many of the community facilities for Fort Monmouth. The primary mission of Fort Monmouth is to provide command, administrative, and logistical support for Headquarters, U.S. Army Communications and Electronics Command (CECOM). CECOM is a major subordinate command of the U.S. Army Materiel Command (AMC) and is the host tenant at Fort Monmouth.

Site 80/166 is located in the eastern part of the Main Post Area of Fort Monmouth, north of Riverside Avenue and south of Building 166 (**Figure 2-2**). Site 80/166 is located approximately 500 feet northwest of Oceanport Creek.

2.2 Site Background

In the early 1990s, the DPW developed a UST program for managing approximately 506 USTs located throughout the Fort Monmouth installation (Main Post, Charles Wood and Camp Evans areas). This program was created to work toward replacing the use of heating oil as a major energy source and to convert to natural gas. The DPW's approach involved installing new gas lines, new boilers that could be gas fed, and removing the non-regulated (residential) USTs. Since 1990, approximately 97 percent of the aforementioned USTs at Fort Monmouth have been removed.

As part of the DPW's UST management program, two UST closure reports (dated July 1998 and May 2000) have been submitted to the NJDEP regarding USTs in the immediate vicinity of Site 80/166. These two reports are presented in **Appendices A** and **B** and are discussed below in **Sections 2.2.1** and **2.2.2**, respectively.

In 1995, the DPW submitted a Site Investigation (SI) report for the Main Post and Charles Wood areas. This site investigation report is discussed below in **Section 2.2.3**, and incorporated into the discussion of contaminants of concern at Site 80/166 (**Section 5.3**).

The groundwater monitoring program presented in this report includes two wells (80-MW1 and 166-MW1) originally installed in September 1994 as part of UST closures. The locations of these two monitoring wells and four additional wells installed in July 2000 are shown in **Figure 2-3**. A well construction summary is provided in **Table 2-1**. The monitoring well records for these wells are provided in **Appendix C**.

2.2.1 UST Closure and SI Report for Former Building T-80 (BCM, 1998)

According to the *UST Closure and Site Investigation Report for Former Building T-80, NJDEP Registration No. 090010-06,* prepared by ATC for the DPW, July 1998 (**Appendix A**), there was one single-wall steel UST (UST No. 090010-06) located immediately north of former Building T-80 (**Figure 2-4**). UST No. 090010-06 was a 1,000-gallon No. 2 fuel oil UST. On June 16, 1994, following the removal of this UST, a spill was reported to the NJDEP "Hot Line" for UST number 090010-06 and Case Number 94-6-16-1127-25 was assigned by the NJDEP. On July 16, 1994, UST No. 090010-06 was cleaned, excavated and disposed of in accordance with NJDEP requirements. In addition to the UST removal, approximately 56 cubic yards of potentially contaminated soil was removed and disposed offsite. One hole was observed on each of the end seams of the tank during the inspection by the subsurface evaluator.

Following the soil excavation and removal of UST No. 090010-06, six post-excavation samples were collected and analyzed for TPHC using USEPA Method 418.1. All samples contained either non-detectable concentrations of contaminants or concentrations below 1,000 mg/kg (the NJDEP cleanup criteria for TPHC is 10,000 mg/kg).

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well (80-MW1) was installed at the former Building T-80 area on September 15, 1994. Well 80-MW1 was constructed to a maximum finished depth of 13 feet. This well was screened from a depth of 3.0 feet below ground surface (bgs) to 13 feet bgs with 4-inch diameter 20-slot PVC.

On May 19, 1995 and June 13, 1995, monitoring well 80-MW1 was sampled and analyzed for VOCs plus 10 TICs and SVOCs plus 15 TICs. One VOC, benzene, was detected at concentrations exceeding the NJDEP GWQC at concentrations of 1.7 ug/L and 1.4 ug/L, respectively. No other VOCs or SVOCs were detected in these two groundwater samples at concentrations exceeding the NJDEP GWQC. No product or sheen was observed in well 80-MW1 during either of the sampling rounds.

2.2.2 UST Closure and SI Report for Building 166 (ATC, 2000)

According to the *UST Closure and Site Investigation Report, Building 166, UST No. 90017-17*, prepared by ATC, May 2000, (**Appendix B**), there was one UST (No. 90017-17) located under the pavement approximately 20 feet west of the southwest corner of Building 80/166 (**Figure 2-4**). UST No. 90017-17 was a 4,000-gallon fiberglass tank that contained No. 2 fuel oil.

On June 16, 1994, the DPW closed UST No. 90017-17. Stained soils were observed in the UST excavation and organic vapors were detected with an OVA. Based on these observations, a spill was reported to the NJDEP Hotline and this spill was assigned as Case No. 94-6-16-1545-09 by the NJDEP. The subsurface evaluator did not observe any holes or punctures in UST No. 90017-17 after the UST was removed and drained. Soil screening was also conducted along the former UST piping run. No contamination was observed anywhere along the piping length. Based on visual observations, approximately 24 cubic yards of potentially contaminated soil was excavated and disposed offsite during the UST closure.

On June 16, 1994, following the removal of UST No. 90017-17 and soil excavation, nine post-excavation soil samples were collected from eight locations along the sidewalls of the UST excavation. Following the removal of the UST fuel lines (on the same date of the tank closure), one additional post-excavation sample was collected along the former piping length, which was approximately 10 feet long. These ten post-excavation soil samples were analyzed for TPHC using USEPA Method 418.1. TPHC was detected in each of these ten samples below 1,000 mg/kg.

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well (166-MW1) was installed southwest of Building 166 (**Figure 2-3**) on September 14, 1994. Monitoring well 166-MW1 was constructed to a maximum finished depth of 10 feet. This well was screened from a depth of 0.5 feet bgs to 10 feet bgs with 4-inch diameter 20-slot PVC.

Monitoring well 166-MW1 was sampled in two sampling rounds (May 18, 1995 and June 13, 1995). The two groundwater samples collected in these two rounds were analyzed for VOCs plus 10 TICs and SVOCs plus 15 TICs. No VOCs or SVOCs were detected in these two groundwater samples at concentrations exceeding the NJDEP GWQC. No product or sheen was observed in well 166-MW1 during either of the sampling rounds.

2.2.3 SI Report for Main Post and Charles Wood Areas (Weston, 1995)

As part of an SI of the Fort Monmouth military installation, Weston conducted soil sampling, monitoring well installation and sampling and geophysical surveying. In addition to sampling soil and groundwater at sites throughout the Main Post and Charles Wood areas of Fort Monmouth, Weston established background concentrations for soil and groundwater for the Fort Monmouth installation, as reported in the Weston SI (1995) (**Appendix D**). These background concentrations have been used by the DPW for comparing sample results for native constituents of soil and groundwater (see **Section 5.3**).

As presented in the Weston SI Report, several natural and anthropogenic factors contribute to the wide range in concentrations of metals in soils, which further impact the concentration of metals in groundwater. Soils derived from the glauconitic sands contain abundant aluminum, calcium, potassium, iron, magnesium and manganese (among others), which are likely to be present at elevated concentrations in the groundwater,

particularly when sediments are entrained in the collected groundwater samples. A low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of entrained sediments on the dissolved phase metals concentrations at the Main Post and Charles Wood areas of Fort Monmouth. Using a low-flow sampling methodology to reduce the presence of entrained sediment has generally yielded substantial reductions in the dissolved phase concentrations of metals, such as arsenic, antimony, beryllium, cadmium, chromium, cobalt, lead, mercury, selenium, silver, thallium and vanadium at Fort Monmouth sites. Significant decreases in the concentrations of metals characteristic of glauconitic sand also were observed. These included aluminum, barium, calcium, copper, iron, magnesium, manganese, nickel, potassium, sodium and zinc.

2.3 Current Conditions

Versar conducted a site walkthrough on June 20, 2001 to assess current conditions at Site 80/166. The site currently consists of Building 166, which is used by the DPW as office space and equipment storage, a parking area used for storage of construction and army vehicles, and grassy areas along Riverside Drive. Underground utilities at Site 80/166 are shown in **Figure 2-5**. Site photographs were taken during the Site 80/166 walkthrough and are included in **Appendix E**.

2.4 Environmental Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Site 80/166. Included is a description of the regional geology of the area surrounding Fort Monmouth, as well as descriptions of the local geology and hydrogeology of the Main Post.

2.4.1 Regional and Local Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. Site 80/166 is located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands. The geologic map of New Jersey is provided as **Figure 2-6**.

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, sand and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapecza, 1989). These sediments, predominantly derived from deltaic, shallow marine and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units, which are generally thicker to the southeast and reflect a deeper water environment. More than 20 regional geologic units are present within the sediments of the Coastal

Plain. Regressive, upward coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations and the Cohansey Sand), while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown and Navesink Formations). The individual thickness for these units varies greatly (e.g., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line (e.g., a boundary zone between older, resistant rocks and younger, softer plain sediments) to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank Sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank Sand is a yellowish-gray to reddish brown clayey, medium-to-coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark gray to black, medium-to-fine grained sand with abundant clay, mica and glauconite.

The Tinton Sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse-grained feldspathic-quartz and glauconite-sand to a glauconitic-coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive. Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit. The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard, 1969). Groundwater occurs beneath the site at a depth of approximately 2 to 12 feet bgs.

The Kirkwood Formation (part of the Kirkwood-Cohansey system) crops out southeast of the Main Post and dips to the southeast at a slope of 20 feet per mile (Jablonski, 1968). The Kirkwood Formation consists of alternating layers of sand and clay. The upper unit is a light gray to yellowish-brown, fine-grained quartz sand with quartz nodules and small pebbles. The lower unit is a brown silt in Monmouth County (Jablonski, 1968).

As presented in the *Site Investigation Report - Main Post and Charles Wood Areas, Fort Monmouth, New Jersey*, prepared by Weston, Inc, December 1995 (Weston SI), several natural and anthropogenic factors contribute to the wide range in concentrations of metals in soils, which further impact the concentration of metals in groundwater. Soils derived from the glauconitic sands contain abundant aluminum, calcium, potassium, iron, magnesium and manganese (among others), which are likely to be present at elevated concentrations in the groundwater, particularly when sediments are entrained in the collected groundwater samples.

As presented in **Appendix C**, the lithologic logs from monitoring well installations at Site 80/166 indicate that the lithology consists of brown, green and black clay, silt and fine sand and brown sand with sub-rounded quartz pebbles. Water-level elevation data collected during the investigation presented in this report indicates groundwater flow was toward Oceanport Creek. Further discussion of the subsurface conditions is presented in **Section 4.0**.

2.4.2 Hydrogeology

Fort Monmouth lies in the Atlantic and Eastern Gulf Coastal Plain groundwater region (Meisler et al., 1988). This groundwater region is underlain by undeformed, unconsolidated to semi-consolidated sedimentary deposits. The chemistry of the water near the surface is variable with low dissolved solids and high iron concentrations. The water chemistry in areas underlain by glauconitic sediments (such as Red Bank, Tinton and Hornerstown Sands) is dominated by calcium, magnesium, manganese, aluminum and iron. The sediments in the area of Fort Monmouth were deposited in fluvial-deltaic to near shore environments.

The water table aquifer in the Main Post area is identified as part of the "Navesink-Hornerstown Confining Units," or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation and the basal clay of the Kirkwood Formation. These geologic formations comprise a "Composite Confining Bed" for the Wenonah Mount Laurel Aquifer (Zapecza, 1984).

Wells installed in the Red Bank and Tinton Sands produce 2 to 25 gallons per minute (gpm) (Jablonski, 1968). Groundwater is typically encountered at the Main Post and in the surrounding areas at shallow depths below ground surface (2 to 9 feet bgs). Water in the surficial aquifer generally flows east toward the Atlantic Ocean.

As presented in **Figure 2-7**, Fort Monmouth is located within the outcrop area of the "Navesink-Hornerstown Confining Unit" (Martin, 1998), which also includes the Red Bank Sand, Tinton Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation and the basal clay of the Kirkwood Formation. The Navesink-Hornerstown Confining Unit is approximately 125 feet thick at Site 80/166.

Based on a review of the NJDEP GWQS (NJAC 7:9-6), January 7, 1993, Versar has determined that the site is underlain by a Class III-A aquifer. A formal presentation of this finding was made to the NJDEP in November 2003. The primary designated use for Class III-A groundwater is the release or transmittal of groundwater to adjacent classification areas and surface water, as relevant. Secondary designated uses in Class III-A include any reasonable use. Further discussion of the Class III-A aquifer designation is presented in **Section 6.3**.

Shallow groundwater may be locally influenced within the Main Post area by the following factors:

- Tidal influence (based on proximity to the Atlantic Ocean, rivers, and tributaries)
- Topography
- Nature of the fill material within the Main Post area
- Presence of clay and silt lenses in the natural overburden deposits
- Local groundwater recharge areas (i.e., streams, lakes)

- Roadways, utility conduits, and stormwater culverts

Due to the fluvial nature of the overburden deposits (e.g., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. The groundwater in the vicinity of Site 80/166 appears to be flowing in a southeast direction toward Oceanport Creek.

2.4.3 Soils

According to the U.S. Department of Agriculture (USDA), Soil Conservation Service, Monmouth County Soil Survey (April 1989), the majority of the Main Post is covered by urban land (**Figure 2-8**). The soil survey describes urban land as areas where concrete, asphalt, buildings, shopping centers, airports or other impervious surfaces cover 80 percent or more of the surface. In addition, the survey indicated that the natural subsurface soils have largely been replaced with artificial or foreign fill materials (developed land with disturbed soils).

The following soil series and classification units are mapped in the Main Post area:

- DoB Downer sandy loam (with 2 to 5 percent slopes)
- FrB Freehold sandy loam (with 2 to 5 percent slopes)
- FUB Freehold sandy loam/urban land complex (with 0 to 10 percent slopes)
- HV Humaquepts, frequently flooded
- KvA Kresson loam (with 0 to 5 percent slopes)
- UA Udorthents, smoothed
- UD Udorthents – urban land complex (with 0 to 3 percent slopes).

The Downer series soils are well-drained soils that are found on uplands and terraces. The soils are formed in acid, silty coastal plain sediments. The Freehold soils are also well drained and are formed in acid, loamy, coastal plain sediments that, by volume, are 1 to 10 percent glauconite and are found on uplands. The Humaquepts soils are somewhat poorly- to very poorly- drained soils that are formed in stratified, sandy, or loamy sediments of fluvial origins. The Humaquepts soils are located on the floodplain and are subject to flooding several times each year. The Kresson loam is a nearly level to gently sloping soil and is somewhat poorly drained. The soil is found on low divides and in depressions.

The Udorthents soils have been altered by excavation or filling activities. In filled areas, these soils consist of loamy material that is more than 20 inches thick. The filled areas include floodplain, tidal marshes and areas with moderately, well drained to very poorly drained soils. Some Udorthent soils contain concrete, asphalt, metal and glass. The soils in the vicinity of Site 80/166 are classified as UD – Udorthents – urban land complex, with 0 to 3 percent slopes (**Figure 2-8**).

2.4.4 Topography and Surface Drainage

Over the last 80 years, the natural topography of Fort Monmouth has been altered by excavation and filling activities conducted by the military. The land surface at the Main Post is relatively flat and ranges in elevation from approximately 4 feet above mean sea level (amsl) in the east at Oceanport Creek to 32 feet amsl at the western end of the post, near Highway 35. The eastern half of the post is generally 10 feet amsl in elevation.

Surface water runoff from the western part of the Main Post flows into the Lafetra Creek to the north or into Mill Creek to the south. The USGS topographic map (**Figure 2-1**) shows the Lafetra Creek as Parkers Creek Branch and Mill Creek as Wampum. Both Mill Creek and Lafetra Creek originate off-post. Mill Creek is channelized and flows along the southern boundary of the Main Post, turning north just past the Auto Craft Shop. Lafetra Creek forms the northern boundary of the Main Post and joins Mill Creek to form Parkers Creek. Parkers Creek flows eastward along the northern boundary and joins Oceanport Creek east of the post. Most of Parkers Creek, Lafetra Creek and Mill Creek are tidally influenced.

The U.S. Fish and Wildlife Service (FWS) National Wetland Inventory Long Branch quadrangle maps indicate the presence of wetlands at the Main Post. Parkers Creek and Oceanport Creek are classified as estuarine intertidal aquatic beds. The area of Parkers Creek and the part of Oceanport Creek/Husky Brook are classified as estuarine intertidal emergent wetlands. Lafetra Creek and Mill Creek are classified as riverine lower perennial open water/unknown bottom.

Site 80/166 is located approximately 500 feet northwest of Oceanport Creek, which empties to the east into Shrewsbury River. The USGS topographic map (**Figure 2-1**) shows that the land surface of the site is relatively flat at an elevation of less than 20 feet amsl. Surface water runoff at Site 80/166 drains into catch basins and flows southeast into Oceanport Creek.

3.0 SITE ACTIVITIES

Fort Monmouth DPW has conducted remedial investigation activities, including a groundwater sampling program, to define the areal extent of potential pollutants and evaluate impacts to groundwater in the vicinity of Site 80/166. Remedial investigation activities were performed from April 1997 and continued through August 2001. These activities were managed by the Fort Monmouth DPW and performed by TECOM-Vinnell Services (TVS) and Versar. The details of remedial investigation activities that occurred at Site 80/166 are described in the following sections.

3.1 Well Installation

A total of six monitoring wells (80-MW1, 80-MW2, 80-MW3, 80- MW4, 80-MW5 and 166-MW1) comprise the quarterly groundwater monitoring program conducted by the DPW. As discussed in **Section 2.2**, two of the six wells (80-MW1 and 166-MW1) were installed in September 1994 during UST closures and site investigations (at former Building T-80 and Building 166, respectively). The remaining four wells (80-MW2 through 80-MW5) were installed by the DPW on July 24, 2000.

Each of these four additional wells were installed to a total depth of 10 feet and screened with 10-slot PVC from 2 to 10 feet bgs. The locations of these wells (**Figure 2-3**) were strategically selected by the DPW to monitor possible contaminants released into the groundwater due to the former USTs located at Site 80/166. Monitoring well construction details are summarized in **Table 2-1**. Well boring logs and monitoring well records are provided in **Appendix C**.

3.2 Sample Collection Activities

As part of the remedial investigation of Site 80/166, quarterly groundwater monitoring was conducted from April 1997 through January 2001 and a Geoprobe® investigation was conducted in March and May 2000. Sampling activities were performed in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (December 1997). Laboratory analyses of the samples collected at Site 80/166 were conducted by the Fort Monmouth Environmental Testing Laboratory (FMETL), a New Jersey certified laboratory (Certification No. 13461).

3.2.1 Groundwater Sampling Collection Activities

Two monitoring wells (80-MW1 and 166-MW1) were sampled during 16 quarterly sampling rounds (#1 through #14, #16 and #17) from April 1997 through January 2001. Monitoring wells 80-MW2, 80-MW3, 80-MW4 and 80-MW5 were incorporated later into the quarterly monitoring program and sampled from August 2000 through January 2001 during four quarterly rounds (#14, #15, #16 and #17). Monitoring wells 80-MW1 and 166-MW1 were not sampled during quarterly round #15, which occurred one month after round #14.

During the 17 rounds of quarterly groundwater sampling, a total of 89 groundwater samples, including 11 duplicate samples, 15 field blanks and 15 trip blanks for quality assurance/quality control (QA/QC) purposes, were collected from the six monitoring wells at Site 80/166. The quarterly groundwater samples were analyzed as follows:

- During the first quarterly sampling round, groundwater samples were analyzed for VOCs plus 15 TICs using USEPA method 624, and lead using USEPA Method 3113B.
- During quarterly sampling round #2, VOCs plus 15 TICs were analyzed using USEPA Method 624, SVOCs plus 25 TICs were analyzed using USEPA Method 625, pesticides and PCBs were analyzed using USEPA Method 608, and TAL metals were analyzed using USEPA Methods 3111D, 3111B, 3112B, 3113B and 3120B.
- During quarterly sampling rounds #3 through #17, VOCs plus 15 TICs were analyzed using USEPA Method 624, SVOCs plus 25 TICs were analyzed using USEPA Method 625, pesticides and PCBs were analyzed using USEPA Method 608, and TAL metals were analyzed using USEPA Methods 3112B and 3120B.

A summary of the groundwater sampling activities, including rounds, well IDs, sample IDs, sample locations, collection/analysis date, analytical parameters and analysis method, is provided in **Table 3-1**. Copies of the groundwater sampling chain-of-custody forms and laboratory data sheets are presented in **Appendix F**. The results of the quarterly groundwater monitoring program for Site 80/166 are discussed in **Section 5.1**.

In consideration of the potential benefits of the low-flow sampling procedure (see **Section 2.2.3**), two additional rounds of low-flow sampling were conducted on September 6 - 7, 2000 (Low Flow #1), and October 11 - 12, 2000 (Low Flow #2) using a low-flow groundwater sampling technique. A total of 20 samples, including four duplicate samples and four field blanks for QA/QC purposes, were collected and analyzed for TAL metals to determine whether metal concentrations observed in the groundwater samples at Site 80/166 are due to entrained soil particles (e.g., high turbidity), rather than dissolved phased groundwater constituents. During the two low-flow sampling rounds at Site 80/166, groundwater samples were also analyzed for pesticides and PCBs in order to determine if detections of pesticides and PCBs were affected by turbidity during quarterly sampling rounds. The samples were analyzed by the FMETL for pesticides and PCBs using USEPA Method 608 and TAL metals utilizing USEPA Methods 3120B and 3112B. A summary of the groundwater sampling activities, including rounds, well IDs, sample IDs, sample locations, collection/analysis date, analytical parameters and analysis method, is provided in **Table 3-1**. Copies of the groundwater sampling chain-of-custody forms and laboratory data sheets are presented in **Appendix F**. The results of the low-flow sampling rounds for Site 80/166 are discussed in **Sections 5.1**.

Sampling equipment was thoroughly decontaminated before and after each use in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (1997). Following collection, the groundwater samples were immediately placed in laboratory-

supplied bottleware. The sample containers were labeled, sealed, packed in ice and transported to the FMETL under proper chain-of-custody procedures.

During each of the monitoring well sampling rounds, aquifer chemical characteristics including pH, temperature, conductivity and dissolved oxygen (DO) were recorded prior to sampling. These chemical characteristics are included in the laboratory data packages. The aquifer pH and DO data are presented in **Section 5.4** and discussed in **Section 6.1**.

3.2.2 Geoprobe® Investigation

Geoprobe® soil and groundwater samples were collected in March and May 2000 at Site 80/166. A total of 18 subsurface soil samples and 18 groundwater samples were collected from 18 distinct Geoprobe® borings. The soil samples were collected from each Geoprobe® boring at depth intervals ranging from 3 to 4 feet bgs. The Geoprobe® groundwater samples were collected from depth intervals approximately 3 to 7 feet bgs. The locations of the Geoprobe® samples are shown in **Figure 3-1**.

Sampling equipment was thoroughly decontaminated before and after each use, in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (1997). The soil samples were collected and immediately placed in laboratory-supplied bottleware. The sample containers were labeled, sealed, packed in ice and transported to the FMETL under proper chain-of-custody procedures. A summary of the Geoprobe® soil and groundwater sampling activities, including rounds, sample IDs, collection/analysis dates, analytical parameters and analysis method is provided in **Table 3-2**. Copies of the Geoprobe® soil and groundwater sampling chain-of-custody forms for the laboratory analyses are presented in **Appendix G**. The Geoprobe® soil and groundwater samples were analyzed by the FMETL for VOCs plus 15 TICs and percent solids using USEPA Method 624. The Geoprobe® soil and groundwater sample results are discussed in **Section 5.2**.

3.3 Groundwater Depth Measurements

During each of the groundwater monitoring rounds conducted at Site 80/166 (including the 17 quarterly monitoring rounds and two low-flow rounds), measurements of the depth to water were recorded with an accuracy of 0.01 feet. These depth to groundwater measurements, recorded from 1997 through 2001, are presented in **Table 3-3**. The groundwater elevation at each well was calculated by subtracting the measured depth to groundwater from the elevation of the top of the well casing. Groundwater elevations are discussed in **Section 4.2**.

3.4 Slug Testing Procedures

Versar conducted slug testing at the six monitoring wells located at Site 80/166 on August 15, 2001. Slug testing was performed to estimate hydrogeologic properties of the shallow soils at this site, such as groundwater velocity, to be used for contaminant

transport modeling. The equipment used to perform the slug testing included a Hermit Environmental Data Logger (Model 1000C), a 10-psi pressure transducer, and a 4-foot long, 3.5-inch diameter PVC slug.

Slug testing was performed by first recording the depth to top of groundwater, then placing the slug and the transducer into the well and allowing the water to equilibrate to a level close to the original water level. The new water level was set as the reference water level for the data logger during the slug test. The slug was then removed and the data logger recorded the changing water level with time. The collected data were then transferred to a personal computer for later review and reduction. The raw data are presented in **Appendix H**. The results are discussed in **Section 4.2**.

3.5 Sensitive Receptors/Well Search

Searches were conducted using various databases and historical information to identify receptors and groundwater wells that may be potentially affected by Site 80/166. An Offsite Receptor Report (dated October 24, 2001) was prepared surrounding a central point of the Main Post (less than one-mile from Site 80/166) by Environmental Data Resources, Inc. (EDR).

In addition, a search of the comprehensive well database maintained by the NJDEP Well Permitting and Regulations Section of the Bureau of Water Allocation was performed to identify groundwater wells that may potentially be affected by Site 80/166. The search was performed for a one-mile radius surrounding the central point of Site 80/166.

A copy of the sensitive receptor survey is provided in **Appendix I** and a copy of the well search summary is provided in **Appendix J**. The results of the sensitive receptor survey and well search are discussed in **Section 6.2**.

4.0 SITE PHYSICAL CHARACTERISTICS

The following sections represent the findings of the geologic and hydrogeologic characterization program for Site 80/166. The following sections represent the findings of Site 80/166 geologic and hydrogeologic characterization program for Site 80/166. These sections include a detailed discussion of the physical properties of the unconsolidated soil, bedrock and groundwater underlying the study area. Groundwater elevation data collected by the DPW from April 1997 through January 2001 are presented in this section.

4.1 Lithology

The lithology encountered at Site 80/166 consists of fine sand, silt and clay with a few thin layers of rounded quartz gravel. Two geologic cross sections (A-A' and A'-A") were prepared for monitoring wells in the study area. Geologic cross section A-A' depicts the profiles for monitoring wells 166-MW1, 80-MW1, 80-MW2 and 80-MW4. Geologic cross section A'-A" depicts the profiles for monitoring wells 80-MW3, 80-MW4 and 80-MW5. The cross section location map is included as **Figure 4-1**. The data used to construct the cross sections are presented in **Table 4-1** (cross section A-A') and **Table 4-2** (cross section A'-A"). The geologic cross section A-A' is presented in **Figure 4-2** and the geologic cross section A'-A" is presented in **Figure 4-3**. The boring logs used to create the cross section data tables are contained in **Appendix C**.

Subsurface material encountered in the well borings at Site 80/166 consisted of brown, green and black clay, silt and fine sand (Units 2, 3, 4, 5, 6 and 8) and brown sand with sub-rounded quartz pebbles (Unit 7). The lithology of this material is consistent with the Tinton Sand formation (Minard, 1969). As noted on the geologic cross sections in **Figures 4-2** and **4-3**, some of the lithology presented in cross section A-A' as native soil may be fill. The boring logs for the wells at Site 80/166 (**Appendix C**) do not specify that fill was encountered; however, due to the construction of buildings, underground utilities, and paved areas at Site 80/166, the presence of fill is assumed.

The following underground utilities are shown in geologic cross sections A-A' and A'-A":

- One 6-inch diameter gas line is shown in geologic cross section A-A'.
- One 6-inch diameter gas line and two 10-inch diameter gas lines are shown in geologic cross section A'-A".

4.2 Groundwater Flow

During the groundwater sampling program at Site 80/166 (17 quarterly rounds and two low-flow rounds), groundwater was encountered in monitoring wells at Site 80/166 at depths ranging from 0.47 to 4.04 feet bgs (**Table 3-3**) with a slight gradient toward the southeast. Groundwater velocity and flow directions were predicted based on the

4.2.1 Groundwater Flow Direction

In accordance with NJAC 7:26E-3.13(d)2iv, three groundwater contour maps were generated based on groundwater depth measurements collected on August 16, 2000 (**Figure 4-4a**), October 27, 2000 (**Figure 4-4b**), and January 24, 2001 (**Figure 4-4c**) from the six monitoring wells. The groundwater underlying Site 80/166 consistently flows to the southeast towards Oceanport Creek. No significant variations in groundwater flow conditions were observed in these three groundwater contour maps. Groundwater elevation data are presented in **Table 3-3**.

4.2.2 Hydrogeologic Properties

As discussed in **Section 3.4**, Versar conducted slug testing of the six monitoring wells located at Site 80/166 on August 15, 2001. Versar utilized the computer software *Aquifer Test* by Waterloo Hydrogeologic, Inc. (version 3.01, 2001) to reduce the slug testing data using Bouwer-Rice methodologies. Data plots generated by Aquifer Test are presented in **Appendix H**. A summary of the calculated conductivity values is presented in **Table 4-3**.

The calculated conductivity values range from 2.0 feet/day at monitoring well 80-MW1 to 6.4 feet/day at well 80-MW5, with a calculated geometric mean of 3.8 feet/day. The variability in the range of hydraulic conductivities is associated with the shallow depth of the monitoring wells, partial penetration into the aquifer, and the heterogeneous nature of the fill material at Site 80/166. The geometric mean is used instead of the average due to the commonly high range of variability in hydraulic conductivity measurements.

The groundwater flow gradient for Site 80/166 was estimated using the groundwater elevation data discussed above. The groundwater flow gradient (i) is calculated by measuring the distance (L) between two equipotential lines h_1 and h_2 using the following equation:

$$i = \frac{h_1 - h_2}{L}$$

The groundwater flow gradient for Site 80/166, based on water level measurements collected on January 24, 2001, was estimated at approximately 0.015 feet per foot.

Groundwater flow velocity (v) in the vicinity of Site 80/166 was then estimated using the groundwater flow gradient (i), an estimated hydraulic conductivity (K) for the surrounding soils based on the slug test results, and an assumed porosity (α) in the following equation:

$$v = \frac{Ki}{\alpha}$$

The hydraulic conductivity (K) used in the calculation, 3.8 feet/day, is the geometric mean based on the results of slug testing performed by Versar (**Table 4-3**). The porosity (α) was estimated at 40% using average values for silt and sands (Heath, USGS, 1989). The groundwater velocity for Site 80/166 was calculated to be approximately 0.14 feet per day (equal to 52 feet per year) based on the January 24, 2001 water-level measurements.

5.0 SITE CHEMICAL CHARACTERIZATION

This section includes a discussion of the chemical characterization of Site 80/166 based on the various samples collected and analyzed from 19 rounds of monitoring well sampling. DPW personnel were responsible for the collection of samples during this remedial investigation. Sample analyses were performed by the FMETL.

5.1 Groundwater Sampling Results

This section presents a discussion of the results of laboratory analyses performed for the 19 rounds of groundwater samples collected from April 1997 through June 2001 from the six monitoring wells (80-MW1 through 80-MW5 and 166-MW1) at Site 80/166. These 19 rounds are a combination of 17 quarterly rounds conducted at wells 80-MW1 and 166-MW1, four quarterly rounds at wells 80-MW2 through 80-MW5, and two additional low-flow rounds conducted at each of the wells (**Table 3-1**). The groundwater samples were collected and analyzed for VOCs plus 15 TICs, SVOCs plus 25 TICs, pesticides, PCBs and TAL metals.

The two low-flow sampling rounds were conducted on September 6 - 7, 2000 (Low Flow #1), and October 11 - 12, 2000 (Low Flow #2) using a low-flow groundwater sampling technique for pesticides, PCBs and TAL metals. As discussed in **Section 2.2.3**, a low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of suspended sediments on the dissolved phase metals, pesticides and PCB concentrations at Site 80/166.

As discussed in **Section 2.4.2**, Fort Monmouth is underlain by a Class III-A aquifer. The appropriate groundwater quality criteria for Class III-A are the criteria for the most stringent classification for vertically or horizontally adjacent ground waters that are not Class III-A (NJAC 7:9-6.7e). The NJDEP criteria used for comparison of groundwater analytical results were the higher of the Practical Quantitation Limits (PQLs) and the NJDEP GWQC for Class II-A aquifers (NJAC 7:9-6, Table 1).

During the 19 rounds of sampling, a total of six VOCs were detected in site groundwater. One VOC was detected at concentrations that exceeded its respective GWQC in at least one sample, while the remaining five VOCs were detected below their respective GWQC or Interim GWQC. A total of ten SVOCs were detected in site groundwater below their respective GWQC. A total of four pesticides were detected in site groundwater above their respective GWQC. No PCBs were detected in site groundwater. A total of 23 metals were detected in site groundwater. Eight metals were detected at concentrations that exceed their respective GWQC in at least one sample, while the remaining 15 metals were detected below their respective GWQC.

The detections of analytes in groundwater samples are presented in four subsections: VOCs (**Section 5.1.1**), SVOCs (**Section 5.1.2**), Pesticides and PCBs (**Section 5.1.3**) and Metals (**Section 5.1.4**). Analytes detected in groundwater samples at Site 80/166 at

concentrations above the NJDEP criteria are bold and highlighted in **Table 5-1**. The chain-of-custody forms for groundwater samples and laboratory data sheets are provided in **Appendix F**. **Figure 5-1** shows the contaminant distribution for groundwater within the area of Site 80/166.

5.1.1 VOCs

During 19 rounds of groundwater sampling, one VOC was detected in site groundwater at concentrations that exceeded its respective GWQC in at least one sample.

Benzene was detected at concentrations exceeding the GWQC of 1.0 ug/L in four rounds of sampling collected at one monitoring well location. Concentrations ranged from 1.26 ug/L (sampling round #8) to 1.71 ug/L (sampling round #5) in 80-MW1.

5.1.2 SVOCs

No SVOCs were detected above the appropriate GWQC at the site.

5.1.3 Pesticides and PCBs

During 19 rounds of groundwater sampling, four pesticides were detected in site groundwater at concentrations that exceeded their respective GWQC in at least one sample.

a-Chlordane was detected at concentrations exceeding the GWQC of 0.5 ug/L in three rounds of sampling collected at two monitoring well locations. Concentrations ranged from 0.779 ug/L (sampling round #15) to 1.625 ug/L (sampling round #17) in 80-MW2.

g-Chlordane was detected at concentrations exceeding the GWQC of 0.5 ug/L in two rounds of sampling collected at one monitoring well location. Concentrations ranged from 0.979 ug/L (Low Flow #2) to 2.719 ug/L (sampling round #17) in 80-MW2.

4,4'-DDD was detected at concentrations exceeding the GWQC of 0.1 ug/L in three rounds of sampling collected at two monitoring well locations. Concentrations ranged from 0.148 ug/L (sampling round #9) in 80-MW1 to 0.453 ug/L (sampling round #14) in 80-MW2.

Endosulfan Sulfate was detected at concentrations exceeding the GWQC of 0.4 ug/L in one round of sampling collected at one monitoring well location at a concentration of 0.485 ug/L in 80-MW2.

5.1.4 Metals

During 19 rounds of groundwater sampling, eight metals were detected in site groundwater at concentrations that exceeded their respective GWQC in at least one sample.

Aluminum was detected at concentrations exceeding the GWQC of 200 ug/L in 18 rounds of sampling collected at six monitoring well locations. Concentrations ranged from 215 ug/L (sampling round #16) in 80-MW1 to 97,500 ug/L (sampling round #15) in 80-MW5.

Arsenic was detected at concentrations exceeding the GWQC of 8.0 ug/L in 17 rounds of sampling collected at four monitoring well locations. Concentrations ranged from 8.49 ug/L (sampling round #8) in 80-MW1 to 71.6 ug/L (sampling round #15) in 80-MW5.

Cadmium was detected at concentrations exceeding the GWQC of 4.0 ug/L in eight rounds of sampling collected at four monitoring well locations. Concentrations ranged from 4.15 ug/L (sampling round #17) in 166-MW1 to 24.6 ug/L (sampling round #8) in 80-MW1.

Chromium was detected at concentrations exceeding the GWQC of 100 ug/L in one rounds of sampling collected at two monitoring well locations. Concentrations ranged from 121 ug/L (sampling round #2) in 166-MW1 to 148 ug/L (sampling round #2) in 80-MW1.

Iron was detected at concentrations exceeding the GWQC of 300 ug/L in 18 rounds of sampling collected at six monitoring well locations. Concentrations ranged from 578 ug/L (sampling round #2) in 80-MW2 to 571,000 ug/L (sampling round #2) in 80-MW5.

Lead was detected at concentrations exceeding the GWQC of 10 ug/L in ten rounds of sampling collected at four monitoring well locations. Concentrations ranged from 10.4 ug/L (sampling round #6) in 80-MW1 to 84.1 ug/L (sampling round #15) in 80-MW5.

Manganese was detected at concentrations exceeding the GWQC of 50 ug/L in 18 rounds of sampling collected at six monitoring well locations. Concentrations ranged from 51.5 ug/L (sampling round #17) in 80-MW3 to 17,250 ug/L (sampling round #2) in 166-MW1.

Sodium was detected at concentrations exceeding the GWQC of 50,000 ug/L in 18 rounds of sampling collected at six monitoring well locations. Concentrations ranged from 58,200 ug/L (sampling round #6) in 166-MW1 to 11,700,000 ug/L (sampling round #15) in 80-MW5.

5.2 Geoprobe® Investigation Results

The DPW installed 18 Geoprobe® borings at Site 80/166 and collected subsurface soil and groundwater samples at each of these borings. **Figure 3-1** shows the locations of the Geoprobe® borings at Site 80/166. The Geoprobe® sampling results are discussed below and are summarized in **Figure 5-2**, **Table 5-2** (soils), **Table 5-3** (groundwater).

5.2.1 Geoprobe® Soil Sampling Results

The 18 soil samples were collected at each Geoprobe® boring at Site 80/166 at depth intervals ranging from 3 to 4 feet bgs. The soil samples were analyzed by the FMETL for VOCs plus 15 TICs and percent solids using USEPA Method 624. A summary of the subsurface soil sample analytical results is provided in **Table 5-2**. The soil sample results were compared to the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) and the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC).

A total of three VOCs were detected in at least one soil sample below their respective RDCSCC and IGWSCC.

5.2.2 Geoprobe® Groundwater Sampling Results

The 18 Geoprobe® groundwater samples were collected at depth intervals of approximately 3 to 7 feet bgs. The groundwater samples were analyzed by the FMETL for VOCs plus 15 TICs using USEPA Method 624. The analytical results for the groundwater samples collected are provided in **Table 5-3**.

A total of eight VOCs were detected in the Geoprobe® groundwater samples. Two VOCs were detected at concentrations that exceeded their respective GWQC in at least one sample, while the remaining five VOCs were detected below their respective GWQC.

Benzene was detected at concentrations exceeding the GWQC of 1.0 ug/L in two groundwater samples collected at two Geoprobe® boring locations. Concentrations ranged from 1.13 ug/L in boring location #2 to 6.84 ug/L in boring location #3.

Bromodichloromethane was detected at concentrations exceeding the GWQC of 1.0 ug/L in one groundwater sample collected at one Geoprobe® boring location (#18) at a concentration of 2.06 ug/L.

5.3 Contaminants of Concern

In order to determine the potential COCs at Site 80/166, the first step was to identify exceedances of the NJDEP GWQC in monitoring well and Geoprobe® groundwater samples collected at Site 80/166. These exceedances are presented in **Sections 5.1** and

5.2 above and in **Tables 5-1** and **5-3**. There were no exceedances of applicable NJDEP cleanup criteria in soil samples collected from Geoprobe® samples at Site 80/166 (**Table 5-2**). There were four groundwater constituents identified as COCs in groundwater (a-chlordane, g-chlordane, arsenic and lead) at Site 80/166 as discussed in this section.

There were several factors that were used to eliminate or identify analytes as COCs. These factors include the magnitude and frequency of the exceedances, comparisons to low-flow sample results (for metals and pesticides only) and comparisons to established background concentrations (see **Section 2.2.1**). **Table 5-4** summarizes the process used to identify COCs in groundwater at Site 80/166.

There were two VOCs (benzene and bromodichloromethane) that were detected in groundwater at Site 80/166 at concentrations exceeding the NJDEP GWQC during the 19 groundwater sampling events and the Geoprobe® groundwater study. However, neither of these VOCs is considered to be a COC at Site 80/166, as discussed below:

- Benzene was detected in four of 16 rounds in monitoring well 80-MW1 at concentrations exceeding the GWQC. Benzene was also detected at concentrations exceeding the GWQC in two of the 18 Geoprobe® boring groundwater samples in March 2000 (boring locations #2 and #3) near well 80-MW1. Benzene was not detected in each of the four most recent monitoring well sampling rounds (May 2000 to January 2001). Benzene is not considered a COC at the 80/166 due to the infrequency and magnitude of the exceedances in groundwater samples.
- Bromodichloromethane exceeded the GWQC in only one groundwater sample collected at Site 80/166 and is therefore not considered to be a COC.

There were no SVOCs detected at concentrations exceeding the GWQC. Therefore, no SVOCs are considered COCs at Site 80/166.

There were four pesticides (4,4'-DDD, a-chlordane, g-chlordane and endosulfan sulfate) that were detected in groundwater at concentrations exceeding the NJDEP GWQC. Out of these four pesticides, two are identified as COCs (a-chlordane and g-chlordane), as discussed below:

- 4,4-DDD was detected at concentrations exceeding the NJDEP GWQC during two of 17 quarterly sampling rounds in monitoring well 80-MW1 and during one of five rounds in well 80-MW2. There were no exceedances for 4,4-DDD during the two low-flow sampling rounds. 4,4-DDD is not considered a COC at Site 80/166 due to the infrequency and magnitude of the exceedances in groundwater samples.
- a-Chlordane was detected above the NJDEP GWQC in well 80-MW2 during two of five quarterly sampling rounds. a-Chlordane was also detected above the NJDEP GWQC in monitoring well 166-MW during the first low-flow sampling round. The maximum detected concentration of a-chlordane was 1.625 ug/L. Therefore, a-chlordane is identified as a potential COC.

- g-Chlordane was detected above the NJDEP GWQC in well 80-MW2 in two of five samples collected (including one during the first low-flow sampling round). The maximum detected concentration of g-chlordane was 2.719 ug/L. Therefore, g-chlordane is identified as a potential COC.
- Endosulfan sulfate exceeded the NJDEP GWQC in only one groundwater sample (low flow) collected at Site 80/166 and is therefore not considered to be a COC.

There were eight metals that were detected in site groundwater at concentrations exceeding the NJDEP GWQC (aluminum, arsenic, cadmium, chromium, iron, lead, manganese and sodium). The specific exceedances and the identification of each of these metals as a potential COC are discussed below.

As discussed in **Section 2.2.3**, a low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of suspended sediments on the dissolved phase metals concentrations at Site 80/166. The eight different metals that were detected in Site 80/166 groundwater at concentrations exceeding the NJDEP GWQC are distinguished below into background and non-native metals. The indigenous metals are compared to the Main Post Maximum Background Concentrations (MBC) identified in the Weston SI (1995), which are presented in **Tables 5-1** and **5-4**. The non-native metals are discussed in relation to the NJDEP GWQC only.

Of the eight metals detected in Site 80/166 groundwater that exceed the GWQC, four metals (aluminum, iron, manganese and sodium) are common background constituents in Monmouth County soils. The water chemistry in areas underlain by glauconitic sediments (such as Red Bank, Tinton and Hornerstown Sands) is dominated by calcium, magnesium, manganese, aluminum and iron. Elevated concentrations of these metals are routinely observed in groundwater samples collected at Fort Monmouth. In consideration of these facts, the groundwater analytical results for these eight metals were compared to their respective MBCs of 121,000 ug/L (aluminum), 431,000 ug/L (iron), 331 ug/L (manganese), and 21,500 ug/L (sodium), as follows:

- Aluminum is not considered to be a COC because aluminum was not detected at concentrations exceeding the MBC.
- Iron and manganese are not considered COCs because these metals are native constituents of soils at Site 80/166.
- Sodium is not considered to be a COC due to the proximity of Site 80/166 to sea water.

There were four non-native metals that exceeded the NJDEP GWQC (arsenic, cadmium, chromium and lead). Of these four non-native metals, chromium is not considered a COC because chromium exceeded the NJDEP GWQC in only two samples collected at Site 80/166. Both of the chromium exceedances occurred in August 1997 when chromium was also detected in the laboratory blank sample. The remaining three non-native metals (arsenic, cadmium and lead) were compared to sample results collected during the low-flow sampling rounds.

Two separate rounds of sampling (September 6 - 7, 2000 and October 11 - 12, 2000) were performed during the quarterly groundwater sampling program using the low-flow groundwater sampling technique as discussed in **Section 3.2.1**. This technique was used to determine if the detected metal concentrations observed in the groundwater samples are a function of entrained sediments suspended in the groundwater during the course of well purging and sampling activities, or an accurate representation of dissolved phase aquifer/groundwater conditions. These comparisons provided the following results:

- Arsenic concentrations exceeded the NJDEP GWQC in samples collected during both of the low-flow sampling rounds. Arsenic was also detected at concentrations exceeding the GWQC in 14 of 17 quarterly sampling rounds at monitoring well 80-MW1. Based on these results, arsenic is considered to be a potential COC at Site 80/166.
- Cadmium was not detected during the two low-flow sampling rounds (September and October 2000) and is therefore not considered a COC.
- Lead was detected above the NJDEP GWQC during both of the low-flow sampling rounds (September and October 2000). Lead was also detected in multiple rounds in monitoring wells 80-MW1, 80-MW4, 80-MW5 and 166-MW1. Based on these results, lead is considered to be a potential COC at Site 80/166.

Based on the magnitude of the exceedances, the frequency of occurrences, and the wide-ranging results, two pesticides (a-chlordane and g-chlordane) and two metals (arsenic and lead) are identified as potential COCs at Site 80/166 and are given further consideration with regard to contaminant migration potential in **Section 6.0** of this RIR. No other potential contaminants of concern were identified at Site 80/166. The concentrations of these COCs at Site 80/166 are summarized on **Figure 5-1** and in **Table 5-5**.

The method detection limits (MDLs) for each of the sample results in which there was a non-detect (ND) result are included in **Table 5-5**. The MDL for each analysis is included in the laboratory data packages. These MDLs were used in the groundwater model as discussed in **Section 6.1.3**.

5.4 Aquifer pH and DO

During each of the monitoring well sampling rounds, the pH and DO of the groundwater were recorded prior to sampling. The average pH ranged from 5.06 in well 80-MW5 to 6.85 in well 166-MW1. The average DO ranged from 3.10 in well 80-MW3 to 4.10 in well 80-MW4. The aquifer pH and DO measurements are shown in **Table 5-6**. The pH and DO data is included in the laboratory data packages. The aquifer pH and DO is discussed in more detail in **Section 6.1**.

6.0 CONTAMINANT MIGRATION AND GROUNDWATER USE DESIGNATION

The purpose of developing a groundwater model for Site 80/166 was to predict the migration of the identified COCs (a-chlordane, g-chlordane, arsenic and lead) in site groundwater. For the model, areas at the site were assigned initial concentrations of these COCs, and predictions of the migration and change in COC concentration over time were made. The initial COC concentrations, as well as future predictions (results) of the COC concentrations, are presented graphically. The time required to achieve compliance with the NJDEP GWQC was estimated for each COC.

6.1 Groundwater Model Development

A conceptual site model was developed for Site 80/166 to provide a basis for the computer model development. The conceptual site model includes the topography, groundwater recharge, groundwater flow conditions and the geologic formations in the ground. The parameters used in the groundwater flow model were based on Fort Monmouth survey data, published literature on the hydrogeology of the region, as well as field measurements of groundwater elevation at the site (discussed in **Section 4.2**).

For a-chlordane and g-chlordane, a degradation spreadsheet model was used to predict the decay and contaminant transport. The degradation model was applied to g-chlordane only, because g-chlordane concentrations in Site 80/166 groundwater samples have been higher than concentrations of a-chlordane (**Section 5.1.3**, **Table 5-1**), and these two pesticides are addressed as one compound in Howard (1991). The degradation model incorporates the effects of horizontal groundwater flow, biodegradation and retardation.

The United States Geologic Survey (USGS) Modular Three-Dimensional Groundwater Flow Model, MODFLOW, was chosen for additional groundwater modeling for g-chlordane in order to incorporate the effects of dispersion and 3-dimensional groundwater flow. MODFLOW was also used to simulate groundwater migration for the COCs that are metals (arsenic and lead), which do not degrade. The MODFLOW simulation includes the effect of dispersion, which accounts for the dilution of the groundwater due to mixing, 3-dimensional groundwater flow, degradation (applied to g-chlordane only) and retardation due to sorption.

6.1.1 Conceptual Site Model

Land surface at the Main Post is relatively flat and ranges in elevation from 4 feet amsl in the east at Oceanport Creek to 32 feet amsl at the western end of the post, near Highway 35. The eastern half of the post is generally 10 feet amsl in elevation. Site 80/166 is located approximately 500 feet northwest of Oceanport Creek. The USGS topographic map (**Figure 2-1**) shows that the land surface of the site is relatively flat at an elevation

of less than 20 feet amsl. Surface water runoff from Site 80/166 is likely to flow through stormdrains into Oceanport Creek (**Figure 2-5**).

According to Jablonski (1968), the average precipitation for Monmouth County is 44.67 inches per year. After precipitation reaches the ground, the water cycle begins and the water is lost to the atmosphere through evapotranspiration, discharged to receiving waters as surface runoff, or percolates into the soil as groundwater recharge. Groundwater is then separated into water utilization and groundwater flow ("base flow"). The average groundwater recharge for Site 80/166 was calculated from Jablonski (1968) to be approximately 13.28 inches per year, which is the sum of the base flow (11.56 inches per year), utilization from groundwater (0.84 inches per year), and the utilization from surface water (0.88 inches per year). As an approximation to natural conditions, the recharge of 13.28 inches was applied to the entire MODFLOW model area as an approximation (as discussed below in **Section 6.1.4**).

As discussed in **Section 2.4.1**, the geologic formations that outcrop at the Fort Monmouth Army Base include the Tinton and Red Bank Sands, as well as the Hornerstown Formation. These formations, along with the Navesink Formation, are part of the Navesink-Hornerstown Confining Unit that overlies the Wenonah-Mount Laurel Aquifer (Zapecza, 1990). A cross section of the New Jersey Coastal plain that shows these formations is presented in **Figure 6-1.**

As discussed in **Section 4.1**, the lithology encountered during drilling of the monitoring wells at Site 80/166 consists of material that is consistent with the Tinton Sand formation as described in Minard (1969). The subsurface material encountered in the well borings at Site 80/166 consisted of brown, green, and black clay, silt and fine sand (Units 2, 3, 4, 5, 6 and 8) and brown sand with sub-rounded quartz pebbles (Unit 7). Some of the subsurface lithology is likely to be fill, as noted on geologic cross sections A-A' and A'-A" (**Figures 4-2** and **4-3**). Underground utilities (discussed in **Section 2.2** and **4.1** and shown on **Figure 2-5**) were not included as part of the groundwater migration models.

Groundwater was encountered in both the fill and native soils in each monitoring well at depths ranging from 0.47 to 4.04 feet bgs **(Table 3-3**) with a hydraulic gradient indicating flow southeast toward Oceanport Creek (**Figure 4-4a**, **4-4b**, and **4-4c**). The groundwater flow gradient for Site 80/166 was estimated to be 0.015 feet per foot. The calculated conductivity values range from 2.00 feet/day at monitoring well 80-MW1 to 6.41 feet/day at 80-MW5, with a calculated geometric mean of 3.8 feet/day. The groundwater velocity for Site 80/166 was calculated to be approximately 0.14 feet per day (equal to 52 feet per year).

6.1.2 Chlordane Biodegradation Model

A *Microsoft Excel* spreadsheet was used to predict the biodegradation and migration of g-chlordane in groundwater at Site 80/166. The biodegradation model incorporates the effects of horizontal groundwater flow, first-order biodegradation and retardation.

As discussed in **Section 5.1** and shown in **Figure 5-1**, a-Chlordane was detected above the NJDEP GWQC of 0.5 ug/L in two of five samples collected from well 80-MW2 with a maximum concentration of 1.625 ug/L. g-Chlordane was detected at concentrations above the NJDEP GWQC of 0.5 ug/L in two of five samples collected from well 80-MW2 with a maximum concentration of 2.719 ug/L. There was only one exceedance of the NJDEP GWQC for either a-chlordane or g-chlordane in well 166-MW1 (0.84 ug/L for a-chlordane in March 2000). Both a-chlordane and g-chlordane were not detected in groundwater samples collected from any other wells at Site 80/166. The biodegradation model predicts the future concentrations of g-chlordane with time, starting with an initial concentration of 2.719 ug/L in well 80-MW2 in January 2001.

Due to the lack of a decreasing trend in the chlordane detections, a site-specific decay rate for chlordane was not calculated. The half-life of 7.6 years was obtained from published results (Howard, 1991) and used in the model. This half-life corresponds to a degradation rate constant (k) of 0.00025 (1/day). The chlordane biodegradation model parameters and results for well 80-MW2 is presented in **Table 6-1**. Predicted chlordane concentrations at well 80-MW2 is presented in **Figure 6-2**.

At monitoring well 80-MW2, the initial g-chlordane concentration of 2.719 ug/L led to a predicted time of 19.0 years for compliance with the NJDEP criteria (1.0 ug/L). The migration distance to achieve compliance at well 80-MW2 is predicted to be 0.66 feet. This prediction was made using the biodegradation half-life of 7.6 years for chlordane (Howard, 1991) and does not include the effects of dilution due to dispersion, which was simulated using MODFLOW. Aerobic biodegradation is discussed in more detail below.

6.1.3 Dissolved Oxygen

The aerobic biodegradation of chlordane is justified based on analysis of the DO observed during monitoring well sampling at Site 80/166. As discussed in **Section 5.4**, during each sampling event, at each well, DO was recorded while the wells were being purged. **Table 5-6** shows the DO measurements for the monitoring wells at Site 80/166 during sampling events between April 1997 and January 2001.

Aerobic respiration is the first reaction in an aerobic environment that contains microorganisms capable of biodegradation (Wiedemeir, 1999). Once the available DO is depleted and anaerobic conditions dominate the interior regions of the organic contaminant plume, anaerobic microorganisms can utilize other electron acceptors in the following order of preference: nitrate, manganese, iron (III), sulfate, and finally carbon dioxide. As each electron acceptor being utilized for biodegradation becomes depleted, the next most preferable electron acceptor is utilized. Each successive redox couple provides less energy to the microorganism.

Aerobic degradation requires the presence of DO. If the subsurface environment becomes devoid of oxygen, the rate of aerobic biodegradation will typically be limited by

oxygen supply rather than by nutrient concentration. For anaerobic biodegradation the microbial competition ultimately will determine the dominant process, but the dominant process can vary both temporally and spatially. Therefore, iron (III) reduction, sulfate reduction or methanogenesis may dominate, depending on seasonal variations in concentrations of DO and sulfate.

Using stoichiometry, a utilization factor can be developed showing the ratio of the oxygen consumed to the mass of DO consumed in the biodegradation reactions. Similarly, utilization factors can be developed to show the ratio of the mass of metabolic by-products (such as ferrous iron) that are generated to the mass of dissolved organic degraded in the biodegradation reactions. When the available electron acceptor/by-product concentrations are divided by the appropriate utilization factor, an estimate of the biodegradation capacity of the groundwater flowing through the source zone and plume can be developed as follows:

Biodegradation Capacity (mg/L) =

{(Average Upgradient Electron Acceptor Concentration) -
(Minimum Plume Zone Electron Acceptor Concentration)} / Utilization Factor

The upgradient well used in the calculation of Biodegradation Capacity is well 166-MW1. The plume zone is assumed to be located in the vicinity of well 80-MW2. The following utilization factors and site biodegradation capacity based on the degradation of a-chlordane and g-chlordane are calculated for the site:

Electron Acceptor	Average Upgradient Electron Acceptor Concentration	Minimum Plume Zone Electron Acceptor Concentration	Aerobic Biodegradation of Chlordane: $4C_6H_5O + 29O_2 \rightarrow 2Cl_2 + 24CO_2 + 10H_2O$	
	166-MW1 (mg/L)	80-MW2 (mg/L)	Utilization Factor (mg/mg)	Site Biodegradation Capacity (mg/L)
Oxygen	3.90	3.41	2.063	0.238

The most recent chlordane detection at well 80-MW2 (in January 2001) was 2.917 ug/L (0.002917 mg/L) for g-chlordane. Based on the calculations presented in the preceding table and on site observations, groundwater has enough biodegradation capacity to degrade dissolved-phase chlordane, if aerobic reactions are occurring at the site.

6.1.4 MODFLOW Input Parameters

Visual MODFLOW Version 2.8.2 (Waterloo Hydrogeologic, Inc.) was used to simulate the groundwater flow at Site 80/166, and *MT3D 1999* (1999, Papadopolos & Associates, Inc.) was used to simulate the movement of the contaminants over time at Site 80/166. *Surfer for Windows Version 7* (Golden Software, Inc.) was used to create the map of the

ground surface that was used in the simulation, and the maps of initial arsenic and lead concentrations. The input parameters for the MODFLOW model for Site 80/166 are presented in **Table 6-2**.

Physical Boundaries and Grid

The model grid for Site 80/166 is presented in **Figure 6-3** with topographic contours shown as brown lines, Oceanport Creek highlighted as solid brown (groundwater constant head boundary condition of 0 feet amsl), and the Fort Monmouth Base Map shown in black. The Fort Monmouth Base Map was used to determine the location of Oceanport Creek.

The model area for Site 80/166 was 2,400 feet (West to East) by 2,400 feet (South to North). This area was divided into a grid with 124 columns and 124 rows. The grid cells are 20 by 20 feet in the majority of the model area and 10 feet by 10 feet in the vicinity of the Site 80/166 monitoring wells. Ground surface elevation points were obtained from the Fort Monmouth topographic survey map, and the surface water at the site was assumed to be at an elevation of 0 feet amsl. The ground surface was obtained for each of the MODFLOW grid cells by importing topographic data into *Visual MODFLOW*, which uses the "kriging" method to estimate topographic elevations in each model grid-values from a set of topographic measurements.

The groundwater recharge for Site 80/166 was estimated to be 13.28 inches, as discussed in **Section 6.1.1**. The recharge of 13.28 inches was applied to the entire MODFLOW model area as an approximation. Surface water drainage through storm sewers was not addressed in the MODFLOW model. The grid cells that are located within Oceanport Creek were designated the boundary condition of 0 feet amsl for the groundwater head.

The porosity and specific yield of 0.4 and 0.2, respectively, were taken from Heath (USGS, 1989). The bulk density of 46.7 kg/feet^3 was derived from the porosity (0.4), and a typical soil particle density of 2.65 g/ml (Brady and Weil 1996).

Groundwater Flow Parameters

The model area for Site 80/166 was divided into seven layers, which relate to three published hydrogeologic units and one five-foot layer of surficial layer of fill. As noted in **Section 4.1**, boring logs for Site 80/166 monitoring wells do not specify that fill was encountered. However, some of the lithology presented in geologic cross sections A-A' (**Figure 4-2**) and A'-A" (**Figure 4-3**) can be assumed to be fill. **Figure 6-4** presents a cross section of the model area showing these layers. Each color on this figure represents a different hydrogeologic unit and a different hydraulic conductivity. Four hydrogeologic units (surficial fill, the Navesink-Hornerstown Confining Unit, the Mount Laurel Aquifer and the Marshalltown-Wenonah Confining Unit) were used in the MODFLOW simulation for Site 80/166. Conductivity values for the lower three hydrogeologic units were taken to be the geometric mean of published conductivity values (Martin, 1998). The thicknesses of these lower four layers correspond to the published thicknesses of

geologic formations (as presented in Zapecza, 1990, plates 16, 17 and 18). The seven model layers are discussed below:

- The top layer, identified as Layer 1, is 5 feet thick, and corresponds to fill material. The fill thickness of 5 feet was assigned to the entire model area as a simplification. This assumed thickness approximates the observations of fill in soil borings at Fort Monmouth. Layer 1 was assigned a hydraulic conductivity of 3.8 feet per day, which is the geometric mean of the conductivity values obtained from slug tests (described in **Sections 3.4 and 4.2.2**).
- Layers 2 (approximately 12.5 feet thick), 3 (12.5 feet thick), 4 (55 feet thick), and 5 (55 feet thick) correspond to the Navesink-Hornerstown Confining Unit. This confining unit was divided into four layers to identify potential contamination within 20 feet of the ground surface and to accurately predict the effects of dispersion in the model. Layers 2, 3, 4 and 5 were assigned a hydraulic conductivity of 0.12 feet per day. The thickness of the Navesink-Hornerstown Confining Unit is 125 feet at Site 80/166 (**Figure 2-7**).
- Layer 6, which corresponds to the Wenonah-Mount Laurel Aquifer, was assigned a thickness of 75 feet and a hydraulic conductivity of 15.96 feet per day.
- The bottom layer, Layer 7, corresponds to the Marshalltown-Wenonah Confining Unit and was assigned the thickness of 10 feet. The hydraulic conductivity of 0.00018 feet per day was assigned to this lowermost layer.

Contaminant Transport Inputs: Initial Concentrations

The physical and chemical parameters that effect contaminant transport were set up for three groundwater constituents at Site 80/166, g-chlordane, arsenic and lead. The contaminant transport parameters include initial concentrations of the COCs, dispersivity, bulk density, sorption type and sorption coefficients. In addition, biodegradation parameters were used for the MODFLOW simulation of g-chlordane. The initial concentrations of these COCs in each well is discussed in **Section 5.0** and summarized in **Table 5-5**. The initial concentration maps used in MODFLOW are portrayed in **Figures 6-5a**, **6-5b** and **6-5c**.

The initial concentration map for g-chlordane (**Figure 6-5a**) was created by assigning a 40 foot by 40 foot area surrounding well 80-MW2 with the initial concentration of 2.719 (the most recent detection of g-chlordane, in January 2001). The remainder of the map was assigned the initial concentration of 0.014 ug/L, which corresponds to half the MDL for g-chlordane during the groundwater sampling program (see **Table 5-5**).

The initial concentration maps for arsenic (**Figure 6-5b**) and lead (**Figure 6-5c**) were derived for each of the MODFLOW grid cells by entering average groundwater concentrations into *Visual MODFLOW*. The average concentrations were derived from the groundwater sampling results obtained between April 1997 and January 2001 (**Table 5-1**). Points outside of the Site 80/166 monitoring wells were entered into MODFLOW as half the respective MDLs for arsenic and lead.

Contaminant Transport Inputs: Aquifer Characteristics

The contaminant transport simulation for Site 80/166 incorporated the sorption of the COCs to the solid soil particles. The sorption coefficient, K_d, represents the fraction of a particular substance that is "sorbed" to the soil (absorption and/or adsorption) versus that fraction dissolved in the groundwater. The linear isotherm portrayed in the following equation describes the simplest relationship involving sorption:

$$S = K_d C$$

where S represents the sorbed fraction and C represents the dissolved concentration, and the sorption coefficient, K_d, is a constant that does not vary with the dissolved concentration. The ratio of the groundwater velocity to the velocity of a dissolved substance is called the "retardation factor," or R_d. The retardation factor can be calculated using the following equation:

$$R_d = 1 + (\rho_d / \alpha) * (K_d)$$

where R_d is the retardation factor, ρ_d is the bulk density of the soil, α is the porosity, and K_d is the sorption coefficient (Domenico and Schwartz, 1998). For g-chlordane, K_d was calculated using the relationship:

$$K_d = f_{oc} * K_{oc}$$

where f_{oc} is the fraction of organic carbon and K_{oc} is the organic carbon partition coefficient. The contaminant transport simulation was conducted using a linear isotherm and K_d values from the USEPA (1996). As shown in **Table 6-2**, the retardation factors for g-chlordane, arsenic and lead at Site 80/166 are 900, 73 and 2,204, respectively.

Dispersion was incorporated in the model to predict the effects of dilution of the COCs at Site 80/166. The longitudinal dispersivity of 3.48 feet was used in the model, which was calculated using the method published by the USEPA (2001). The longitudinal dispersivity is a function of the plume size of 40 feet.

6.1.5 MODFLOW Calibration

The model was first run to simulate the groundwater conditions at Site 80/166 without the contaminant transport simulation. **Figure 6-6** shows the flow directions and groundwater elevation contours that were predicted during model calibration. These conditions represent steady-state, which was achieved by running the model until the head change variation was less than 0.01 feet between iterations. **Figure 6-7** presents a comparison of the groundwater elevations simulated in the model ("Calculated Heads") and field measurements ("Observed Heads") conducted on January 24, 2001 at Site 80/166 (see **Table 3-3** for groundwater elevation data). The model calibration results shown in **Figure 6-7** provide evidence that the model accurately predicts groundwater flow

conditions at Site 80/166 and that the output (predictions) of the model match closely with field measurements.

6.1.6 MODFLOW Results

The migration of the COCs in groundwater at Site 80/166 was simulated in MODFLOW using the grid setup and input parameters discussed above. The MODFLOW simulation was run for a simulated time of 20 years (7,300 days) for each COC. The MODFLOW results are presented in **Figures 6-8a** and **6-8b** (g-chlordane), **Figures 6-9a** and **6-9b** (arsenic), and **Figures 6-10a and 6-10b** (lead). The estimated times for COCs at Site 80/166 to achieve compliance with NJDEP groundwater standards are presented in **Table 6-3**.

For g-chlordane, the estimated time of compliance at Site 80/166 is approximately 20 years, which is the same as predicted using the biodegradation spreadsheet in **Table 6-1**. This result indicates that the additional components of 3-dimensional flow and dispersion did not change the estimated time of compliance. This lack of change is due to the strong retardation of chlordane in soil.

The result for g-chlordane was derived from groundwater concentrations at a single location (80-MW2). Additional soil and groundwater sampling would be needed in order to determine the extent of the chlordane contamination in soils and/or groundwater at Site 80/166 and the surrounding area. The soil and groundwater samples collected during the Geoprobe® investigation in March and May 2000 were not analyzed for pesticides/PCBs.

For each of the metal COCs at Site 80/166 (arsenic and lead), the predicted concentrations at 20 years exceeded their respective NJDEP groundwater criteria. The MODFLOW results for arsenic and lead are shown in **Figures 6-9a** and **6-9b** (arsenic), and **6-10a** and **6-10b** (lead). The estimated times for compliance with the NJDEP criteria is 600 years for arsenic and greater than 1,000 years for lead. The results of the groundwater modeling indicate that COC migration will be minimal due to low hydraulic conductivity and strong retardation by the soils.

6.2 Sensitive Receptor Survey Results

The sensitive receptor survey was completed by performing two tasks: an Offsite Receptor Report and an NJDEP well record search.

Offsite Receptor Report

An Offsite Receptor Report (dated October 24, 2001) was prepared for Site 80/166 by EDR of Southport, Connecticut. A copy of the Offsite Receptor Report, identifying sensitive receptors in the area, is provided in **Appendix I**.

The Offsite Receptor Report indicates that there are three schools (Steelman School, Wolf Hill Elementary School and Meadowbrook Elementary School) located less than one-mile from Site 80/166. These three schools are located between one-half and one-mile from Site 80/166.

Well Record Search

A search of the comprehensive well database maintained by the NJDEP Well Permitting and Regulations Section of the Bureau of Water Allocation was performed by Versar to identify groundwater wells that may be potentially affected by COCs at Site 80/166. The search was performed for a one-mile radius surrounding the central point of Site 80/166.

The well records obtained during the well search are provided in **Appendix J** and are summarized in **Table 6-4**. The wells designated for domestic or irrigation uses are presented in **Figure 6-11**. There was one domestic well identified by records within 1,000 feet of Site 80/166 with the following information (though actual water use and physical presence were not verified):

- NJDEP Permit #2904513
- Original Owner: Rumson Country Club
- Permit Date: 10/16/64
- Location: N40°19'06" W74°01'33"
- Depth of well: 350 feet
- Approximate distance from Site 80/166: 850 feet (east, across Oceanport Creek)

Due to the significant distance of Site 80/166 from this one sensitive receptor, as well as the ongoing monitoring of Oceanport Creek adjacent to the impacted area, the concern for sensitive receptors is minimal. The probability that any well in the vicinity of the site is being used for consumptive purposes is low, thus minimizing health-based risks associated with ingestion. Furthermore, based on the MODFLOW model predictions, the COCs will not migrate beyond the boundaries of Site 80/166, and would seep into Oceanport Creek before reaching the one identified receptor. Therefore, no sensitive receptors are likely to be impacted by the presence of COCs in the groundwater beneath Site 80/166.

6.3 Aquifer Classification

Upon review of the NJDEP Groundwater Quality Standards (NJAC 7:9-6), January 7, 1993, Site 80/166 is found to be underlain by a Class III-A aquifer. The primary designated use for Class III-A groundwater is the release or transmittal of groundwater to adjacent classification areas and surface water, as relevant. Secondary designated uses in Class III-A include any reasonable uses. For an area to be classified as a Class III-A aquifer, groundwater must meet the following characteristics:

- Class III-A groundwater includes portions of the saturated zones (that meet the criteria below) of the Woodbury Formation, Merchantville Formation, Marshalltown Formation, Navesink Formation, Hornerstown Formation, aquitard formations of the Potomac-Raritan-Magothy aquifer system and the Kirkwood aquifer system, portions of the glacial moraine and glacial lake deposits and other geologic units having the characteristics of an aquitard. Class III-A areas have the following characteristics (NJAC 7:9-6.5):
    - The average thickness of a Class III-A aquifer must be at least 50 feet;
    - Typical hydraulic conductivity of a Class III-A aquifer is approximately 0.1 feet/day or less; and
    - The aerial extent defined as Class III-A must be at least 100 acres.

The shallow aquifer at Fort Monmouth meets each of the four criteria listed above. These criteria are discussed below:

- As presented in **Figure 2-7**, Fort Monmouth is located within the outcrop area of the "Navesink-Hornerstown Confining Unit" (Martin, 1998), which also includes the Red Bank Sand, Tinton Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation and the basal clay of the Kirkwood Formation (see **Section 2.4.2**). **Figure 2-7** illustrates that the thickness of the Hornerstown-Navesink Confining Unit, which in the vicinity of Fort Monmouth, is approximately 125 feet.
- Published hydraulic conductivities (Martin, 1998) for the Navesink-Hornerstown Confining Unit (shown in **Table 6-2)** yield a geometric mean of 0.12 feet per day, which was the conductivity used in the MODFLOW Model (**Section 6.1.2**) and which is consistent with an aquitard.
- The area of Fort Monmouth is greater than 100 acres.

6.4 Contaminant Migration Summary

At Site 80/166, a-chlordane, g-chlordane, arsenic and lead were identified as COCs in groundwater using the NJDEP GWQC for Class II-A aquifers. The Class II-A criteria were used for comparison with site-specific data obtained from the various sampling rounds because the GWQS (NJAC 7:9-6.7e) state that the groundwater quality criteria to be used for Class III-A aquifers are the most stringent criteria associated with vertically or horizontally adjacent ground waters that are not Class III-A.

Groundwater modeling and a sensitive receptor survey were conducted to determine whether groundwater from Site 80/166 could impact surface water, off-site domestic wells, and subsurface groundwater aquifers. Groundwater modeling shows the impact of COC migration in groundwater at Site 80/166 will be minimal due to low hydraulic conductivity and sorption of the COCs to the soil (retardation). The results of the groundwater modeling and sensitive receptor survey are summarized below:

- Using published biodegradation rates for chlordane, the biodegradation model predicts that g-chlordane will degrade in well 80-MW2 within approximately 20 years. a-Chlordane was detected at lower concentrations than g-chlordane and will therefore degrade within a shorter period of time.
- Due to the low concentrations of the a-chlordane and g-chlordane at Site 80/166, and the very slow migration rates for these pesticides in groundwater, there is little potential for significant impact by migration (seepage) into Oceanport Creek. The 20 year prediction for compliance with NJDEP GWQC is not affected by the inclusion of 3-dimensional groundwater flow and dispersion in MODFLOW.
- Due to the low concentrations of the identified metal COCs (arsenic and lead) at Site 80/166, and the very slow migration rates for these metals in the groundwater, there is little potential for significant impact by migration (seepage) into Oceanport Creek.
- The closest aquifer, the Wenonah-Mount Laurel Aquifer, is located approximately 125 feet bgs. The results of the groundwater modeling indicate that this aquifer is too deep to be affected by the COCs near the ground surface at Site 80/166 and that the vertical exchange of groundwater between the aquifers (leakage) is minimal.
- The sensitive receptor survey indicates that the closest downstream domestic well is approximately 850 feet from Site 80/166 across Oceanport Creek, which is too far to be impacted by COC migration. The potential migration of the COCs from Site 80/166 to this well in any reasonable time period is not possible.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Geologic publications show that Site 80/166 is located within an aquitard (the Navesink-Hornerstown Confining Unit). The low hydraulic conductivity of the aquitard and the thickness of the aquitard at the site conform to the requirements of a Class III-A aquifer, as specified in the NJDEP GWQS (NJAC 7:9-6, January 7, 1993).

The analytical results for the groundwater samples collected between April 1997 and January 2001 indicate that a-chlordane, g-chlordane, arsenic and lead exceed the GWQC at Site 80/166 and are considered COCs. The Class II-A criteria were used for comparison with site-specific data obtained from the various sampling rounds because the GWQS (NJAC 7:9-6.7e) state that the groundwater quality criteria to be used for Class III-A aquifers are the most stringent criteria associated with vertically or horizontally adjacent ground waters that are not Class III-A.

Due to the low concentrations of COCs at the site and the slow migration rates for the COCs in the groundwater, there is little potential for significant COC impact by migration into Oceanport Creek. The Wenonah Mount Laurel aquifer, which is approximately 125 feet bgs, is too deep to be affected by the COCs near the ground surface. The sensitive receptor survey indicates that there are no domestic or irrigation wells close enough to Site 80/166 to be adversely impacted by COC migration.

NFA is recommended with regard to pesticides and metals contamination in groundwater at Site 80/166.

8.0 REFERENCES

ATC Associates, BCM Engineers Division, July 1998, *UST Closure and Site Investigation Report for former Building T-80, UST No. 90010-06,* Fort Monmouth, New Jersey.

ATC Associates, May 2000, *UST Closure and Site Assessment Report, Building 166, UST No. 90017-17,* Fort Monmouth, New Jersey.

Domenico, P.A. and F.W. Schwartz, 1998, *Physical and Chemical Hydrogeology, 2nd ed.* New York, John Wiley and Sons, New York.

Heath, R.C., 1989, *Basic ground-water hydrology*, U.S. Geological Survey Water-Supply Paper 2220, 5th printing, U.S. Government Printing Office, Washington, DC.

Howard, P.H., et. al., 1991, *Handbook of Environmental Degradation Rates*. Lewis Publishers.

Jablonski, L.A., 1968, *Groundwater Resources of Monmouth County, New Jersey. USGS Special Report 23*. USGS, Washington, DC.

Martin, M., 1998, *Groundwater Flow in the New Jersey Coastal Plain*. USGS Professional Paper 1404-H.

Meisler, H., J.A. Miller, L.L. Knobel, and R.L. Wait, 1988, "Region 22, Atlantic and Eastern Gulf Coastal Plan," in *Hydrogeology: The Geology of North America*, W. Back, J.S. Rosenhein, and P.R. Seaber, editors. Vol. 0-2. pp. 209-218.

Minard, J.P., 1969, *Geology of Sandy Hook Quadrangle in Monmouth County, New Jersey*. U.S. Government Printing Office, Washington, DC.

New Jersey Geological Survey, 1994, *Geologic Map of New Jersey*.

U.S. Army Garrison, Fort Monmouth, Directorate of Public Works (DPW), December 1997, *Fort Monmouth Standard Sampling Operating Procedure*, New Jersey.

U.S. Army Garrison, Fort Monmouth, Directorate of Public Works (DPW), Nad-83 Base Map of Fort Monmouth, New Jersey.

U.S. Army Garrison, Fort Monmouth, Directorate of Public Works (DPW), Nad-83 Topographic Survey of Fort Monmouth, New Jersey.

USDA Soil Conservation Service, 1989, *Soil Survey of Monmouth County, New Jersey.*

U.S. Geological Survey, 1981, *Long Branch Quadrangle Map*.

VERSAR, Inc. (Versar), 12 September, 2000, *Indefinite Quantity Indefinite Delivery Contract No. DACA51-00-D-0004 Fort Monmouth, Contract Support Services Relating to the Investigation of Groundwater and Surface Water at Five Restoration Sites*.

Weston (Roy F. Weston, Inc.), December 1995, *Site Investigation Report – Main Post and Charles Wood Areas, Fort Monmouth, New Jersey*.

Wiedemeier, T., 1999. *Natural Attenuation of Fuels and Chlorinated Solvents in the Subsurface*. John Wiley and Sons, New York.

Zapecza, O., 1989, *Hydrogeologic Framework of the New Jersey Coastal Plain.* U.S. Geological Survey Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.

TABLES

Table 2-1
Well Construction Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	NJDEP Permit Number	Northing	Easting	Elevation of Inner Casing Survey Mark	Elevation of Ground Surface	Hole Diameter	Total Depth of Well	Depth to Top of Screen	Screen Length	Screen Material	Date of Construction
Units	**--**	**ft**	**ft**	**ft (amsl)[1]**	**ft (amsl)[1]**	**in**	**ft (bgs)[2]**	**ft (bgs)[2]**	**ft**	**--**	**--**
80-MW1	29-31774	540841.109	623562.057	6.84[3]	7.65[3]	8	13.0	3.0	10.0	20 Slot PVC	9/15/1994
80-MW2	29-43199	540895.438	623503.5	7.68	8.01	10	12.0	2.0	10.0	10 Slot PVC	7/24/2000
80-MW3	29-43201	540896.111	623695.234	7.63	7.86	10	12.0	2.0	10.0	10 Slot PVC	7/24/2000
80-MW4	29-43200	540770.626	623567.858	7.46	7.76	10	12.0	2.0	10.0	10 Slot PVC	7/24/2000
80-MW5	29-43202	540786.22	623622.45	7.14	7.36	10	12.0	2.0	10.0	10 Slot PVC	7/24/2000
166-MW1	29-31733	540965.787	623549.32	6.91	7.29	8	10.0	0.5	9.5	20 Slot PVC	9/14/1994

Notes:

Where a difference in reported data exists between a monitoring well permit and the corresponding boring log, data from the permit was used.

[1]amsl = above mean sea level

[2]bgs = below ground surface

[3]Most recent Form B survey data used

NA = Not available

Well locations were recorded using Trimble GPS equipment in August 2001.

Table 3-1
Groundwater Sample Collection Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
1	2457.01	Trip Blank	04/16/97	04/25/97	aqueous	Blank	VOCs+15	Method 624
	2457.02	Field Blank	04/16/97	04/22/97	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	2457.03	80-MW1	04/16/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2458.01	166-MW1	04/16/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
2	2917.01	Trip Blank	08/20/97	08/26/97	aqueous	Blank	VOCs +15	Method 624
	2917.02	Field Blank	08/20/97	08/26/97	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3111D, 3111B, 3112B, 3113B, 3120B
	2917.03	166-MW1	08/20/97	08/26/97	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3111D, 3111B, 3112B, 3113B, 3120B
	2918.01	80-MW1	08/20/97	08/26/97	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3111D, 3111B, 3112B, 3113B, 3120B
3	3174.01	Trip Blank	11/24/97	12/02/97	aqueous	Blank	VOCs +15	Method 624
	3174.02	Field Blank	11/24/97	12/02/97	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3174.03	80-MW1	11/24/97	12/02/97	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3175.01	166-MW1	11/24/97	12/02/97	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
4	3373.01	Trip Blank	02/27/98	03/03/98	aqueous	Blank	VOCs +15	Method 624
	3373.02	Field Blank	02/27/98	03/03/98	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3373.06	Duplicate	02/27/98	03/03/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3375.01	166-MW1	02/27/98	03/03/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3376.01	80-MW1	02/27/98	03/03/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
5	3610.01	Trip Blank	06/02/98	06/09/98	aqueous	Blank	VOCs +15	Method 624
	3610.02	Field Blank	06/02/98	06/10/98	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3614.01	80-MW1	06/02/98	06/11/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3614.02	166-MW1	06/02/98	06/11/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
6	3823.01	Duplicate	08/24/98	08/28/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3823.02	Trip Blank	08/24/98	08/28/98	aqueous	Blank	VOCs +15	Method 624
	3823.03	Field Blank	08/24/98	08/28/98	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3823.04	80-MW1	08/24/98	08/28/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3823.05	166-MW1	08/24/98	08/28/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
7	4076.01	Trip Blank	11/20/98	11/24/98	aqueous	Blank	VOCs +15	Method 624
	4076.02	Field Blank	11/20/98	11/24/98	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4076.03	80-MW1	11/20/98	11/24/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4076.04	166-MW1	11/20/98	11/24/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4076.05	Duplicate	11/20/98	11/24/98	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
8	4262.01	Trip Blank	02/09/99	02/17/99	aqueous	Blank	VOCs +15	Method 624
	4262.02	Field Blank	02/09/99	02/16/99	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4262.03	80-MW1	02/09/99	02/16/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4262.04	166-MW1	02/09/99	02/16/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4262.05	Duplicate	02/09/99	02/16/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
9	4514.01	Trip Blank	05/26/99	05/28/99	aqueous	Blank	VOCs +15	Method 624
	4514.02	Field Blank	05/26/99	05/28/99	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4514.03	80-MW1	05/26/99	05/28/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4514.04	166-MW1	05/26/99	05/28/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4514.05	Duplicate	05/26/99	05/28/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
10	4808.01	80-MW1	09/22/99	09/25/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4808.02	166-MW1	09/22/99	09/25/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4808.03	Trip Blank	09/22/99	09/25/99	aqueous	Blank	VOCs +15	Method 624
	4808.04	Field Blank	09/22/99	09/25/99	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4808.05	Duplicate	09/22/99	09/25/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B

Table 3-1
Groundwater Sample Collection Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
11	5021.01	80-MW1	12/17/99	12/22/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5021.02	166-MW1	12/17/99	12/22/99	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
12	5223.01	Trip Blank	03/06/00	03/08/00	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5223.02	Field Blank	03/06/00	03/08/00	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5223.03	Duplicate	03/06/00	03/08/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5223.04	80-MW1	03/06/00	03/08/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5223.05	166-MW1	03/06/00	03/08/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
13	5406.01	80-MW1	05/09/00	05/10/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5406.02	166-MW1	05/09/00	05/10/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
14	5635.01	80-MW1	08/16/00	08/17/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5635.02	166-MW1	08/16/00	08/17/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5636.01	Trip Blank	08/16/00	08/24/00	aqueous	Blank	VOCs +15	Method 624
	5636.02	Field Blank	08/16/00	08/18/00	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5636.03	Duplicate	08/16/00	08/18/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5636.04	80-MW2	08/16/00	08/18/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5636.05	80-MW3	08/16/00	08/18/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5636.06	80-MW4	08/16/00	08/18/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5636.07	80-MW5	08/16/00	08/18/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
15	5675.01	Trip Blank	08/30/00	09/09/00	aqueous	Blank	VOCs +15	Method 624
	5675.02	Field Blank	08/30/00	09/05/00	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5675.03	Duplicate	08/30/00	09/05/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5675.04	80-MW2	08/30/00	09/05/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5675.05	80-MW3	08/30/00	09/05/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5675.06	80-MW4	08/30/00	09/05/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5675.07	80-MW5	08/30/00	09/05/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
low flow 1	5691.01	Field Blank	09/06/00	09/19/00	aqueous	Blank	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5691.02*	Duplicate	09/06/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5691.03*	80-MW4	09/06/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5691.04*	80-MW5	09/06/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5691.05*	80-MW3	09/06/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5694.01	Field Blank	09/07/00	09/19/00	aqueous	Blank	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5694.02*	Duplicate	09/07/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5694.03*	80-MW2	09/07/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5694.04*	80-MW1	09/07/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5694.05*	166-MW1	09/07/00	09/19/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
low flow 2	5780.01*	Duplicate	10/11/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5780.02	Field Blank	10/11/00	10/18/00	aqueous	Blank	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5780.03*	80-MW4	10/11/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5780.04*	80-MW5	10/11/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5780.05*	80-MW3	10/11/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5782.01*	Duplicate	10/12/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5782.01	Field Blank	10/12/00	10/18/00	aqueous	Blank	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5782.03*	80-MW1	10/12/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5782.04*	80-MW2	10/12/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B
	5782.05*	166-MW1	10/12/00	10/18/00	aqueous	GW	Pesticides/PCBs; TAL metals	Method 608; Method 3112B, 3120B

Table 3-1
Groundwater Sample Collection Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
16	5818.01	Trip Blank	10/27/00	11/02/00	aqueous	Blank	VOCs +15	Method 624
	5818.02	Field Blank	10/27/00	11/02/00	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.03	Duplicate	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.04	80-MW1	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.05	80-MW2	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.06	80-MW3	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.07	80-MW4	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.08	80-MW5	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5818.09	166-MW1	10/27/00	11/02/00	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
17	342	Trip Blank	01/24/01	01/31/01	aqueous	Blank	VOCs +15	Method 624
	343	Field Blank	01/24/01	01/31/01	aqueous	Blank	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	344	Duplicate	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	345	166-MW1	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	346	80-MW1	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	347	80-MW2	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	348	80-MW3	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	349	80-MW4	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	350	80-MW5	01/24/01	01/31/01	aqueous	GW	VOCs+15; SVOCs +25; Pesticides/PCBs; TAL metals;	Method 624; Method 625; Method 608; Methods 3112B and 3120B

Notes:
GW : Groundwater
TAL metals : Target Analyte List metals
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)
SVOCs+15: Semi-Volatile Organic Compounds plus 15 TICs
*Low Flow Sampling Method was used to collect sample

Table 3-2
Geoprobe Investigation Sample Collection Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Sample ID	Sample Location	Sample Depth	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
5241.01	Trip Blank	-	3/13/2000	3/16/2000	methanol	Blank	VOCs+15	Method 624
5241.02	Field Blank	-	3/13/2000	3/14/2000	aqueous	Blank	VOCs+15	Method 624
5241.03	1	48"	3/13/2000	3/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5241.04	1	3-7'	3/13/2000	3/16/2000	aqueous	GW	VOCs+15	Method 624
5241.05	2	48"	3/13/2000	3/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5241.06	2	3-7'	3/13/2000	3/16/2000	aqueous	GW	VOCs+15	Method 624
5241.07	3	48"	3/13/2000	3/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5241.08	3	3-7'	3/13/2000	3/16/2000	aqueous	GW	VOCs+15	Method 624
5241.09	4	48"	3/13/2000	3/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5241.10	4	3-7'	3/13/2000	3/16/2000	aqueous	GW	VOCs+15	Method 624
5246.01	Trip Blank	-	3/14/2000	3/18/2000	methanol	Blank	VOCs+15	Method 624
5246.02	Field Blank	-	3/14/2000	3/18/2000	aqueous	Blank	VOCs+15	Method 624
5246.03	5	42"	3/14/2000	3/18/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5246.04	5	3-7'	3/14/2000	3/18/2000	aqueous	GW	VOCs+15	Method 624
5246.05	6	42"	3/14/2000	3/18/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5246.06	6	3-7'	3/14/2000	3/18/2000	aqueous	GW	VOCs+15	Method 624
5246.07	7	42"	3/14/2000	3/18/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5246.08	7	3-7'	3/14/2000	3/18/2000	aqueous	GW	VOCs+15	Method 624
5246.09	8	42"	3/14/2000	3/18/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5246.10	8	3-7'	3/14/2000	3/18/2000	aqueous	GW	VOCs+15	Method 624
5246.11	9	48"	3/14/2000	3/18/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5246.12	9	3-7'	3/14/2000	3/18/2000	aqueous	GW	VOCs+15	Method 624
5246.13	10	48"	3/14/2000	3/18/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5246.14	10	3-7'	3/14/2000	3/18/2000	aqueous	GW	VOCs+15	Method 624
5248.01	Trip Blank	-	3/15/2000	3/19/2000	methanol	Blank	VOCs+15	Method 624
5248.02	Field Blank	-	3/15/2000	3/19/2000	aqueous	Blank	VOCs+15	Method 624
5248.03	11	48"	3/15/2000	3/19/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5248.04	11	3-7'	3/15/2000	3/19/2000	aqueous	GW	VOCs+15	Method 624
5248.05	12	48"	3/15/2000	3/19/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5248.06	12	3-7'	3/15/2000	3/19/2000	aqueous	GW	VOCs+15	Method 624

Table 3-2
Geoprobe Investigation Sample Collection Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Sample ID	Sample Location	Sample Depth	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
5248.07	13	48"	3/15/2000	3/19/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5248.08	13	3-7'	3/15/2000	3/19/2000	aqueous	GW	VOCs+15	Method 624
5248.09	14	48"	3/15/2000	3/19/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5256.01	14	3-7'	3/17/2000	3/19/2000	aqueous	GW	VOCs+15	Method 624
5248.11	15	48"	3/15/2000	3/19/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5248.12	15	3-7'	3/15/2000	3/19/2000	aqueous	GW	VOCs+15	Method 624
5248.13	FD	48"	3/15/2000	3/19/2000	soil	S	VOCs+15	Method 624
5256.02	FD	3-7'	3/17/2000	3/19/2000	aqueous	GW	VOCs+15	Method 624
5416.01	Trip Blank	-	5/15/2000	5/16/2000	methanol	Blank	VOCs+15	Method 624
5416.02	Field Blank	-	5/15/2000	5/16/2000	aqueous	Blank	VOCs+15	Method 624
5416.03	16	36"	5/15/2000	5/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5416.04	16	3.4-8'	5/15/2000	5/16/2000	aqueous	GW	VOCs+15	Method 624
5416.05	17	36"	5/15/2000	5/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5416.06	17	3-8'	5/15/2000	5/16/2000	aqueous	GW	VOCs+15	Method 624
5416.07	18	36"	5/15/2000	5/16/2000	Soil	S	VOCs+15, Percent Solids	Method 624
5416.09	18	3-8'	5/15/2000	5/16/2000	aqueous	GW	VOCs+15	Method 624

Notes:
FD: Field Duplicate
GW:Groundater
NA: Data not available.
S: Soil Boring
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)

Table 3-3
Groundwater Elevation Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.
80-MW1	6.91	04/16/97	2.60	4.31	08/20/97	3.2	3.71	11/24/97	2.40	4.51	02/27/98	1.40	5.51
80-MW2	7.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW3	7.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW4	7.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW5	6.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
166-MW1	6.96	04/16/97	2.51	4.45	08/20/97	3.20	3.76	11/24/97	2.25	4.71	02/27/98	1.00	5.96

Notes:

1) Elev.: Elevation in feet above mean sea level.
2) Depth to water: depth in feet from the inner casing survey mark.
3) NS: Not Sampled

Table 3-3
Groundwater Elevation Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.
80-MW1	6.91	06/02/98	2.09	4.82	08/24/98	3.43	3.48	11/20/98	4.04	2.87	02/09/99	3.84	3.07
80-MW2	7.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW3	7.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW4	7.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW5	6.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
166-MW1	6.96	06/02/98	1.97	4.99	08/24/98	3.42	3.54	11/20/98	3.99	2.97	02/09/99	2.73	4.23

Notes:

1) Elev.: Elevation in feet above mean sea level.
2) Depth to water: depth in feet from the inner casing survey mark.
3) NS: Not Sampled

Table 3-3
Groundwater Elevation Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.
80-MW1	6.91	05/26/99	2.61	4.3	09/22/99	2.73	4.18	12/17/99	2.52	4.39	03/06/00	2.76	4.15
80-MW2	7.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW3	7.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW4	7.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
80-MW5	6.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
166-MW1	6.96	05/26/99	2.90	4.06	09/22/99	2.71	4.25	12/17/99	2.57	4.39	03/06/00	2.61	4.35

Notes:

1) Elev.: Elevation in feet
above mean sea level.
2) Depth to water: depth in feet
from the inner casing survey mark.
3) NS: Not Sampled

Table 3-3
Groundwater Elevation Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.
80-MW1	6.91	05/09/00	2.36	4.55	08/16/00	1.80	5.11	NS	NS	NS	09/07/00	3.15	3.76
80-MW2	7.68	NS	NS	NS	08/16/00	2.44	5.24	08/30/00	3.22	4.46	09/07/00	2.25	5.43
80-MW3	7.63	NS	NS	NS	08/16/00	2.81	4.82	08/30/00	3.37	4.26	09/06/00	3.25	4.38
80-MW4	7.46	NS	NS	NS	08/16/00	2.76	4.7	08/30/00	3.18	4.28	09/06/00	2.9	4.56
80-MW5	6.91	NS	NS	NS	08/16/00	2.26	4.65	08/30/00	3.05	3.86	09/06/00	3.34	3.57
166-MW1	6.96	05/09/00	2.31	4.65	08/16/00	1.54	5.42	NS	NS	NS	09/07/00	2.1	4.86

Notes:

1) Elev.: Elevation in feet
above mean sea level.
2) Depth to water: depth in feet
from the inner casing survey mark.
3) NS: Not Sampled

Table 3-3
Groundwater Elevation Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Min. Depth to Water	Max. Depth to Water	Min. Ground-water Elev.	Max. Ground-water Elev.	Average Groundwater Elev.
80-MW1	6.91	10/12/00	2.9	4.01	10/27/00	2.98	3.93	01/24/01	2.09	4.82	1.40	4.04	2.87	5.51	4.23
80-MW2	7.68	10/12/00	3.5	4.18	10/27/00	3.77	3.91	01/24/01	2.87	4.81	2.25	3.77	3.91	5.43	4.67
80-MW3	7.63	10/11/00	3.6	4.03	10/27/00	3.83	3.8	01/24/01	2.57	5.06	2.57	3.83	3.80	5.06	4.39
80-MW4	7.46	10/11/00	3.5	3.96	10/27/00	3.67	3.79	01/24/01	3.1	4.36	2.76	3.67	3.79	4.70	4.28
80-MW5	6.91	10/11/00	3.2	3.71	10/27/00	3.58	3.33	01/24/01	2.4	4.51	2.26	3.58	3.33	4.65	3.94
166-MW1	6.96	10/12/00	2.55	4.41	10/27/00	2.95	4.01	01/24/01	1.99	4.97	0.47	3.46	3.50	6.49	4.97
											0.47	4.04	2.87	6.49	

Notes:

1) Elev.: Elevation in feet above mean sea level.
2) Depth to water: depth in feet from the inner casing survey mark.
3) NS: Not Sampled

Table 4-1
Data for Geologic Cross-Section A-A'
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Units	166-MW1	80-MW2	80-MW1	80-MW4
Elevation of Top of Casing	ft (amsl)	6.91	7.68	6.84	7.46
Elevation of Ground Surface	ft (amsl)	7.29	8.01	7.65	7.76
Elevation of Top of Screen	ft (amsl)	6.79	6.01	4.65	5.76
Elevation of Groundwater (1/24/01)	ft (amsl)	4.97	4.81	4.82	4.36
Elevation of Top of Unit 2	ft (amsl)	6.29	7.34	7.05	7.76
Elevation of Top of Unit 3	ft (amsl)	3.29	7.01	4.65	5.76
Elevation of Top of Unit 4	ft (amsl)	2.29	2.01	NA	0.76
Elevation of Top of Unit 5	ft (amsl)	NA	NA	NA	NA
Elevation of Top of Unit 6	ft (amsl)	NA	-2.99	-2.35	-3.24
Elevation of Bottom of Well	ft (amsl)	-2.71	-3.99	-5.35	-4.24

Explanation of Units (see Minard, 1969):

Surface Materials:

Unit 1 (not in table) = asphalt and base stone

Tinton Sand Formation / Fill

Unit 2 = brown to black fine-medium sand and silt (fill?)

Unit 3 = olive green to gray clay, fine sand and silt

Unit 4 = light brown and orange clay with fine sand and silt

Unit 5 = yellowish orange fine medium sand

Unit 6 = fine sand with small-large subrounded to rounded quartz gravel

Notes:

All measurements in feet.

amsl: above mean sea level

NA: Not Applicable

Table 4-2
Data for Geologic Cross-Section A'-A"
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Units	80-MW4	80-MW5	80-MW3
Elevation of Top of Casing	ft (amsl)	7.46	7.14	7.63
Elevation of Ground Surface	ft (amsl)	7.76	7.36	7.86
Elevation of Top of Screen	ft (amsl)	5.76	5.36	5.86
Elevation of Groundwater (1/24/01)	ft (amsl)	4.36	4.51	5.06
Elevation of Top of Unit 2	ft (amsl)	7.76	0	0
Elevation of Top of Unit 3	ft (amsl)	5.76	6.86	5.76
Elevation of Top of Unit 4	ft (amsl)	0.76	-2.64	-0.97
Elevation of Top of Unit 5	ft (amsl)	NA	NA	NA
Elevation of Top of Unit 6	ft (amsl)	-3.24	NA	NA
Elevation of Top of Unit 7	ft (amsl)	NA	NA	6.86
Elevation of Top of Unit 8	ft (amsl)	NA	NA	-0.39
Elevation of Bottom of Well	ft (amsl)	-4.24	-4.64	-4.14

Explanation of Units (see Minard, 1969):

Surface Materials:

Unit 1 (not in table) = asphalt and base stone

Tinton Sand Formation:

Unit 2 = brown to black fine-medium sand and silt

Unit 3 = olive green to gray clay, fine sand and silt

Unit 4 = light brown and orange clay with fine sand and silt

Unit 5 = yellowish orange fine medium sand

Unit 6 = fine sand with small-large subrounded to rounded quartz gravel

Unit 7 = brown fine-course sand with small-medium subrounded quarts gravel

Unit 8 = gray clay interbedded with orange fine-medium sand

Notes:

All measurements in feet.

amsl: above mean sea level

NA: Not Applicable

Table 4-3
Slug Testing Results Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID	Date	Depth to Static Water Level	DTW at t=0	b	DTW Adjustment	Hydraulic Conductivity (feet/day)
80-MW1	8/15/2001	3.13	6.136	6.864	1.899	2.00
80-MW2	8/15/2001	3.91	6.184	5.816	1.944	4.85
80-MW3	8/15/2001	4.31	7.556	4.444	0.929	6.30
80-MW4	8/15/2001	4.15	6.309	5.691	1.380	6.41
80-MW5	8/15/2001	3.65	5.762	6.238	0.478	2.08
166-MW1	8/15/2001	3.05	5.204	4.796	0.056	NA*

Geometric Mean of Hydraulic Conductivity (feet/day): 3.8

Notes:
DTW = Depth To Water
Depth to Static Water Level was estimated by subtracting 0.3 ft. from the measured DTW at the end of each test.
b = height of water in well at the beginning of the test.
DTW Adjustment = factor by which raw data was adjusted so final hermit data point equals final measured DTW.
*Not Available: Not enough water in well to perform slug test. When slug test was performed, observed sediment inside the well. Data for 166MW01 was discarded from Geometric Mean of Hydraulic Conductivity calculation

Table 5-1
Groundwater Sampling Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID			80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1
Lab Sample ID	**NJDEP**	**Site Specific**	2457.03	2918.01	3174.03	3376.01	3614.01	3823.04	4076.03	4262.03	4514.03	4808.01	5021.01	5223.04	5406.01	5635.01	5818.04	346	5694.04	5782.03
Sample Date	**Criteria**	**MBC[1]**	04/16/97	08/20/97	11/24/97	02/27/98	06/02/98	08/24/98	11/20/98	02/09/99	05/26/99	09/22/99	12/17/99	03/06/00	05/09/00	08/16/00	10/27/00	01/24/01	09/07/00	10/12/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	17	low flow 1	low flow 2
Volatiles																				
Acetone	**700**	**N/A**	ND	ND	ND	ND	ND	10.27	ND	ND	2.28	ND	ND	ND	ND	ND	ND	ND	NS	NS
Benzene	**1**	**N/A**	**1.38**	ND	ND	ND	**1.71**	ND	ND	**1.26**	**1.31**	ND	ND	ND	ND	ND	ND	ND	NS	NS
2-Butanone	**300**	**N/A**	ND	ND	ND	ND	ND	3.32	ND	ND	ND	ND	ND	ND	ND	ND	4.87	ND	NS	NS
Carbon Disulfide[3]	**100**	**N/A**	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Chlorobenzene[3]	**50**	**N/A**	2.61	ND	2.26	3.26	5.14	5.2	4.88	5.71	5.58	ND	1.95	3.83	4.49	5.9	2.23	7.34	NS	NS
Methylene Chloride[3]	**3**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Semi-Volatiles																				
Acenaphthene	**400**	**N/A**	ND	1.12	1.1	1.39	2.28	ND	ND	ND	1.29	1.29	ND	1.1	1.75	1.54	ND	1.17	NS	NS
Dibenzofuran[3]	**100**	**N/A**	ND	ND	ND	ND	2.03	ND	ND	ND	ND	ND	ND	ND	1.24	1.19	ND	ND	NS	NS
1,2-Dichlorobenzene	**600**	**N/A**	ND	ND	1.79	1.05	1.2	ND	ND	2	1.97	ND	ND	1.25	ND	1.81	ND	1.62	NS	NS
2,4-Dichlorophenol	**20**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Di-n-butylphthalate	**900**	**N/A**	ND	ND	2.54	ND	3.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Fluorene	**300**	**N/A**	ND	1.62	1.27	1.56	3.44	ND	ND	ND	ND	1.69	ND	1.01	2.12	1.98	ND	ND	NS	NS
2-Methylnaphthalene[3]	**100**	**N/A**	ND	7.25	3	8.85	ND	ND	ND	3.95	ND	1.73	2.67	ND	ND	2.91	ND	1.5	NS	NS
Naphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Phenanthrene[3]	**100**	**N/A**	ND	0.52	ND	ND	2.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	1.40	1.17	1.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/PCBs																				
4,4'-DDD	**0.1**	**N/A**	ND	ND	ND	ND	0.099	0.059	0.093	0.09	**0.148**	ND	0.04	ND	**0.176**	ND	ND	0.084	NS	NS
a-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
g-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Endosulfan Sulfate	**0.4**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Metals																				
Aluminum	**200**	**121000**	NS	**329.5**	121	**306**	195	**545**	**422**	**975**	**553**	**542**	121	**2070**	**750**	**267**	**215**	28.2	**368**	73.2
Antimony	**20**	**N/A**	NS	2.8	ND	ND	ND	3.95	ND	ND	ND	ND	ND	ND	ND	5.85	ND	ND	ND	ND
Arsenic	**8**	**N/A**	NS	**9**	ND	**24**	**11.9**	**41.5**	**34.3**	**8.49**	**24**	**11.8**	6.56	**17.9**	**11.3**	**28.8**	**16.8**	**32.4**	ND	**55.2**
Barium	**2000**	**699**	NS	70	24.5	86.2	40.2	108	86.1	81.2	89.7	47.7	56.5	97	118	75.1	97.6	77.6	65.9	89.7
Beryllium	**20**	**N/A**	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.849	ND
Cadmium	**4**	**N/A**	NS	**8**	ND	**8**	3.9	**4.49**	1.96	**24.6**	3.64	3.31	**6.69**	0.585	**4.44**	ND	ND	**5.66**	ND	ND
Calcium	**NLE**	**45400**	NS	28750	81220	51010	39700	75000	58600	86000	65000	28400	50200	71100	79400	49800	84400	53300	13600	51900
Chromium	**100**	**N/A**	NS	**148 (3)**	1.2	1.3	ND	3.12	9.77	8	5.7	4.65	2.82	15.6	11	4.05	5.21	5.43	ND	5.93
Cobalt	**NLE**	**N/A**	NS	50	ND	2	ND	2.05	2.81	0.704	2.9	ND	1.84	0.783	ND	1.86	0.682	1.95	10.9	1.9
Copper	**1000**	**65.6**	NS	15	17	16	6.6	17.5	ND	8.75	13.9	12.6	6.13	ND	197	ND	62.4	12.6	ND	8.58
Iron	**300**	**431000**	NS	**7490**	**9062**	**70680**	**8409**	**67400**	**68800**	**17600**	**56700**	**10500**	**28500**	**52900**	**22200**	**48600**	**26200**	**69800**	**1820**	**109000**
Lead	**10**	**N/A**	2.5	4	**14**	6	3.3	**10.4**	2.86	ND	5.34	5.15	ND	3.67	**26.7**	2.63	3.16	1.87	ND	ND
Magnesium	**NLE**	**62700**	NS	136	18780	16030	4236	18700	16900	10100	15300	3820	10600	13500	10000	ND	11100	14000	6620	18200
Manganese	**50**	**331**	NS	**4260**	**552.7**	**456.2**	**117**	**605**	**647**	**407**	**564**	**228**	**424**	**529**	**318**	**444**	**396**	**579**	**392**	**788**
Mercury	**2**	**N/A**	NS	ND	0.3	ND	ND	0.21	0.38	0.17	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND
Nickel	**100**	**187**	NS	ND	2.3	2.7	2.4	ND	2.23	4.85	1.72	2	ND	4.9	2.3	9.42	1.85	ND	ND	ND
Potassium	**NLE**	**137000**	NS	3920	6010	8470	8833	17400	5340	5080	5730	4660	6360	6520	7570	4590	6530	4140	2470	5130
Selenium	**50**	**N/A**	NS	ND	ND	ND	ND	ND	8.2	7.53	5.22	ND	ND	3.46	ND	ND	5.92	ND	ND	ND
Silver	**NLE**	**N/A**	NS	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	NS	**110750**	**97380**	**279400**	**147200**	**533000**	**530000**	**306000**	**457000**	**181000**	**359000**	**315000**	**648000**	**331000**	**431000**	**574000**	**142000**	**664000**
Thallium	**10**	**N/A**	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	NS	200	ND	ND	3.1	4.11	3.18	3.15	6.41	3.18	1.21	11	3.55	2.56	2.34	2.85	ND	ND
Zinc	**5000**	**233**	NS	92	60	117	65	72.9	44.2	214	80.3	59.5	23.2	42.1	103	29	38.2	76.9	31.6	33.2

Notes

All concentrations in micrograms per liter (ug/L), equivalent to NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and**bold**

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No cleanup standard exists for this analyte

[1]Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

[2]Low Flow Sampling Method used to collect sample

[3]Interim Criteria used as NJDEP criteria

[4]Laboratory blank greater than Method Detection Limit

Table 5-1
Groundwater Sampling Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID			80-MW2	80-MW2	80-MW2	80-MW2	80-MW2	80-MW2
Lab Sample ID	**NJDEP**	**Site Specific**	5636.04	5675.04	5818.05	347	5694.03	5782.04
Sample Date	**Criteria**	**MBC[1]**	08/16/00	08/30/00	10/27/00	01/24/01	09/07/00	10/12/00
		Round No.	14	15	16	17	low flow 1	low flow 2
Volatiles								
Acetone	**700**	**N/A**	ND	ND	ND	ND	NS	NS
Benzene	**1**	**N/A**	ND	ND	ND	ND	NS	NS
2-Butanone	**300**	**N/A**	ND	ND	ND	ND	NS	NS
Carbon Disulfide[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Chlorobenzene[3]	**50**	**N/A**	ND	ND	ND	ND	NS	NS
Methylene Chloride[3]	**3**	**N/A**	ND	ND	ND	ND	NS	NS
Semi-Volatiles								
Acenaphthene	**400**	**N/A**	ND	ND	ND	ND	NS	NS
Dibenzofuran[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
1,2-Dichlorobenzene	**600**	**N/A**	ND	ND	ND	ND	NS	NS
2,4-Dichlorophenol	**20**	**N/A**	ND	ND	ND	ND	NS	NS
Di-n-butylphthalate	**900**	**N/A**	ND	ND	ND	ND	ND	ND
Fluorene	**300**	**N/A**	ND	ND	ND	ND	NS	NS
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Naphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Phenanthrene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	ND	ND	ND	ND
Pesticides/PCBs								
4,4'-DDD	**0.1**	**N/A**	**0.453**	ND	ND	ND	0.025	ND
a-Chlordane	**0.5**	**N/A**	0.197	**0.779**	ND	**1.625**	ND	ND
g-Chlordane	**0.5**	**N/A**	ND	0.303	ND	**2.719**	ND	**0.979**
Endosulfan Sulfate	**0.4**	**N/A**	ND	ND	ND	ND	ND	**0.485**
Metals								
Aluminum	**200**	**121000**	**1770**	**544**	**1400**	**256**	102	**743**
Antimony	**20**	**N/A**	5.6	ND	ND	ND	ND	ND
Arsenic	**8**	**N/A**	ND	ND	ND	2.69	**46.6**	ND
Barium	**2000**	**699**	82.2	59.6	61.7	43.6	76.9	62.1
Beryllium	**20**	**N/A**	0.726	0.733	0.73	ND	ND	0.784
Cadmium	**4**	**N/A**	ND	ND	ND	**5.36**	ND	ND
Calcium	**NLE**	**45400**	18100	13800	12500	12700	51100	12200
Chromium	**100**	**N/A**	6.56	ND	5.8	1.01	ND	3.04
Cobalt	**NLE**	**N/A**	13.1	11.4	10.3	10.4	3.18	11.3
Copper	**1000**	**65.6**	ND	ND	17.4	3.38	ND	58.5
Iron	**300**	**431000**	**3420**	**578**	**1320**	**729**	**89700**	**942**
Lead	**10**	**N/A**	2.64	1.55	1.7	ND	ND	9.12
Magnesium	**NLE**	**62700**	8390	6640	6040	6250	16500	6240
Manganese	**50**	**331**	**479**	**421**	**419**	**412**	**697**	**407**
Mercury	**2**	**N/A**	0.1	0.1	ND	0.3	ND	ND
Nickel	**100**	**187**	6.66	ND	7.24	3.7	ND	8.1
Potassium	**NLE**	**137000**	3240	2440	2670	2020	4210	2640
Selenium	**50**	**N/A**	ND	ND	5.79	ND	ND	ND
Silver	**NLE**	**N/A**	ND	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	**116000**	**178000**	**170000**	**164000**	**638000**	**126000**
Thallium	**10**	**N/A**	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	5.87	ND	4.7	ND	ND	ND
Zinc	**5000**	**233**	80.7	70.2	42.2	40.3	22.8	114

Notes

All concentrations in micrograms per liter (ug/L), equivalent to NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and**bold**

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No cleanup standard exists for this analyte

[1]Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

[2]Low Flow Sampling Method used to collect sample

[3]Interim Criteria used as NJDEP criteria

[4]Laboratory blank greater than Method Detection Limit

Table 5-1
Groundwater Sampling Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID			80-MW3	80-MW3	80-MW3	80-MW3	80-MW3	80-MW3
Lab Sample ID	**NJDEP**	**Site Specific**	5636.05	5675.05	5818.06	348	5691.05	5780.05
Sample Date	**Criteria**	**MBC[1]**	08/16/00	08/30/00	10/27/00	01/24/01	09/06/00	10/11/00
		Round No.	14	15	16	17	low flow 1	low flow 2
Volatiles								
Acetone	**700**	**N/A**	ND	16.1	5.12	ND	NS	NS
Benzene	**1**	**N/A**	ND	ND	ND	ND	NS	NS
2-Butanone	**300**	**N/A**	ND	8.15	3.3	ND	NS	NS
Carbon Disulfide[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Chlorobenzene[3]	**50**	**N/A**	ND	ND	ND	ND	NS	NS
Methylene Chloride[3]	**3**	**N/A**	ND	ND	ND	ND	NS	NS
Semi-Volatiles								
Acenaphthene	**400**	**N/A**	3.44	19.59	13.2	ND	NS	NS
Dibenzofuran[3]	**100**	**N/A**	1.09	20.05	3.32	ND	NS	NS
1,2-Dichlorobenzene	**600**	**N/A**	ND	ND	ND	ND	NS	NS
2,4-Dichlorophenol	**20**	**N/A**	ND	13.95	ND	ND	NS	NS
Di-n-butylphthalate	**900**	**N/A**	3.9	ND	ND	ND	ND	ND
Fluorene	**300**	**N/A**	1.04	20.95	ND	ND	NS	NS
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Naphthalene[3]	**100**	**N/A**	4.34	14.37	ND	ND	NS	NS
Phenanthrene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	ND	ND	ND	ND
Pesticides/PCBs								
4,4'-DDD	**0.1**	**N/A**	ND	ND	ND	ND	ND	ND
a-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND
g-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	**0.4**	**N/A**	ND	ND	ND	ND	ND	ND
Metals								
Aluminum	**200**	**121000**	**292**	**217**	**1370**	97.9	**650**	**237**
Antimony	**20**	**N/A**	4.86	ND	ND	ND	ND	ND
Arsenic	**8**	**N/A**	3.36	7.06	7.27	2.28	ND	ND
Barium	**2000**	**699**	27.2	22.3	29.4	53	34.7	23.9
Beryllium	**20**	**N/A**	ND	ND	ND	ND	ND	ND
Cadmium	**4**	**N/A**	ND	ND	ND	3.89	ND	ND
Calcium	**NLE**	**45400**	39200	27600	22800	79800	33800	28000
Chromium	**100**	**N/A**	2.59	ND	13.2	4.17	ND	2.55
Cobalt	**NLE**	**N/A**	0.704	0.969	1.14	0.747	1.67	ND
Copper	**1000**	**65.6**	ND	ND	5.92	4.31	ND	ND
Iron	**300**	**431000**	**2890**	**12800**	**21400**	**5710**	**14600**	**8170**
Lead	**10**	**N/A**	1.7	ND	1.52	ND	ND	ND
Magnesium	**NLE**	**62700**	8870	7240	8140	18600	11100	7420
Manganese	**50**	**331**	**87.8**	**93.1**	**144**	**51.5**	**121**	**61.3**
Mercury	**2**	**N/A**	ND	0.1	ND	ND	0.2	ND
Nickel	**100**	**187**	ND	ND	2.02	ND	ND	ND
Potassium	**NLE**	**137000**	9660	5010	4950	10700	6110	7000
Selenium	**50**	**N/A**	5.71	ND	3.72	ND	ND	ND
Silver	**NLE**	**N/A**	ND	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	27100	35000	40200	**71500**	**132000**	40200
Thallium	**10**	**N/A**	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	2.18	ND	8.02	1.28	ND	2.33
Zinc	**5000**	**233**	17.2	37.9	27.5	27.9	25.3	14.8

Notes

All concentrations in micrograms per liter (ug/L), equivalent to NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and**bold**

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No cleanup standard exists for this analyte

[1]Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

[2]Low Flow Sampling Method used to collect sample

[3]Interim Criteria used as NJDEP criteria

[4]Laboratory blank greater than Method Detection Limit

Table 5-1
Groundwater Sampling Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID			80-MW4	80-MW4	80-MW4	80-MW4	80-MW4	80-MW4
Lab Sample ID	**NJDEP**	**Site Specific**	5636.06	5675.06	5818.07	349	5691.03	5780.03
Sample Date	**Criteria**	**MBC[1]**	08/16/00	08/30/00	10/27/00	01/24/01	09/06/00	10/11/00
		Round No.	14	15	16	17	low flow 1	low flow 2
Volatiles								
Acetone	**700**	**N/A**	ND	ND	ND	ND	NS	NS
Benzene	**1**	**N/A**	ND	ND	ND	ND	NS	NS
2-Butanone	**300**	**N/A**	ND	ND	ND	ND	NS	NS
Carbon Disulfide[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Chlorobenzene[3]	**50**	**N/A**	ND	ND	ND	ND	NS	NS
Methylene Chloride[3]	**3**	**N/A**	ND	ND	ND	ND	NS	NS
Semi-Volatiles								
Acenaphthene	**400**	**N/A**	ND	ND	ND	ND	NS	NS
Dibenzofuran[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
1,2-Dichlorobenzene	**600**	**N/A**	ND	ND	ND	ND	NS	NS
2,4-Dichlorophenol	**20**	**N/A**	ND	ND	ND	ND	NS	NS
Di-n-butylphthalate	**900**	**N/A**	3.31	ND	ND	ND	ND	ND
Fluorene	**300**	**N/A**	ND	ND	ND	ND	NS	NS
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Naphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Phenanthrene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	ND	ND	ND	ND
Pesticides/PCBs								
4,4'-DDD	**0.1**	**N/A**	ND	ND	ND	ND	ND	ND
a-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND
g-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	**0.4**	**N/A**	ND	ND	ND	ND	ND	ND
Metals								
Aluminum	**200**	**121000**	**4020**	**1240**	**3850**	**1260**	**1130**	**1420**
Antimony	**20**	**N/A**	4.04	ND	ND	ND	ND	ND
Arsenic	**8**	**N/A**	6.28	5.04	5.3	4.18	4.93	6
Barium	**2000**	**699**	269	186	204	162	273	672
Beryllium	**20**	**N/A**	ND	ND	0.726	ND	ND	0.679
Cadmium	**4**	**N/A**	ND	ND	ND	0.945	ND	ND
Calcium	**NLE**	**45400**	213000	226000	198000	209000	230000	241000
Chromium	**100**	**N/A**	25.2	14.2	22.2	18.6	10.5	20.7
Cobalt	**NLE**	**N/A**	34.6	14	18	9.68	12.6	ND
Copper	**1000**	**65.6**	359	ND	ND	180	ND	ND
Iron	**300**	**431000**	**256000**	**297000**	**211000**	**264000**	**306000**	**448000**
Lead	**10**	**N/A**	**70.4**	ND	2.03	**20**	ND	ND
Magnesium	**NLE**	**62700**	129000	132000	118000	125000	139000	163000
Manganese	**50**	**331**	**2320**	**2130**	**2220**	**2070**	**1980**	**2080**
Mercury	**2**	**N/A**	0.3	0.1	ND	0.2	0.2	ND
Nickel	**100**	**187**	54.6	3.61	30.6	16.3	2.67	ND
Potassium	**NLE**	**137000**	10600	8450	9190	8450	10700	17700
Selenium	**50**	**N/A**	ND	ND	5.16	ND	ND	ND
Silver	**NLE**	**N/A**	ND	2.35	ND	ND	ND	ND
Sodium	**50000**	**21500**	**1500000**	**1820000**	**1190000**	**1360000**	**1920000**	**1920000**
Thallium	**10**	**N/A**	ND	ND	ND	ND	ND	7.55
Vanadium	**NLE**	**N/A**	5.13	0.727	0.633	ND	3.11	ND
Zinc	**5000**	**233**	666	90.6	271	485	71.7	42.4

Notes

All concentrations in micrograms per liter (ug/L), equivalent to NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and**bold**

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No cleanup standard exists for this analyte

[1]Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

[2]Low Flow Sampling Method used to collect sample

[3]Interim Criteria used as NJDEP criteria

[4]Laboratory blank greater than Method Detection Limit

Table 5-1
Groundwater Sampling Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID			80-MW5	80-MW5	80-MW5	80-MW5	80-MW5	80-MW5
Lab Sample ID	**NJDEP**	**Site Specific**	5636.07	5675.07	5818.08	350	5691.04	5780.04
Sample Date	**Criteria**	**MBC[1]**	08/16/00	08/30/00	10/27/00	01/24/01	09/06/00	10/11/00
		Round No.	14	15	16	17	low flow 1	low flow 2
Volatiles								
Acetone	**700**	**N/A**	ND	ND	ND	ND	NS	NS
Benzene	**1**	**N/A**	ND	ND	ND	ND	NS	NS
2-Butanone	**300**	**N/A**	ND	ND	ND	ND	NS	NS
Carbon Disulfide[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Chlorobenzene[3]	**50**	**N/A**	ND	ND	ND	ND	NS	NS
Methylene Chloride[3]	**3**	**N/A**	ND	ND	ND	ND	NS	NS
Semi-Volatiles								
Acenaphthene	**400**	**N/A**	ND	ND	ND	ND	NS	NS
Dibenzofuran[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
1,2-Dichlorobenzene	**600**	**N/A**	ND	ND	ND	ND	NS	NS
2,4-Dichlorophenol	**20**	**N/A**	ND	ND	ND	ND	NS	NS
Di-n-butylphthalate	**900**	**N/A**	ND	ND	ND	ND	ND	ND
Fluorene	**300**	**N/A**	ND	ND	ND	ND	NS	NS
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Naphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	NS	NS
Phenanthrene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	ND	ND	ND	ND
Pesticides/PCBs								
4,4'-DDD	**0.1**	**N/A**	ND	ND	ND	ND	ND	ND
a-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND
g-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	**0.4**	**N/A**	ND	ND	ND	ND	ND	ND
Metals								
Aluminum	**200**	**121000**	**5580**	**97500**	**2750**	**2500**	**48000**	**3420**
Antimony	**20**	**N/A**	7.72	ND	ND	ND	ND	ND
Arsenic	**8**	**N/A**	**11.2**	**71.6**	4.42	5.85	**32.7**	7.86
Barium	**2000**	**699**	257	1220	149	54.5	865	367
Beryllium	**20**	**N/A**	ND	14.3	ND	ND	8.35	1.25
Cadmium	**4**	**N/A**	ND	ND	ND	**11.1**	ND	ND
Calcium	**NLE**	**45400**	239000	978000	144000	87500	699000	417000
Chromium	**100**	**N/A**	36.5	75.7	82.6	22.1	29.5	20.4
Cobalt	**NLE**	**N/A**	15	41.9	6	5.37	30.3	7.85
Copper	**1000**	**65.6**	ND	ND	6.13	11.6	ND	17.3
Iron	**300**	**431000**	**82600**	**571000**	**30100**	**10700**	**353000**	**162000**
Lead	**10**	**N/A**	**11.1**	**84.1**	ND	ND	**79.5**	**15.2**
Magnesium	**NLE**	**62700**	61300	386000	34000	18200	241000	103000
Manganese	**50**	**331**	**1020**	**2980**	**673**	**491**	**2300**	**1280**
Mercury	**2**	**N/A**	0.2	0.1	ND	ND	0.2	ND
Nickel	**100**	**187**	25.9	73.3	35.7	4.16	45.5	13
Potassium	**NLE**	**137000**	27700	119000	35500	35700	69700	45800
Selenium	**50**	**N/A**	ND	ND	10.2	ND	ND	3.45
Silver	**NLE**	**N/A**	ND	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	**3830000**	**11700000**	**2590000**	**1810000**	**7830000**	**5670000**
Thallium	**10**	**N/A**	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	19.9	84	12.6	12.9	7.3	0.724
Zinc	**5000**	**233**	137	378	267	325	248	307

Notes

All concentrations in micrograms per liter (ug/L), equivalent to NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and**bold**

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No cleanup standard exists for this analyte

[1]Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

[2]Low Flow Sampling Method used to collect sample

[3]Interim Criteria used as NJDEP criteria

[4]Laboratory blank greater than Method Detection Limit

Table 5-1
Groundwater Sampling Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID			166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1
Lab Sample ID	**NJDEP**	**Site Specific**	2458.01	2917.03	3175.01	3375.01	3614.02	3823.05	4076.04	4262.04	4514.04	4808.02	5021.02	5223.05	5406.02	5635.02	5818.09	345	5694.05	5782.05
Sample Date	**Criteria**	**MBC[1]**	04/16/97	08/20/97	11/24/97	02/27/98	06/02/98	08/24/98	11/20/98	02/09/99	05/26/99	09/22/99	12/17/99	03/06/00	05/09/00	08/16/00	10/27/00	01/24/01	09/07/00	10/12/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	17	low flow 1	low flow 2
Volatiles																				
Acetone	**700**	**N/A**	ND	ND	ND	ND	ND	13.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Benzene	**1**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
2-Butanone	**300**	**N/A**	ND	ND	ND	ND	ND	3.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Carbon Disulfide[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Chlorobenzene[3]	**50**	**N/A**	ND	ND	ND	ND	ND	ND	1.88	ND	ND	ND	1.28	1.68	ND	ND	1.1	ND	NS	NS
Methylene Chloride[3]	**3**	**N/A**	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Semi-Volatiles																				
Acenaphthene	**400**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Dibenzofuran[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
1,2-Dichlorobenzene	**600**	**N/A**	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
2,4-Dichlorophenol	**20**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Di-n-butylphthalate	**900**	**N/A**	ND	ND	16.28	ND	3.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**300**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Naphthalene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Phenanthrene[3]	**100**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/PCBs																				
4,4'-DDD	**0.1**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
a-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	0.027	0.052	ND	ND	ND	0.048	ND	ND	ND	ND	ND	0.028	**0.84**	ND
g-Chlordane	**0.5**	**N/A**	ND	ND	ND	ND	0.022	0.05	ND	ND	ND	0.049	ND	ND	ND	ND	ND	0.024	0.46	ND
Endosulfan Sulfate	**0.4**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																				
Aluminum	**200**	**121000**	NS	15.1	**408**	**291**	**266**	**1620**	**662**	**687**	**945**	97.5	**362**	**274**	**422**	**272**	**3800**	43.1	39.9	154
Antimony	**20**	**N/A**	NS	ND	ND	ND	ND	3.7	ND	ND	ND	ND	2.75	ND	ND	3.91	ND	ND	ND	ND
Arsenic	**8**	**N/A**	NS	4	**23**	ND	2.3	3.21	ND	ND	4.57	ND	ND	2.83	ND	ND	5.67	4.83	ND	3.13
Barium	**2000**	**699**	NS	100	65.5	16	14.6	23	28.3	36.2	31.7	24.5	25.7	36.8	32.2	19.1	42.2	34.5	23.5	27.4
Beryllium	**20**	**N/A**	NS	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	**4**	**N/A**	NS	**5**	1.6	1.4	1.4	**4.35**	2.31	3.51	3.04	2.44	2.95	1.25	2.79	1.21	**4.58**	**4.15**	ND	ND
Calcium	**NLE**	**45400**	NS	72390	46940	46400	52700	69600	79700	98300	61200	70100	69600	95200	93600	49200	86100	101000	71200	79400
Chromium	**100**	**N/A**	NS	**121 (3)**	3	1.5	ND	9.58	9.49	8.3	9.16	4.56	4.75	6.79	11.3	3.11	23.7	7.28	ND	4.69
Cobalt	**NLE**	**N/A**	NS	30	ND	1	ND	0.782	ND	1.27	1.23	1.29	1.01	ND	0.71	0.796	1.39	ND	0.603	ND
Copper	**1000**	**65.6**	NS	14	14	15	8	22.2	ND	179	47.1	66	5.31	13.8	98.4	ND	59.3	9.15	ND	146
Iron	**300**	**431000**	NS	**4750**	**31700**	**5976**	**6776**	**11500**	**13300**	**6510**	**9880**	**2310**	**10300**	**18300**	**9300**	**6260**	**20100**	**9140**	**8360**	**11300**
Lead	**10**	**N/A**	2.4	1.6	**15**	ND	2.3	**12.4**	4.23	ND	**11.4**	7.95	ND	4.21	**17.3**	5.12	**16.4**	ND	1.73	**22.7**
Magnesium	**NLE**	**62700**	NS	336	9730	13030	14350	17000	19800	22800	15200	15400	16500	23100	25500	13000	23000	24800	18400	20200
Manganese	**50**	**331**	NS	**17250**	**286.6**	**245.6**	**235**	**397**	**669**	**413**	**368**	**214**	**377**	**603**	**239**	**204**	**587**	**360**	**452**	**606**
Mercury	**2**	**N/A**	NS	ND	ND	0.3	ND	0.12	0.29	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	**100**	**187**	NS	ND	4.5	1.7	2.6	1.5	2.06	7.09	3.85	8.48	1.13	7.07	4.93	3.72	5.4	1.72	ND	6.5
Potassium	**NLE**	**137000**	NS	6350	6850	4610	7118	10000	4800	4890	4410	6130	4670	4690	6460	5000	6040	5100	4590	4570
Selenium	**50**	**N/A**	NS	ND	ND	ND	ND	3.87	4.09	7.58	3.39	ND	ND	ND	ND	ND	5.13	ND	ND	ND
Silver	**NLE**	**N/A**	NS	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	NS	**83750**	**200200**	29310	27800	**58200**	**114000**	**108000**	**72900**	46500	**60300**	**66500**	**62300**	33600	**121000**	**154000**	**83300**	**94600**
Thallium	**10**	**N/A**	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.13	ND	ND
Vanadium	**NLE**	**N/A**	NS	800	ND	ND	4.2	7.9	3.87	3.07	7.01	1.53	2.42	3.63	3.56	1.74	18.1	2.66	ND	ND
Zinc	**5000**	**233**	NS	289	147	144	104	285	99.6	328	160	261	54.4	126	289	161	318	301	28.4	237

Notes

All concentrations in micrograms per liter (ug/L), equivalent to NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and **bold**

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No cleanup standard exists for this analyte

[1] Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

[2] Low Flow Sampling Method used to collect sample

[3] Interim Criteria used as NJDEP criteria

[4] Laboratory blank greater than Method Detection Limit

Table 5-2
Soil Sampling Results from Geoprobe® Investigation
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Lab Sample ID	NJDEP RDCSCC[(1)] (mg/Kg)	NJDEP IGWSCC[(2)] (mg/Kg)	5241.03	5241.05	5241.07	5241.09	5246.03	5246.05	5246.07	5246.09	5246.11
Sample Location			1	2	3	4	5	6	7	8	9
Sample Depth			48"	48"	48"	48"	42"	42"	42"	42"	48"
Sample Date			03/13/00	03/13/00	03/13/00	03/13/00	03/14/00	03/14/00	03/14/00	03/14/00	03/14/00
2-Butanone	1000	50	1.3	ND	ND	ND	1.7	1.6	1.5	ND	ND
Chloroform	19	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	49	1	ND	ND	ND	ND	ND	ND	ND	ND	ND

Lab Sample ID	NJDEP RDCSCC[(1)] (mg/Kg)	NJDEP IGWSCC[(2)] (mg/Kg)	5246.13	5248.03	5248.05	5248.07	5248.09	5248.11	5416.03	5416.05	5416.07
Sample Location			10	11	12	13	14	15	16	17	18
Sample Depth			42"	48"	48"	48"	48"	48"	36"	36"	36"
Sample Date			03/14/00	03/15/00	03/15/00	03/15/00	03/15/00	03/15/00	05/15/00	05/15/00	05/15/00
2-Butanone	1000	50	ND	ND	ND	ND	ND	ND	2.8	ND	3
Chloroform	19	1	ND	ND	ND	ND	ND	ND	0.42	ND	0.44
Methylene Chloride	49	1	ND	ND	ND	ND	ND	ND	0.96	0.71	ND

NOTES:

[(1)]New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Cleanup Criteria (RDCSCC) per NJAC 7:26D.

[(2)]New Jersey Department of Environmental Protection (NJDEP) Impact to Groundwater Soil Cleanup Criteria (IGWSCC).

All concentrations are reported in milligrams per kilogram (mg/kg) or parts per million (ppm) per NJAC 7:26D.

Exceedances of the RDCSCC and IGWSCC are highlighted and printed in **bold-faced** type.

ND: Analyte not detected in sample.

Table 5-3
Groundwater Sampling Results from Geoprobe® Investigation
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Lab Sample ID	NJDEP	5241.04	5241.06	5241.08	5241.10	5246.04	5246.06	5246.08	5246.10	5246.12	5246.14
Sample Location	Groundwater	1	2	3	4	5	6	7	8	9	10
Sample Depth	Criteria	3-7'	3-7'	3-7'	3-7'	3-7'	3-7'	3-7'	3-7'	3-7'	3-7'
Sample Date	(ug/L) [1]	03/13/00	03/13/00	03/13/00	03/13/00	03/14/00	03/14/00	03/14/00	03/14/00	03/14/00	03/14/00
Volatiles											
Acetone	700	7.4	12.99	ND	9.38	ND	8.32	9.81	7.95	16.85	16.37
Benzene	1	ND	**1.13**	**6.84**	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide*	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene*	50	ND	5.01	2.06	ND	ND	3.69	3.78	ND	ND	ND
Chloroform	6	ND	ND	ND	ND	1.77	1.32	ND	1.82	1.41	ND
Ethylbenzene	700	ND	ND	2.69	ND	ND	ND	ND	ND	ND	ND
MTBE*	70	ND	4.16	5.89	ND	ND	ND	ND	ND	ND	ND

NOTES:

All concentrations are reported in micrograms per liter (ug/L) or parts per billion (ppb).

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6.

Exceedances of the NJDEP criteria are highlighted and printed in **bold-faced** type.

ND: Analyte not detected in sample.

*Interim Criteria used as NJDEP criteria.

Table 5-3
Groundwater Sampling Results from Geoprobe® Investigation
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Lab Sample ID	NJDEP	5248.04	5248.06	5248.08	5256.01	5248.12	5416.04	5416.06	5416.09
Sample Location	Groundwater	11	12	13	14	15	16	17	18
Sample Depth	Criteria	3-7'	3-7'	3-7'	3-7'	3-7'	3.4-8'	3-8'	3-8'
Sample Date	(ug/L) [1]	03/15/00	03/15/00	03/15/00	03/17/00	03/15/00	05/15/00	05/15/00	05/15/00
Volatiles									
Acetone	700	13.4	5.62	36.64	ND	ND	ND	17.99	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	ND	ND	ND	ND	ND	ND	ND	**2.06**
Carbon Disulfide*	100	ND	ND	3.17	ND	ND	ND	ND	ND
Chlorobenzene*	50	ND	6.54	ND	1.48	2.7	ND	5.31	ND
Chloroform	6	ND	ND	ND	ND	ND	ND	ND	5.6
Ethylbenzene	700	ND	ND	ND	ND	ND	ND	ND	ND
MTBE*	70	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All concentrations are reported in micrograms per liter (ug/L) or parts per billion (ppb).

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6.

Exceedances of the NJDEP criteria are highlighted and printed in **bold-faced** type.

ND: Analyte not detected in sample.

*Interim Criteria used as NJDEP criteria.

Table 5-4
Determination of Contaminants of Concern
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Analyte	NJDEP Criteria[1]	Site Specific Groundwater MBC[2]	Maximum Result	No. of Exceedences in Monitoring Well Samples	No. of Exceedences in Geoprobe Groundwater Samples	No. of Site Maximum Background Exceedences	Comments
Volatiles							
Acetone	700	N/A	16.1	0	0	N/A	No exceedance of NJDEP criteria
Benzene	**1**	**N/A**	**1.71**	**4**	**2**	**N/A**	**Not a COC. Benzene was detected in 4 of 16 rounds in monitoring well 80-MW1 at concentrations exceeding the NJDEP criteria. Benzene was also detected at concentrations exceeding the NJDEP criteria in 2 of the 18 Geoprobe borings in March 2000 (boring locations 2 and 3) near well 80-MW1. Benzene was not detected in each of the four most recent sampling rounds (May 2000 to January 2001).**
Bromodichloromethane	**1**	**N/A**	**2.06**	**1**	**0**	**N/A**	**Not a COC. There were no exceedances of NJDEP criteria in monitoring well samples. There was only one exceedance in Geoprobe groundwater samples.**
2-Butanone	300	N/A	8.15	0	0	N/A	No exceedance of NJDEP criteria
Carbon Disulfide[3]	100	N/A	2.31	0	0	N/A	No exceedance of NJDEP criteria
Chlorobenzene[3]	**50**	**N/A**	**7.34**	**0**	**0**	**N/A**	**Not a COC. There were no exceedances of NJDEP criteria in monitoring well samples or Geoprobe groundwater samples.**
Methylene Chloride[3]	**3**	**N/A**	**2.4**	**1**	**0**	**N/A**	**Not a COC: no exceedences of NJDEP Cleanup Criteria.**
Semi-Volatiles							
Acenaphthene	400	N/A	19.59	0	N/A	N/A	No exceedance of NJDEP criteria
Dibenzofuran[3]	100	N/A	20.05	0	N/A	N/A	No exceedance of NJDEP criteria
1,2-Dichlorobenzene	600	N/A	2	0	N/A	N/A	No exceedance of NJDEP criteria
2,4-Dichlorophenol	20	N/A	13.95	0	N/A	N/A	No exceedance of NJDEP criteria
Di-n-butylphthalate	900	N/A	16.28	0	N/A	N/A	No exceedance of NJDEP criteria
Fluorene	300	N/A	20.95	0	N/A	N/A	No exceedance of NJDEP criteria
2-Methylnaphthalene[3]	100	N/A	8.85	0	N/A	N/A	No exceedance of NJDEP criteria
Naphthalene[3]	100	N/A	14.37	0	N/A	N/A	No exceedance of NJDEP criteria
Phenanthrene[3]	100	N/A	2.56	0	N/A	N/A	No exceedance of NJDEP criteria

Table 5-4
Determination of Contaminants of Concern
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Analyte	NJDEP Criteria[1]	Site Specific Groundwater MBC[2]	Maximum Result	No. of Exceedences in Monitoring Well Samples	No. of Exceedences in Geoprobe Groundwater Samples	No. of Site Maximum Background Exceedences	Comments
Bis(2-Ethylhexyl)phthalate	30	N/A	1.4	0	N/A	N/A	No exceedance of NJDEP criteria
Pesticides/PCBs							
4,4'-DDD	**0.1**	**N/A**	**0.453**	**3**	**N/A**	**N/A**	**Not a COC. 4,4-DDD concentrations exceeded the NJDEP criteria during 2 of 18 rounds in monitoring well 80-MW1 and 1 of 5 rounds in well 80-MW2.**
a-Chlordane	**0.5**	**N/A**	**1.625**	**3**	**N/A**	**N/A**	**COC: a-Chlordane was detected above the NJDEP criteria in 2 of 5 samples collected from well 80-MW2.**
g-Chlordane	**0.5**	**N/A**	**2.719**	**2**	**N/A**	**N/A**	**COC: g-Chlordane was detected above the NJDEP criteria in 2 of 5 samples collected from well 80-MW2.**
Endosulfan Sulfate	**0.4**	**N/A**	**0.485**	**1**	**N/A**	**N/A**	**Not a COC: only one exceedence of NJDEP Cleanup Criteria.**
Metals							
Aluminum	**200**	**121000**	**97500**	**46**	**N/A**	**0**	**Not a COC: no exceedance of the Site Specific MBC.**
Antimony	20	N/A	7.72	0	N/A	N/A	No exceedance of NJDEP criteria
Arsenic	**8**	**N/A**	**71.6**	**19**	**N/A**	**N/A**	**COC. Arsenic was detected at concentrations exceeding the NJDEP criteria in 15 rounds at monitoring well 80-MW1.**
Barium	2000	699	1220	0	N/A	2	No exceedance of NJDEP criteria
Beryllium	20	N/A	14.3	0	N/A	N/A	No exceedance of NJDEP criteria
Cadmium	**4**	**N/A**	**24.6**	**13**	**N/A**	**N/A**	**Not a COC: cadmium was not detected during Low-Flow sampling (September and October 2000).**
Calcium	NLE	45400	978000	N/A	N/A	44	No NJDEP Groundwater Criteria
Chromium	**100**	**N/A**	**148**	**2**	**N/A**	**N/A**	**Not a COC: there were 2 exceedances in August 1997. However, chromium was detected in laboratory blank samples during this sampling round.**

Table 5-4
Determination of Contaminants of Concern
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Analyte	NJDEP Criteria[1]	Site Specific Groundwater MBC[2]	Maximum Result	No. of Exceedences in Monitoring Well Samples	No. of Exceedences in Geoprobe Groundwater Samples	No. of Site Maximum Background Exceedences	Comments
Cobalt	NLE	N/A	50	N/A	N/A	N/A	No NJDEP Groundwater Criteria
Copper	1000	65.6	359	0	N/A	7	No exceedance of NJDEP criteria
Iron	**300**	**431000**	**571000**	**58**	**N/A**	**19**	**Not a COC: iron is a background metal.**
Lead	**10**	**N/A**	**84.1**	**15**	**N/A**	**N/A**	**COC. Lead was detected in multiple rounds in monitoring wells 80-MW1, 80-MW4, 80-MW5, and 166-MW1. Lead was detected above the NJDEP criteria during Low Flow sampling rounds (September and October 2000).**
Magnesium	NLE	62700	386000	N/A	N/A	9	No NJDEP Groundwater Criteria
Manganese	**50**	**331**	**17250**	**58**	**N/A**	**43**	**Not a COC: manganese is a background metal.**
Mercury	2	N/A	0.38	0	N/A	N/A	No exceedance of NJDEP criteria
Nickel	100	187	73.3	0	N/A	0	No exceedance of NJDEP criteria
Potassium	NLE	137000	119000	N/A	N/A	0	No NJDEP Groundwater Criteria
Selenium	50	N/A	10.2	0	N/A	N/A	No exceedance of NJDEP criteria
Silver	NLE	N/A	26	N/A	N/A	N/A	No NJDEP Groundwater Criteria
Sodium	**50000**	**21500**	**11700000**	**50**	**N/A**	**58**	**Not a COC: sodium is not of concern due to proximity of site to seawater.**
Thallium	10	N/A	7.55	0	N/A	N/A	No exceedance of NJDEP criteria
Vanadium	NLE	N/A	800	N/A	N/A	N/A	No NJDEP Groundwater Criteria
Zinc	5000	233	666	0	N/A	16	No exceedance of NJDEP criteria

Notes:

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

COC: Contaminant of Concern.

N/A = Not Applicable

Exceeds NJDEP GWQC =

ND: Analyte not detected in sample

NLE: No limit established for this analyte

[1]Higher of Practical Quantitation Limits (PQLs) and Groundwater Quality Criteria (GWQC) per N.J.A.C. 7:9-6

[2]Fort Monmouth Summary of Site-Specific Groundwater Maximum Background Concentrations (MBC) (Weston SI Report Dated 1995);
MBCs are shown for background (native) metals only.

[3]Interim Criteria used as NJDEP criteria

Table 5-5
Groundwater Sampling Results for Contaminants of Concern
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID		80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1	80-MW1
Lab Sample ID	**NJDEP**	2457.03	2918.01	3174.03	3376.01	3614.01	3823.04	4076.03	4262.03	4514.03	4808.01	5021.01	5223.04	5406.01	5635.01	5818.04	346	5694.04	5782.03
Sample Date	**Criteria**	04/16/97	08/20/97	11/24/97	02/27/98	06/02/98	08/24/98	11/20/98	02/09/99	05/26/99	09/22/99	12/17/99	03/06/00	05/09/00	08/16/00	10/27/00	01/24/01	09/07/00	10/12/00
Round No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	17	low flow 1	low flow 2
Pesticides/PCBs																			
a-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	NS	NS
MDL		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014		
g-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	NS	NS
MDL		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014		
Metals																			
Arsenic	**8**	NS	**9**	0.5	**24**	**11.9**	**41.5**	**34.3**	**8.49**	**24**	**11.8**	6.56	**17.9**	**11.3**	**28.8**	**16.8**	**32.4**	0.5	**55.2**
MDL				1														1	
Lead	**10**	2.5	4	**14**	6	3.3	**10.4**	2.86	0.25	5.34	5.15	0.25	3.67	**26.7**	2.63	3.16	1.87	0.25	0.25
MDL									0.5			0.5						0.5	0.5

Well ID		80-MW2	80-MW2	80-MW2	80-MW2	80-MW2	80-MW2
Lab Sample ID	**NJDEP**	5636.04	5675.04	5818.05	347	5694.03	5782.04
Sample Date	**Criteria**	08/16/00	08/30/00	10/27/00	01/24/01	09/07/00	10/12/00
Round No.		14	15	16	17	low flow 1	low flow 2
Pesticides/PCBs							
a-Chlordane	**0.5**	0.197	**0.779**	0.007	**1.625**	0.007	0.007
MDL				0.014		0.014	0.014
g-Chlordane	**0.5**	0.007	0.007	0.007	**2.719**	0.007	**0.979**
MDL		0.014	0.014	0.014		0.014	
Metals							
Arsenic	**8**	0.5	0.5	0.5	2.69	**46.6**	0.5
MDL		1	1	1			1
Lead	**10**	2.64	1.55	1.7	0.25	0.25	9.12
MDL					0.5	0.5	

Well ID		80-MW3	80-MW3	80-MW3	80-MW3	80-MW3	80-MW3
Lab Sample ID	**NJDEP**	5636.05	5675.05	5818.06	348	5691.05	5780.05
Sample Date	**Criteria**	08/16/00	08/30/00	10/27/00	01/24/01	09/06/00	10/11/00
Round No.		14	15	16	17	low flow 1	low flow 2
Pesticides/PCBs							
a-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007
MDL		0.014	0.014	0.014	0.014	0.014	0.014
g-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007
MDL		0.014	0.014	0.014	0.014	0.014	0.014
Metals							
Arsenic	**8**	3.36	7.06	7.27	2.28	0.5	0.5
MDL						1	1
Lead	**10**	1.7	0.25	1.52	0.25	0.25	0.25
MDL			0.5		0.5	0.5	0.5

Table 5-5
Groundwater Sampling Results for Contaminants of Concern
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Well ID		80-MW4	80-MW4	80-MW4	80-MW4	80-MW4	80-MW4
Lab Sample ID	**NJDEP**	5636.06	5675.06	5818.07	349	5691.03	5780.03
Sample Date	**Criteria**	08/16/00	08/30/00	10/27/00	01/24/01	09/06/00	10/11/00
Round No.		14	15	16	17	low flow 1	low flow 2
Pesticides/PCBs							
a-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007
MDL		0.014	0.014	0.014	0.014	0.014	0.014
g-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007
MDL		0.014	0.014	0.014	0.014	0.014	0.014
Metals							
Arsenic	**8**	6.28	5.04	5.3	4.18	4.93	6
MDL							
Lead	**10**	**70.4**	0.25	2.03	**20**	0.25	0.25
MDL			0.5			0.5	0.5

Well ID		80-MW5	80-MW5	80-MW5	80-MW5	80-MW5	80-MW5
Lab Sample ID	**NJDEP**	5636.07	5675.07	5818.08	350	5691.04	5780.04
Sample Date	**Criteria**	08/16/00	08/30/00	10/27/00	01/24/01	09/06/00	10/11/00
Round No.		14	15	16	17	low flow 1	low flow 2
Pesticides/PCBs							
a-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007
MDL		0.014	0.014	0.014	0.014	0.014	0.014
g-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.007	0.007
MDL		0.014	0.014	0.014	0.014	0.014	0.014
Metals							
Arsenic	**8**	**11.2**	**71.6**	4.42	5.85	**32.7**	7.86
MDL							
Lead	**10**	**11.1**	**84.1**	0.25	0.25	**79.5**	**15.2**
MDL				0.5	0.5		

Well ID		166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1	166-MW1
Lab Sample ID	**NJDEP**	2458.01	2917.03	3175.01	3375.01	3614.02	3823.05	4076.04	4262.04	4514.04	4808.02	5021.02	5223.05	5406.02	5635.02	5818.09	345	5694.05	5782.05
Sample Date	**Criteria**	04/16/97	08/20/97	11/24/97	02/27/98	06/02/98	08/24/98	11/20/98	02/09/99	05/26/99	09/22/99	12/17/99	03/06/00	05/09/00	08/16/00	10/27/00	01/24/01	09/07/00	10/12/00
Round No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	17	low flow 1	low flow 2
Pesticides/PCBs																			
a-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.027	0.052	0.007	0.007	0.007	0.048	0.007	0.007	0.007	0.007	0.007	0.028	**0.84**	0.007
MDL		0.014	0.014	0.014	0.014			0.014	0.014	0.014		0.014	0.014	0.014	0.014	0.014			0.014
g-Chlordane	**0.5**	0.007	0.007	0.007	0.007	0.022	0.05	0.007	0.007	0.007	0.049	0.007	0.007	0.007	0.007	0.007	0.024	0.46	0.007
MDL		0.014	0.014	0.014	0.014			0.014	0.014	0.014		0.014	0.014	0.014	0.014	0.014			0.014
Metals																			
Arsenic	**8**	NS	4	**23**	0.5	2.3	3.21	0.5	0.5	4.57	0.5	0.5	2.83	0.5	0.5	5.67	4.83	0.5	3.13
MDL					1			1	1		1	1		1	1			1	
Lead	**10**	2.4	1.6	**15**	0.25	2.3	**12.4**	4.23	0.25	**11.4**	7.95	0.25	4.21	**17.3**	5.12	**16.4**	0.25	1.73	**22.7**
MDL					0.5				0.5			0.5					0.5		

Notes:

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) and Groundwater Quality Criteria (GWQC) per NJAC 7:9-6.

Exceedences of NJDEP GWQS are shaded and **bold.**

MDL: Method Detection Limit. The MDL is shown for samples for which the analyte was not detected (ND).

One half the MDL was used in calculating the average concentration (See Table 6-2).

Table 5-6
Aquifer pH and Dissolved Oxygen
Site 80/166 - Main Post
Fort Monmouth, New Jersey

80-MW1		
Sample Date	pH	DO (mg/L)
04/16/97	6.43	2.2
08/20/97	7.15	1.8
11/24/97	6.84	1.4
02/27/98	7.18	3.1
06/02/98	5.85	1.2
08/24/98	6.10	4.16
11/20/98	6.37	5.74
02/09/99	6.28	5.91
05/26/99	5.44	NA
09/22/99	6.16	4.17
12/17/99	6.12	5.3
03/06/00	6.21	5.3
05/09/00	6.33	5.04
08/16/00	5.99	3.77
09/07/00	4.65	NA
10/12/00	5.20	NA
10/27/00	6.62	4.11
01/24/01	6.74	5.2
Min:	4.65	1.2
Max:	7.18	5.91
Average:	6.20	3.89

80-MW2		
Sample Date	pH	DO (mg/L)
08/16/00	4.90	3.71
08/30/00	5.19	3.41
09/07/00	5.77	NA
10/12/00	3.98	NA
10/27/00	6.32	3.47
01/24/01	6.33	4.5
Min:	3.98	3.41
Max:	6.33	4.5
Average:	5.42	3.77

80-MW3		
Sample Date	pH	DO (mg/L)
08/16/00	5.98	3.21
08/30/00	5.97	3.09
09/06/00	5.75	0.08
10/11/00	5.75	NA
10/27/00	6.6	4.07
01/24/01	6.7	5.07
Min:	5.75	0.08
Max:	6.70	5.07
Average:	6.13	3.10

80-MW4		
Sample Date	pH	DO (mg/L)
08/16/00	5.41	3.76
08/30/00	5.57	3.17
09/06/00	5.31	NA
10/11/00	5.26	NA
10/27/00	6.24	4.13
01/24/01	6.38	4.99
Min:	5.26	3.17
Max:	6.38	4.99
Average:	5.70	4.01

80-MW5		
Sample Date	pH	DO (mg/L)
08/16/00	5.31	3.41
08/30/00	3.79	3.21
09/06/00	4.05	NA
10/11/00	4.70	NA
10/27/00	6.17	4
01/24/01	6.32	5
Min:	3.79	3.21
Max:	5.31	5
Average:	5.06	3.91

166-MW1		
Sample Date	pH	DO (mg/L)
04/16/97	6.35	2.3
08/20/97	7.98	2
11/24/97	7.15	1.8
02/27/98	7.02	3.7
06/02/98	6.91	1.5
08/24/98	6.73	3.71
11/20/98	7.11	7.09
02/09/99	6.75	4.71
05/26/99	7.18	NA
09/22/99	6.80	4.2
12/17/99	6.77	5.19
03/06/00	6.77	5.1
05/09/00	6.84	5.07
08/16/00	6.18	3.97
09/07/00	6.35	NA
10/12/00	5.89	NA
10/27/00	7.09	3.41
01/24/01	7.37	4.7
Min:	5.89	1.5
Max:	7.98	7.09
Average:	6.85	3.90

Notes:

1.) DO: Dissolved Oxygen

2.) NA: Not Available / Not Applicable

3.) Measurements shown for pH and DO were recorded following the purging of wells prior to groundwater sampling.

Table 6-1
g-Chlordane Biodegradation Model at Monitoring Well 80-MW2
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Duration of Chlordane Degradation Based on Published Biodegradation Rate		
Input		
Parameters	**Units**	**Constituent: g-Chlordane**
Δt	**days**	**365**
$T_{1/2}$	**days**	**2,774**
k (1)	**$days^{-1}$**	**0.00025**
Initial Concentration, C_0 (2)	**µg/L**	**2.719**
January 24, 2001		
Calculation and Results		
Time (days)	**Date**	**Predicted Concentrations, C (ug/L)**
0	January 24, 2001	2.719
365	January 24, 2002	2.482
730	January 24, 2003	2.266
1095	January 24, 2004	2.068
1460	January 23, 2005	1.888
1825	January 23, 2006	1.723
2190	January 23, 2007	1.573
2555	January 23, 2008	1.436
2920	January 22, 2009	1.311
3285	January 22, 2010	1.197
3650	January 22, 2011	1.092
4015	January 22, 2012	0.997
4380	January 21, 2013	0.910
4745	January 21, 2014	0.831
5110	January 21, 2015	0.758
5475	January 21, 2016	0.692
5840	January 20, 2017	0.632
6205	January 20, 2018	0.577
6570	January 20, 2019	0.527
6935	January 20, 2020	0.481
Time until NJDEP criteria is reached:		
6,935	**January 20, 2020**	**0.481**
New Jersey Criteria	**µg/L**	**0.5**

Notes:

NJ Critera = Interim Groundwater Quality Criteria

Constituent Predicted Concentration: $C_p(t) = C_p(t-1) * e^{-k\Delta t}$

Time to reach NJ Criteria = TNJC

Reaction Rate Constant = $k = -\ln(0.5)/t_{1/2}$

Length of Impacted Area Based on Available Published Biodegradation Rates		
Input Data		
Hydraulic Conductivity (3) (K)	**ft/day**	**3.8**
Hydraulic Gradient (4) (i):	**ft/ft**	**0.015**
Effective Porosity (5) (n_e):	**---**	**0.4**
Bulk Density of Formation (5) (ρ_b)	**kg/L**	**1.65**
n-Octanol/Carbon Partition (6) (K_{oc}):	**L/kg**	**1.21E+05**
Fraction of Organic Carbon (7) (f_{oc})	**---**	**0.003**
Sorption Coefficient (K_d)	**L/kg**	**363.000**
Calculation and Results		
Seepage Velocity (ft/day)	vs = K*i/ne =	0.143
Retardation Factor	Rd = 1 + (Kd * ρ_b / ne) =	1498.38
Pollutant Transport Rate (ft/day)	vpt = vs/Rd =	0.00010
or (ft/year)		0.035
TNJC (days)	**Determined above**	**6,935**
TNJC (years)		**19.0**
Length (ft)	**vpt * TNJC =**	**0.66**

Notes:

(1) Half-Life for aerobic biodegradation in groundwater, upper limit: Howard, P.H. et. al. 1991. *Handbook of Environmental Degradation Rates.* Lewis Publishers.

(2) Initial concentration (Co) is the most recent concentration that was detected during the groundwater monitoring program.

(3) Hydraulic conductivity of surficial fill, K = 25.9 ft/day (Geometeric mean of slug tests performed by Versar in August 2001)

(4) Hydraulic gradient (i) derived from ground water elevation contours (August 2000)

(5) Effective porosity, n = 0.4, and bulk density, ρ_b = 1.65 g/mL (consistent with the type of soil - clayey sands, at the Site).

(6) K_{oc} data reference: USEPA Soil Screeening Guidance 1996.

(7) f_{oc} = 0.003 (the geometric mean of the minimum and maximum range of f_{oc}). *USEPA 1996* .

Table 6-2
MODFLOW Input Parameters
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Software used for Modeling
Waterloo Hydrogeologic *Visual Modflow Version 2.8*
Golden Software, Inc. *Surfer for WindowsVersion 7*
Papadopulos & Associates, Inc. *MT3D99*

Grid			
Model Area:	Min	Max	Range
X (Easting, NJ Nad 83):	622100	624500	2400
Y (Northing, NJ Nad 83):	539800	542200	2400
Number of Columns:	124		
Number of Rows:	124		
Default Grid Size:	20' x 20'		
Grid size near well 80-MW2	10' x 10'		

Units used in model	
Length	feet
Time	day
Hydraulic Conductivity	Feet per day (ft/day)
Recharge	Inches per year (in./year)
Concentration	Micrograms per Liter (ug/L), equivalent to Parts Per Billion (ppb)
Mass	kg
Volume	ft^3

Ground Surface
The ground surface elevations were obtained from the Fort Monmouth Nad83 topographic survey.
The river was assigned to elevation of zero (0) ft.
The ground surface used in the model was interpolated from elevation points using Golden Software Surfer.

Table 6-2
MODFLOW Input Parameters
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Layer properties			
Number of Layers:	5		
Layer Number	Formation	Thickness	Porosity*
Layer 1	Fill	5 ft	0.40
Layer 2	Navesink-Hornerstown Confining Unit	7.5 ft	0.40
Layer 3	Navesink-Hornerstown Confining Unit	7.5 ft	0.40
Layer 4	Navesink-Hornerstown Confining Unit	55 ft	0.40
Layer 5	Navesink-Hornerstown Confining Unit	55 ft	0.40
Layer 6	Wenonah-Mount Laurel Aquifer	75 ft	0.40
Layer 7	Marshalltown-Wenonah Confining Unit	10 ft	0.40
**Porosity estimated from Dominico and Schwarts (1998), Table 2.1.*			

Recharge	
Majority of Area:	13.28 in. / year
Selected Area:	0 in./year in paved area south of M-18 site
Recharge applied to:	Highest Active Cells
Source:	Jablonski, 1968, Ground-Water Resources of Monmouth County, New Jersey, USGS Special Report No. 23. *The recharge used for the model was taken to be the sum of the groundwater base flow and water utilization.*

Constant Head Boundary	
Location:	Oceanport Creek
Constant Head	0 ft (applied to all layers)

Table 6-2
MODFLOW Input Parameters
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Hydraulic Conductivity (K)		
The geometric means were used for the layers specified below:		
Fill:	*From Slug tests conducted February 6-7, 2001.*	
(Layer 1)	Well	K
	80-MW1	2
	80-MW2	4.85
	80-MW3	6.3
	80-MW4	6.41
	80-MW5	2.08
	166-MW1	[Not Available]
Geometric Mean:		**3.8**
Navesink-Hornerstown		*From Martin (1998)*
Confining Unit:		2
(Layers 2, 3, 4 and 5)		5.00E-04
		1.30E-01
		9
		3.00E-03
		2.00E-02
		8.00E-02
		6.70E-01
		4
		5.60E-02
Geometric Mean:		**0.12**

Hydraulic Conductivity (K) (Continued)		
Wenonah Formation:		*From Martin (1998)*
(Layer 6)		17
		13
		19
		13
		19
Geometric Mean:		**15.9649869**
Marshaltown Wenonah		*From Martin (1998)*
Confining Unit:		2.60E-04
(Layer 7)		1.30E-01
		4.90E-04
		5.70E-06
		2.40E-05
		1.50E-05
Geometric Mean:		**0.00017998**
Source:	Martin, Mary, 1998, Groundwater Flow in the New Jersey Coastal Plain, USGS Professional Paper 1404-H.	

Table 6-2
MODFLOW Input Parameters
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Contaminant Transport Inputs

Dispersivity: Longitudinal: 3.48 ft Lattitudinal = 0.1 * Longitudinal = 0.348 ft.

Source for dispersivity: USEPA Office of Research and Development, Feb. 2001,
http://www.epa.gov/athens/learn2model/part-two/onsite/longdisp.htm

Dispersivity calculated based on a plume length of 40 feet.

Bulk Density: 46.7 kg/ft3

Sorption type: Linear Isotherm

Sorption Constants Used in Model (Kd):

Source	COC	Kd (ml/g)	Kd (L/ug)	Kd (ft3/kg)	**Calculated Rd**
(1)	g-Chlordane	363	3.63E-07	1.28E+01	**900**
(2)	Arsenic	2.90E+01	2.90E-08	1.02E+00	**73**
(3)	Lead	890	8.90E-07	3.14E+01	**2,204**

Notes:

Kd for g-chlordane was found from the relationship: Kd = foc * Koc.

from MIDEQ (2001): Koc = 1.21E+5 ml/g = 4321 ft^3/Kg. foc = 0.003

Benzene was also modelled separately using biodegradation only, see Table 6-2.

Sources:

(1) Michigan Department of Environmental Quality (MIDEQ)
http://www.deq.state.mi.us/erd/opmemos/opmemo18/om18bt.html

(2) United States Environmental Protection Agency (USEPA). 1996.
Soil Screening Guidance: Technical Background Document.
Office of Solid Waste and Emergency Response. Washington, D.C. EPA/540/R-95/128.
Note: Kd for arsenic used for aquifer pH of 6.8.

(3) Pennsylvania Department of Environmental Protection (PADEP)
Manual Appendix A Table 5B, http://www.dep.state.pa.us/dep/subject/eqb/2000/jun20/Table5b.pdf

Table 6-2
MODFLOW Input Parameters
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Contaminant Transport Inputs (Continued):

Method for Determining Inititial Concentrations for each Contaminant of Concern:

Contaminant of Concern	NJDEP Cleanup Criteria[(1)]	Wells with Number of Exceedances	Method for Determining Initial Concentrations
g-CHLORDANE	0.5	80-MW2 [2]	Initial concentration "plume" surrounding well 80-MW2 with initial concentration of 2.719 (the most recent detection of g-chlordane).
ARSENIC	8	80-MW1 [14] 80-MW2 [2] 80-MW5 [3] 166-MW1 [1]	Initial concentration map derived from average concentrations.
LEAD	10	80-MW1 [3] 80-MW4 [2] 80-MW5 [4] 166-MW1 [5]	Initial concentration map derived from average concentrations.

Notes:

ND: Not Detected in any groundwater sampling round at the 80/166 site.

[(1)]Higher of Practical Quantitation Limits (PQLs) and Groundwater Quality Criteria (GWQC) per N.J.A.C. 7:9-6

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

Table 6-2
MODFLOW Input Parameters
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Contaminant Transport Inputs (Continued):

Average Concentrations for arsenic and lead

Contaminant of Concern	NJDEP Cleanup Criteria[(1)]	80-MW1 Average Concentration	80-MW2 Average Concentration	80-MW3 Average Concentration	80-MW4 Average Concentration	80-MW5 Average Concentration	166-MW1 Average Concentration
ARSENIC	8	19.703	8.548	3.495	5.288	22.272	3.385
LEAD	10	5.143	2.585	0.703	15.530	31.733	6.986

Notes:

[(1)]Higher of Practical Quantitation Limits (PQLs) and Groundwater Quality Criteria (GWQC) per N.J.A.C. 7:9-6

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

MDL: Minimum Detection Limit.

Bold with Shading: average concentration exceeds the NJDEP Criteria.

Samples with a Non-Detect result (ND) were assigned the concentration of 0.5 * MDL for the calculation of average concentrations.

Biodegradation Rate:

COC	Half-life (years)	k (1/day)
g-Chlordane	7.60E+00	2.50E-04

Source:

(1) Howard, P.H. et. al. 1991. *Handbook of Environmental Degradation Rates.* Lewis Publishers.

Half-Life for aerobic biodegradation in groundwater, upper limit.

Table 6-3
MODFLOW Results
Site 80/166 - Main Post
Fort Monmouth, New Jersey

Contaminant of Concern	NJDEP Criteria (ug/L)[(1)]	Well used for Calculation	Initial Concentration (ug/L)	Approximate Change of Concentration (ug/L per year)	**Estimated Time for Compliance (Years)**
g-Chlordane	0.5	80-MW2	2.917	0.121	**20**
Arsenic	8	80-MW1	16.93	0.015	**>600**
Lead	10	80-MW5	24.87	0.010	**>1,000**

Notes:

[(1)]Higher of Practical Quantitation Limits (PQLs) and Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Table 6-4
Well Search Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

NJDEP Permit Number	Depth (feet)	Use*	Permit Date	Lattitude	Longitude
2900961	50	D	10/27/1953	401920	740106
2901016	150	D	12/24/1953	401839	740240
2901400	54	D	4/19/1955	401920	740040
2902505	100	D	10/10/1957	401906	740226
2902774	124	D	9/22/1958	401933	740226
2903015	60	G	8/20/1959	401906	740119
2903369	100	D	8/8/1960	401933	740213
2904271	60	D	2/13/1964	401933	740213
2904513	350	D	10/16/1964	401906	740133
2904519	60	D	10/15/1964	401933	740053
2904782	50	D	8/5/1965	401839	740240
2904815	50	D	9/10/1965	401906	740053
2904817	50	D	9/10/1965	401853	740040
2904855	50	D	10/15/1965	401853	740040
2905009	70	D	3/21/1966	401853	740119
2905084	50	D	5/31/1966	401933	740133
2905673	100	D	1/22/1969	401839	740226
2906131	70	D	12/18/1970	401906	740040
2906460	50	D	4/25/1972	401906	740106
2906499	50	D	5/22/1972	401920	740106
2906510	50	D	6/7/1972	401839	740200
2906958	85	D	4/18/1973	401933	740106
2907172	85	D	9/5/1973	401933	740106
2907264	50	D	10/18/1973	401933	740106
2908438	60	D	8/3/1976	401853	740200
2908810	50	D	5/12/1977	401839	740146
2910282	80	D	9/11/1979	401920	740053
2911063	25	M	3/31/1981	401906	740213
2911064	25	M	3/31/1981	401906	740213
2911065	25	M	3/31/1981	401906	740213
2911066	25	M	3/31/1981	401906	740213
2911067	25	M	3/31/1981	401906	740213
2911068	25	M	3/31/1981	401906	740213
2911772	100	H	12/22/1981	401906	740240
2911855	175	I	2/17/1982	401920	740053
2912553	25	M	1/21/1983	401846	740152
2912554	25	M	1/21/1983	401846	740152
2912555	25	M	1/21/1983	401846	740152
2912598	80	R	2/1/1983	401832	740126
2912785	10	M	6/2/1983	401939	740219
2912786	10	M	6/2/1983	401939	740219
2912787	10	M	6/2/1983	401939	740219
2912788	10	M	6/2/1983	401939	740219
2912789	10	M	6/2/1983	401939	740219
2912790	10	M	6/2/1983	401939	740219
2912792	10	M	6/2/1983	401939	740219
2912793	10	M	6/2/1983	401939	740219
2912794	10	M	6/2/1983	401939	740219
2912795	10	M	6/2/1983	401939	740219
2912796	10	M	6/2/1983	401939	740219
2912797	10	M	6/2/1983	401939	740219
2912798	10	M	6/2/1983	401939	740219
2913696	10	M	8/5/1984	401939	740219
2913697	10	M	8/5/1984	401939	740219
2913698	25	M	8/5/1984	401939	740219
2913825	35	M	6/20/1985	401819	740152
2913978	35	M	6/20/1985	401920	740040
2914157	60	D	9/15/1984	401846	740139
2914244	120	D	10/5/1984	401819	740219

NJDEP Permit Number	Depth (feet)	Use*	Permit Date	Lattitude	Longitude
2914980	200	R	5/5/1985	401912	740246
2915005	80	D	7/18/1985	401846	740059
2915421	100	D	9/20/1985	401859	740046
2916628	12	M	6/11/1986	401939	740232
2916629	12	M	6/11/1986	401939	740232
2916630	12	M	6/11/1986	401939	740232
2919474	200	D	10/26/1987	401920	740133
2919537	60	D	11/9/1987	401920	740053
2919952	80	D	2/16/1988	401920	740040
2920242	80	R	4/12/1988	401839	740106
2920243	15	Z	4/12/1988	401839	740106
2920244	15	Z	4/12/1988	401839	740106
2920245	60	Z	4/12/1988	401839	740106
2920246	15	Z	4/12/1988	401839	740106
2920248	15	Z	4/12/1988	401839	740106
2921780	190	G	11/10/1988	401853	740133
2922063	100	R	2/10/1989	401920	740053
2922181	150	G	2/9/1989	401933	740133
2922236	60	D	2/28/1989	401920	740053
2922526	190	G	4/7/1989	401933	740133
2922549	180	G	4/12/1989	401839	740133
2923608	200	D	10/18/1989	401933	740226
2923677	30	M	11/3/1989	401906	740226
2923678	30	M	11/3/1989	401906	740226
2923679	30	M	11/3/1989	401906	740226
2923680	30	M	11/3/1989	401906	740226
2924557	60	D	4/10/1990	401920	740053
2924639	30	M	4/27/1990	401906	740226
2924640	30	M	4/27/1990	401906	740226
2924953	10	M	6/27/1990	401853	740200
2924954	10	M	6/27/1990	401853	740200
2924955	10	M	6/27/1990	401853	740200
2924956	10	M	6/27/1990	401853	740200
2925357	20	M	10/12/1990	401839	740213
2925453	15	M	11/7/1990	401906	740119
2925454	15	M	11/7/1990	401906	740119
2925455	15	M	11/7/1990	401906	740119
2925456	15	M	11/7/1990	401906	740119
2925457	15	M	11/7/1990	401906	740119
2925506	70	I	11/20/1990	401906	740040
2926778	40	M	8/29/1991	401946	740200
2926925	20	M	9/24/1991	401906	740200
2926926	20	M	9/24/1991	401906	740200
2926927	20	M	9/24/1991	401906	740200
2926928	20	M	9/24/1991	401906	740200
2926929	20	M	9/24/1991	401906	740200
2926930	20	M	9/24/1991	401906	740200
2926931	20	M	9/24/1991	401906	740200
2926938	20	M	9/25/1991	401920	740200
2926939	20	M	9/25/1991	401920	740200
2926940	20	M	9/25/1991	401906	740200
2926941	20	M	9/25/1991	401906	740200
2926942	20	M	9/25/1991	401906	740200
2928031	20	E	5/14/1992	401906	740200
2928907	20	M	10/13/1992	401906	740200
2928992	20	M	10/27/1992	401920	740200
2928993	20	M	10/27/1992	401920	740200
2928994	20	M	10/27/1992	401920	740200
2928995	20	M	10/27/1992	401920	740200

Table 6-4
Well Search Summary
Site 80/166 - Main Post
Fort Monmouth, New Jersey

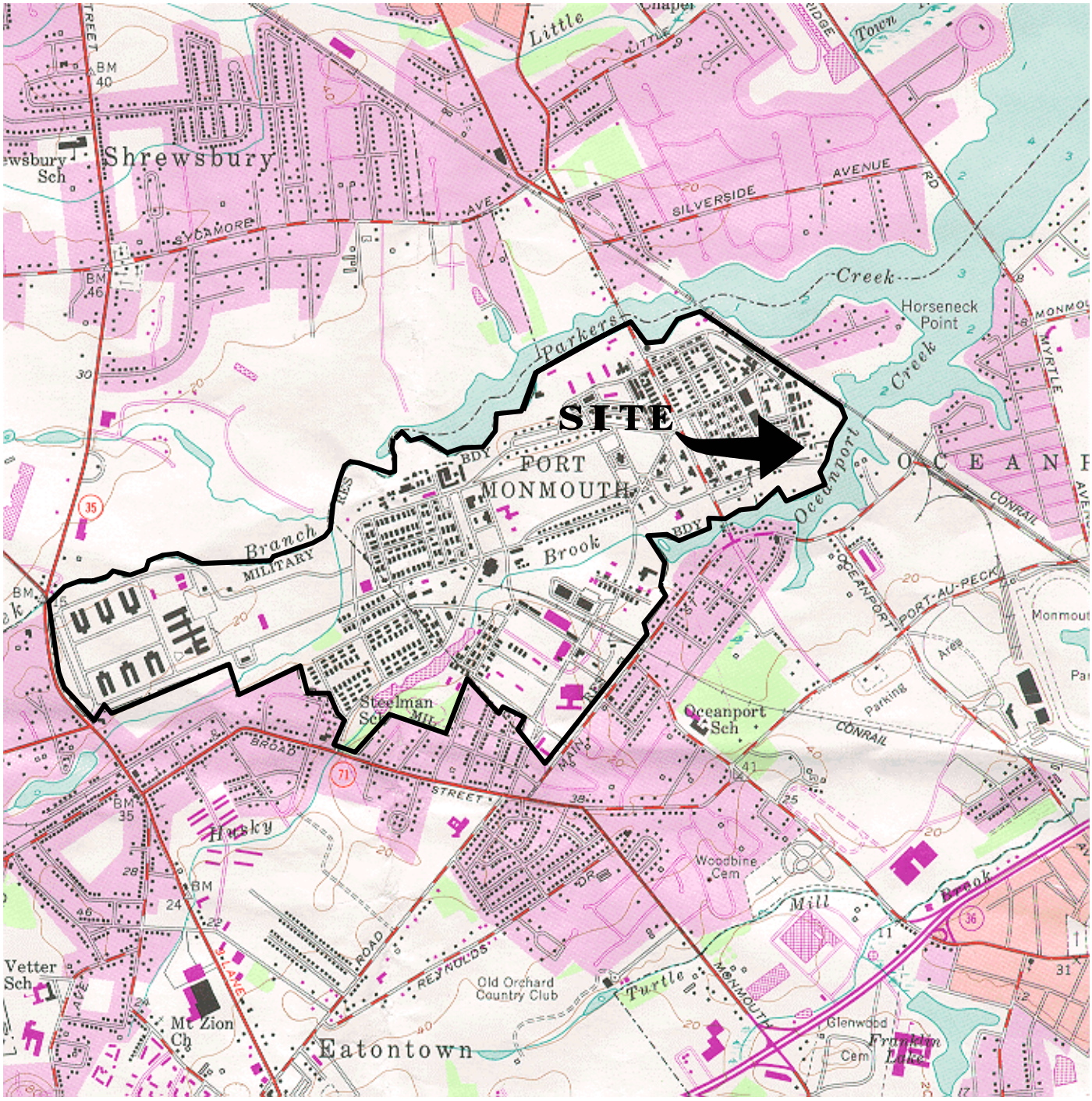
NJDEP Permit Number	Depth (feet)	Use*	Permit Date	Lattitude	Longitude
2929739	20	M	6/3/1993	401920	740146
2929740	20	M	6/3/1993	401920	740146
2929741	20	M	6/3/1993	401920	740146
2930322	100	1	10/12/1993	401906	740040
2930957	15	M	4/5/1994	401906	740200
2930961	15	M	4/5/1994	401853	740240
2930962	15	M	4/5/1994	401906	740200
2930963	15	M	4/5/1994	401906	740200
2930964	15	M	4/5/1994	401906	740200
2930973	15	M	4/5/1994	401906	740240
2930974	15	M	4/5/1994	401906	740240
2930975	15	M	4/5/1994	401920	740240
2930976	15	M	4/5/1994	401920	740240
2930980	15	M	4/5/1994	401906	740240
2931158	25	M	5/4/1994	401853	740200
2931159	25	M	5/4/1994	401853	740200
2931440	200	G	6/9/1994	401933	740106
2931552	30	G	6/30/1994	401853	740133
2931772	15	M	8/3/1994	401906	740240
2931773	15	M	8/3/1994	401906	740240
2931774	15	M	8/3/1994	401906	740240
2931775	15	M	8/3/1994	401906	740240
2932576	25	M	11/29/1994	401853	740226
2932577	25	M	11/29/1994	401853	740226
2932578	25	M	11/29/1994	401853	740226
2932579	25	M	11/29/1994	401853	740226
2932580	25	M	11/29/1994	401853	740226
2932581	25	M	11/29/1994	401853	740226
2932582	25	M	11/29/1994	401853	740226
2932583	25	M	11/29/1994	401853	740226
2933754	20	M	7/19/1995	401906	740200
2933755	20	M	7/19/1995	401906	740200
2933989	20	M	8/18/1995	401920	740240
2934702	40	B	12/15/1995	401920	740146
2934857	50	B	2/8/1996	401920	740146
2935504	70	D	6/5/1996	401906	740040
2935731	25	M	7/17/1996	401826	740119
2935732	25	M	7/17/1996	401826	740119
2935833	15	M	8/2/1996	401920	740106
2936864	175	D	4/23/1997	401920	740119
2936995	40	B	5/27/1997	401826	740119
2937878	120	G	11/14/1997	401853	740200
2938172	30	M	2/11/1998	401826	740226
2938340	100	G	3/18/1998	401920	740053
2938652	60	G	5/14/1998	401920	740119
2938811	60	G	6/15/1998	401906	740106
2939550	300	H	10/21/1998	401826	740226

Notes:
Source: State of New Jersey Department of Environmental Protection - Well Permitting and Regulations Section of the Bureau of Water Allocation, Trenton, NJ.
Search date: 6 August 2001.
Well search was performed for a 1-mile radius surrounding the center point of Site 80/166, U.S. Army Garrison Fort Monmouth, Fort Monmouth, New Jersey.

80/166 Location: latitude = North 40° 19' 03",
longitude = West 74° 01' 43".

***Well Use Codes**
A - Unknown/Well Record Use Only
B - Boring
C - Commercial
D - Domestic (Potable)
E - Recovery/Decontamination Pollution Control/Leachate with Pump Capacity
F - Fire
G - Irrigation
H - Heat Pump/Geothermal (Return Well)
I - Industrial
J - Injection
K - Inclinometer
L - Livestock
M - Monitoring Well (Observation)
N - Public Non Community
O - Oil/Gas Exploration
P - Public Supply
Q - Recharge
R - Replacement (Replacement Codes: 1 - Domestic; 2 - Public Community, 5 - Irrigation)
S - Closed Loop
T - Test
U - Non Public (Supply)
V - Gas Vent
W - Dewatering
X - Agricultural/Horticultural/IrrigationWells
Y - Cathodic Protection
Z - Piezometer

FIGURES



LONG BRANCH, N. J.

40073-C8-TF-024

1954

PHOTOREVISED 1981

DMA 6164 I SE-SERIES V822



QUADRANGLE LOCATION

Mapped, edited and published by the Geological Survey

Figure 2-1
Site Location Map
Site 80/166
Fort Monmouth, New Jersey

Versar INC.
201 Gibraltar Road, Suite 100
Horsham, PA 19044
(215) 957-0955



ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 2-2
SITE LAYOUT
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: PS	DATE DRAWN: 01 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: Fig 2-2
	FILE No.: FIG 2-2
	SCALE: 1" = 60'
	SHEET OF REV.:

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

⊕ = MONITORING WELL LOCATION

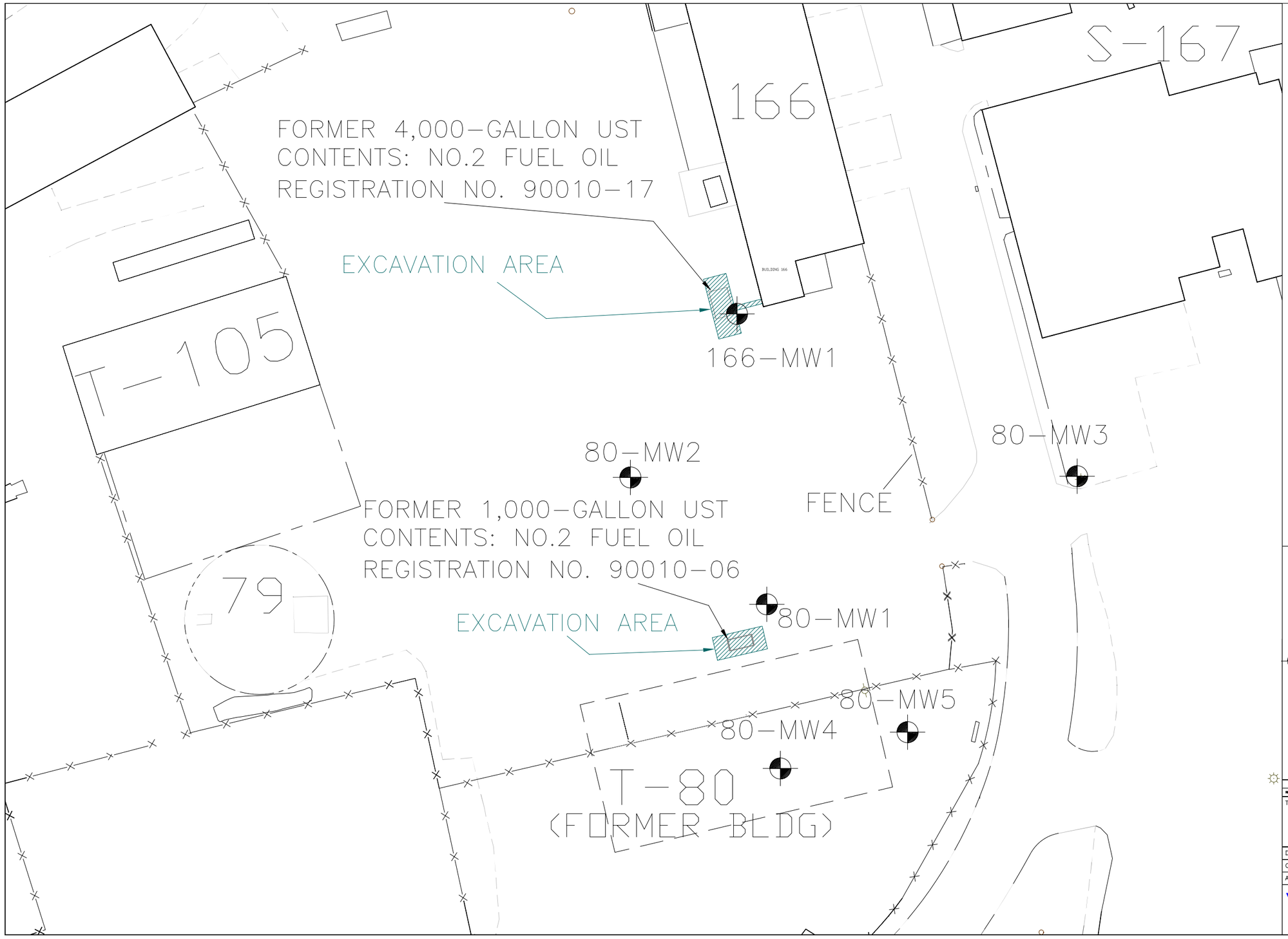
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 2-3
MONITORING WELL LOCATION MAP
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 02 JUL 01
CHECKED BY: TJK	DATE CHECKED: 02 JUL 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 2-3
	FILE No.: FIGURE 2-3
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



NOTES:

⊕ = MONITORING WELL LOCATION

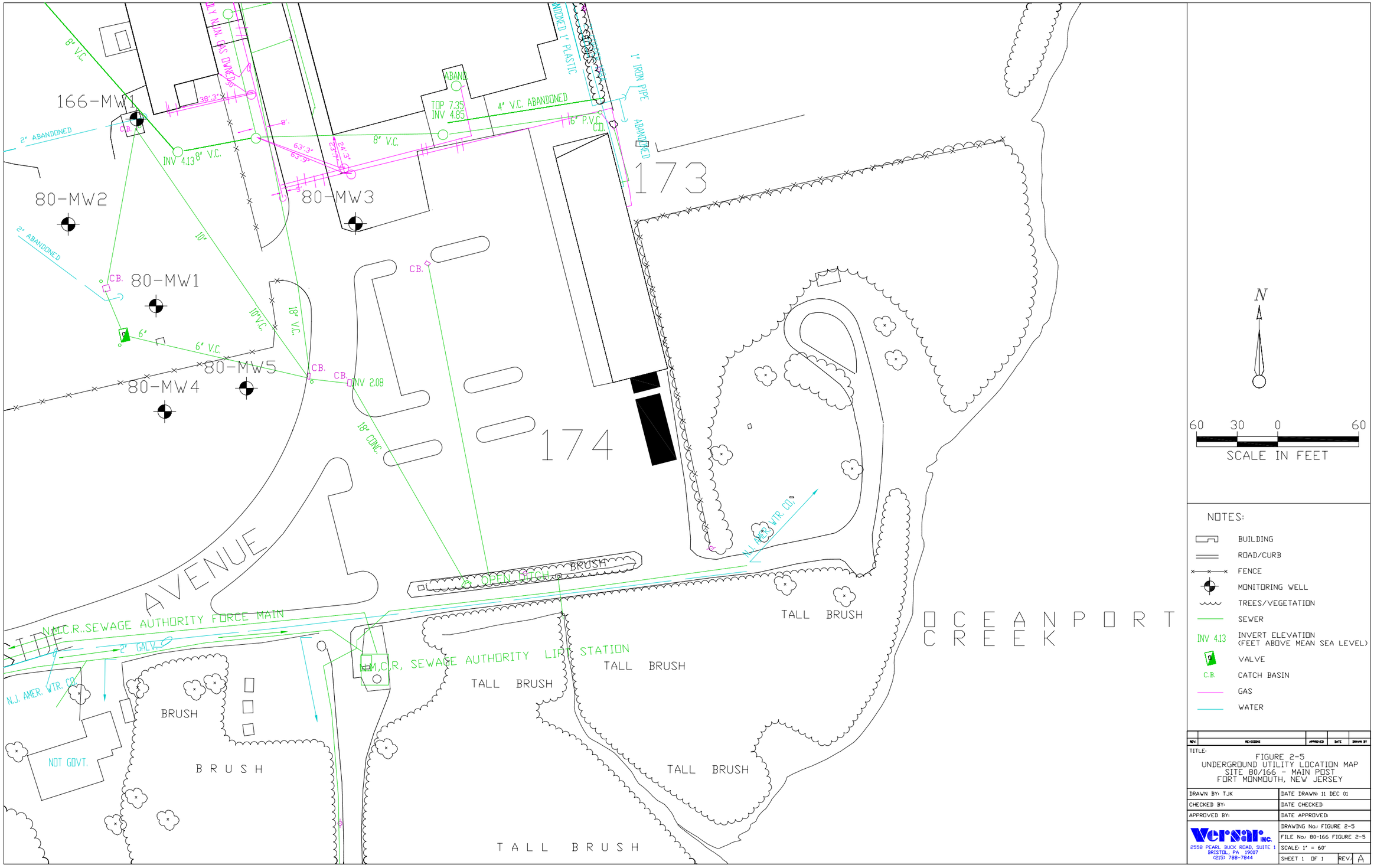
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 2-4
FORMER UST LOCATION MAP
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 29 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 2-4
	FILE No.: 80/166 FIGURE 2-4
	SCALE: 1" = 10'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



NOTES:

- BUILDING
- ROAD/CURB
- FENCE
- MONITORING WELL
- TREES/VEGETATION
- SEWER
- INV 4.13 — INVERT ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- VALVE
- C.B. — CATCH BASIN
- GAS
- WATER

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:
FIGURE 2-5
UNDERGROUND UTILITY LOCATION MAP
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 11 DEC 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 2-5
	FILE No.: 80-166 FIGURE 2-5
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844

Geologic Map of New Jersey

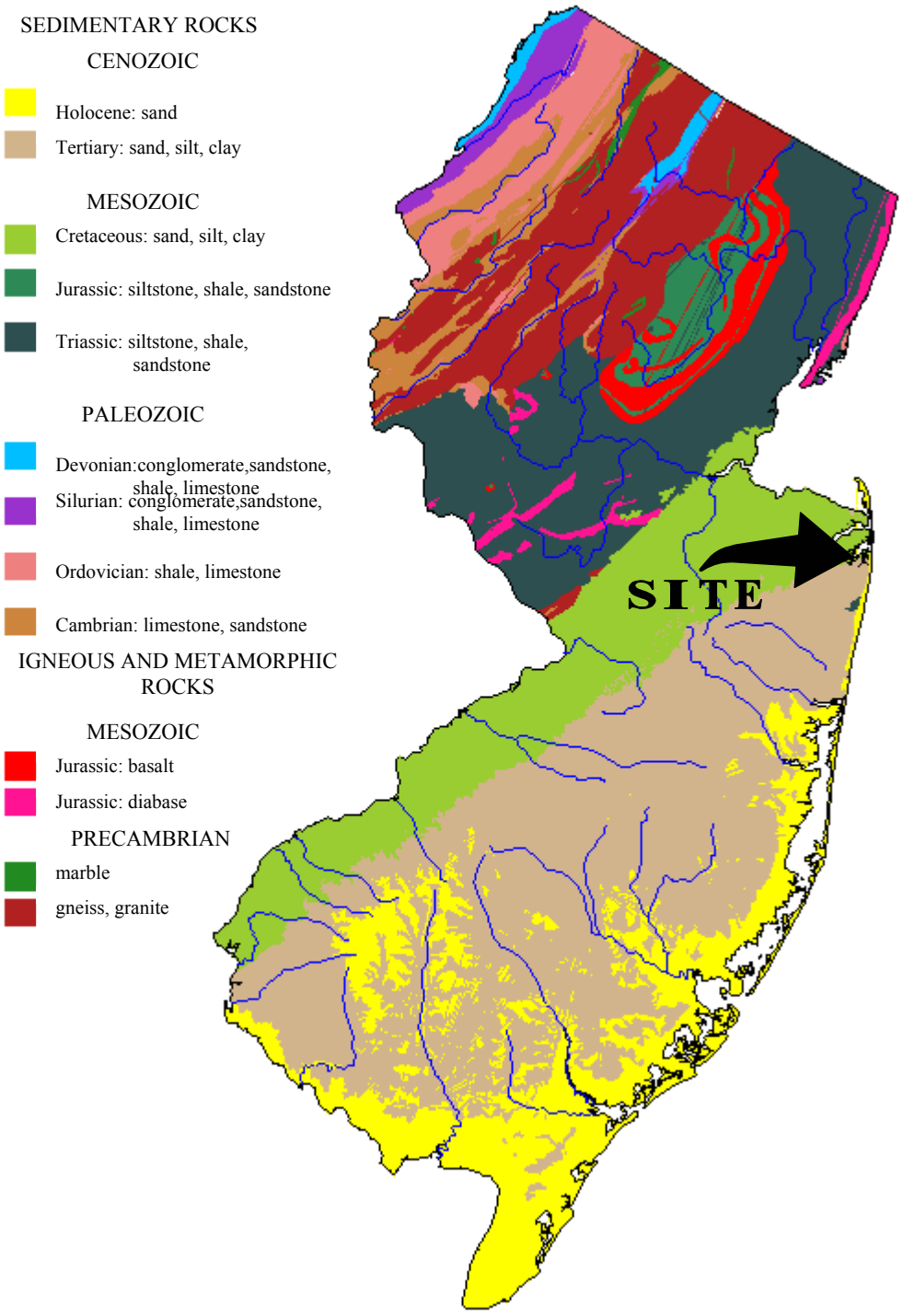
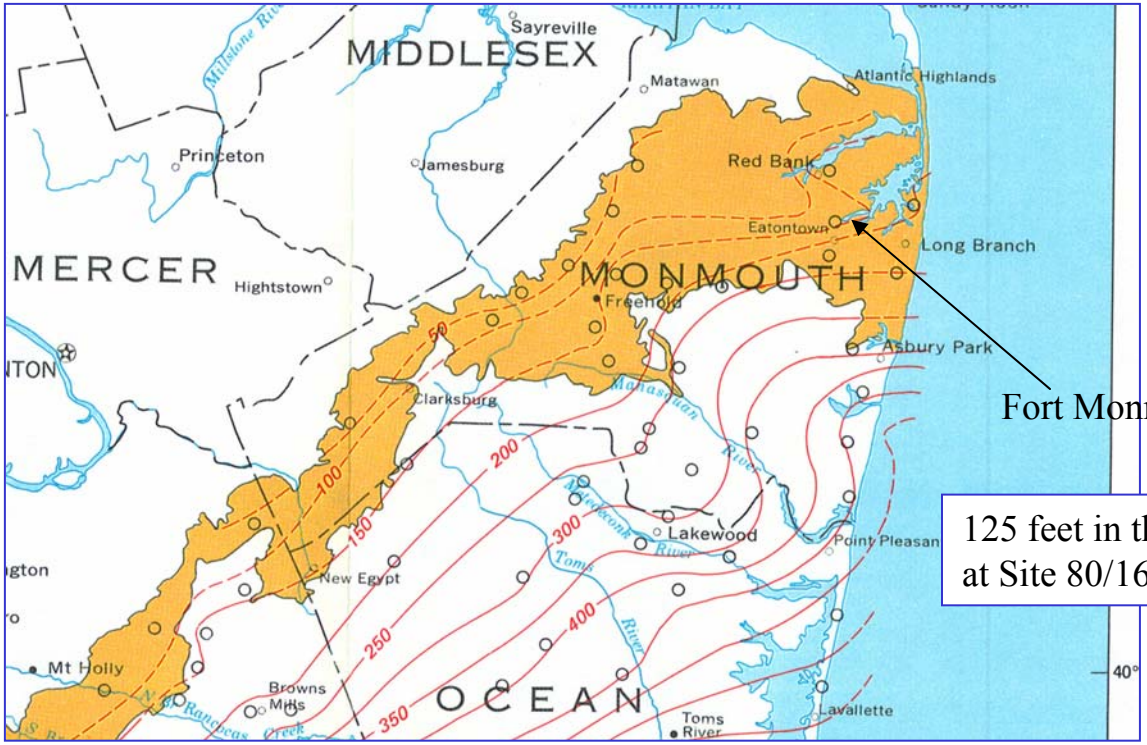


FIGURE 2-6
Geologic Map of New Jersey
Site 80/166
Fort Monmouth, New Jersey

Source: New Jersey Geologic Survey, 1994, *Geologic Map of New Jersey*.

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, Pennsylvania, 19007
(215)-788-7844



EXPLANATION

Outcrop area of the Navesink Formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, and Manasquan Formation

600 — Line of equal thickness of the composite confining bed. Dashed where approximately located. Interval 50 feet

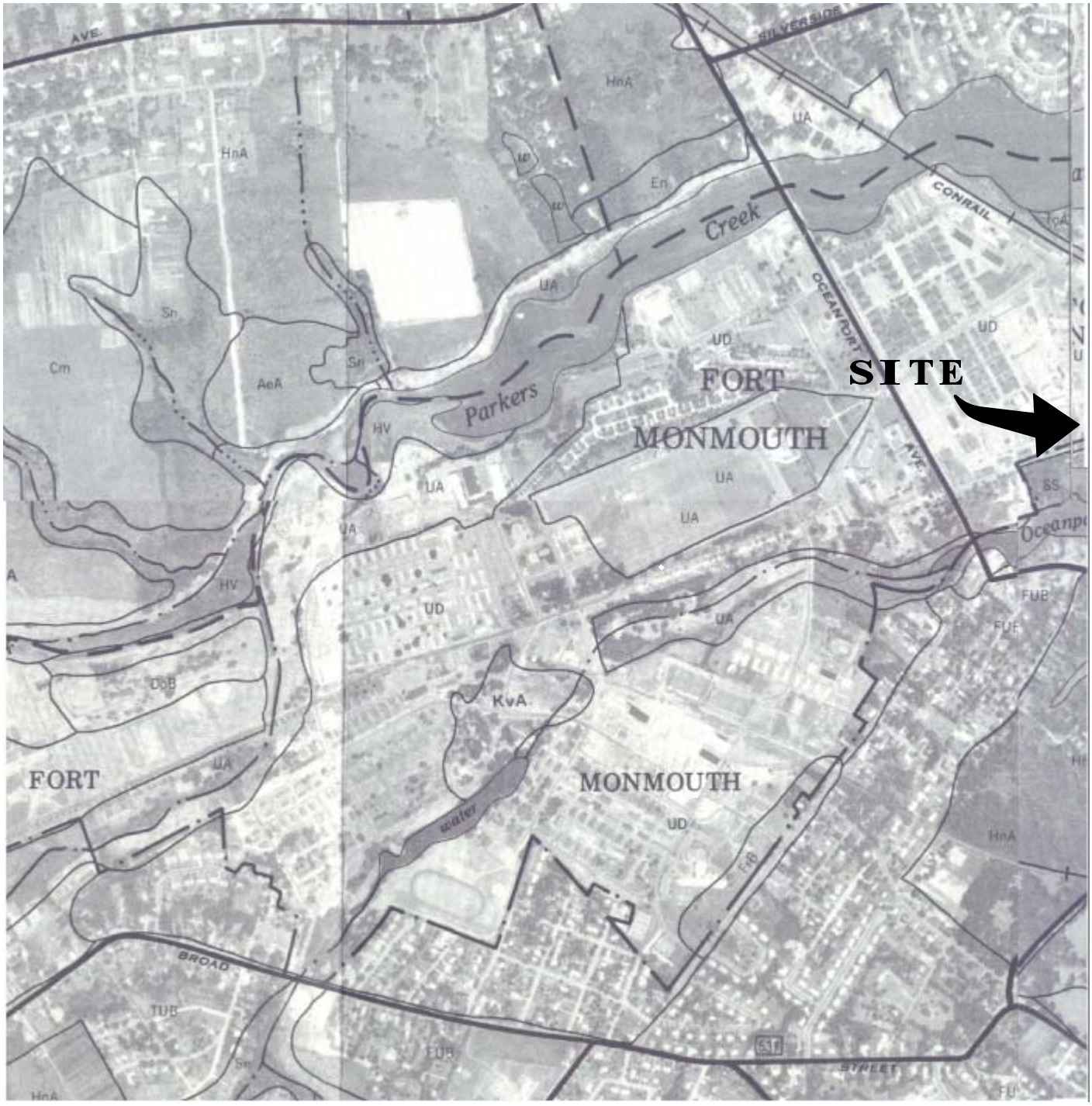
Well location

Source: Zapecza, O. 1989. *Hydrogeologic Framework of the New Jersey Coastal Plain.* USGS Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.

FIGURE 2-7

Outcrop and Thickness of Composite Confining Unit
Site 80/166
Fort Monmouth, New Jersey

Versar Inc.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



US Department of Agriculture
Soil Conservation Service
Soil Survey of Monmouth County, NJ
April 1989

Figure 2-8
Soil Map of Monmouth County
Site 80/166
Fort Monmouth, New Jersey

Versar INC.
201 Gibraltar Road, Suite 100
Horsham, PA 19044
(215) 957-0955

N

105

79

166-MW1

MH

80-MW2

80-MW3

80-MW1

80-MW4

80-MW5

MH

CB.

CB.

CB.

CB.

48" (S)
3-7' (GW)

42" (S)
3-7' (GW)

36" (S)
3-8' (GW)

36" (S)
3.4-8' (GW)

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

= GROUNDWATER SAMPLE LOCATION

= MONITORING WELL LOCATION

= GEOPROBE BORING LOCATION

S = SOIL BORING

GW = GROUNDWATER

24-30" (S)

SAMPLE DEPTH — SAMPLE TYPE

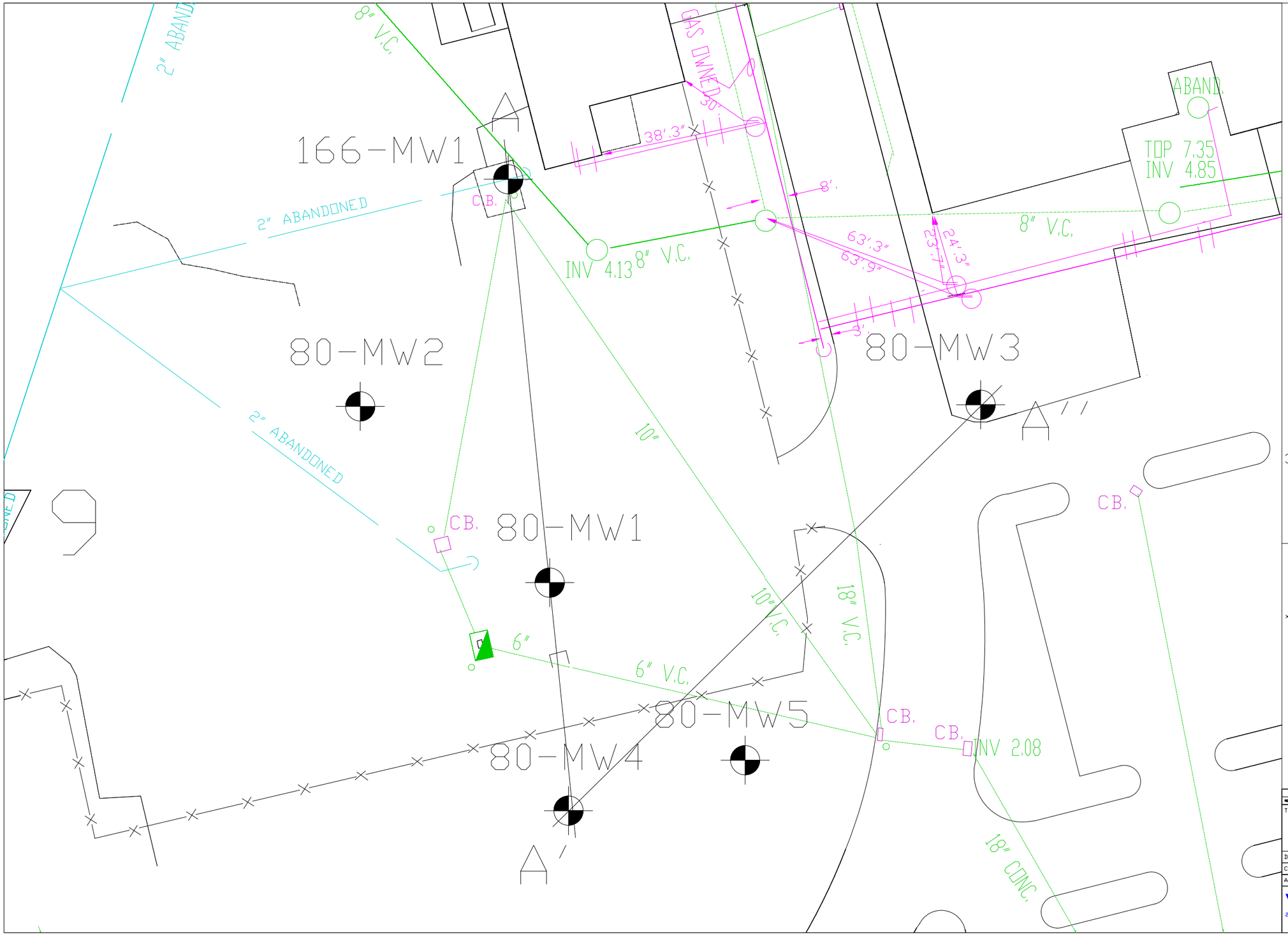
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 3-1
GEOPROBE BORING LOCATION MAP
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 17 JUL 01
CHECKED BY:	DATE CHECKED: 17 JUL 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIG.3-1
	FILE No.: FIG.3-1 80/166
	SCALE: 1" = 30'
	SHEET OF REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007-6894
(215) 788-7844



N

30 15 0 30

SCALE IN FEET

NOTES:

- BUILDING
- ROAD/CURB
- FENCE
- MONITORING WELL
- TREES/VEGETATION
- SEWER
- INV 4.13 — INVERT ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- VALVE
- C.B. — CATCH BASIN
- GAS
- WATER

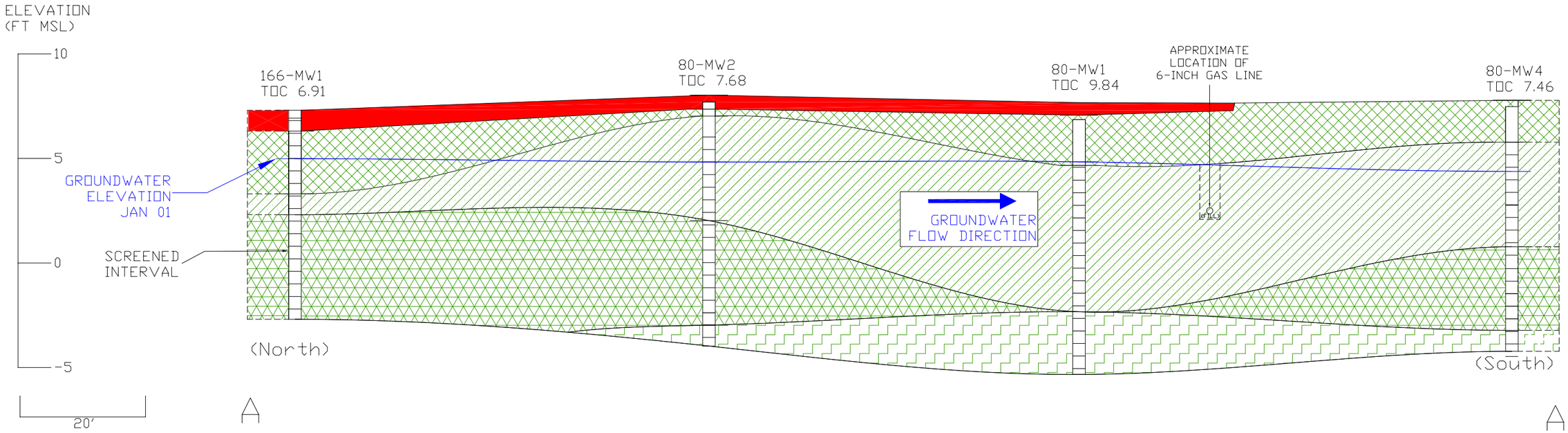
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-1
GEOLOGIC CROSS SECTION LOCATION MAP
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 11 DEC 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-1
	FILE No.: 80-166 FIGURE 4-1
	SCALE: 1" = 30'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



UNIT	SYMBOL	DESCRIPTION
(1)		ASPHALT AND BASE STONE
		TINTON SAND FORMATION / FILL
(2)		BROWN TO BLACK FINE-MEDIUM SAND AND SILT (FILL?)
(3)		OLIVE GREEN TO GRAY CLAY, FINE SAND AND SILT
(4)		LIGHT BROWN AND ORANGE CLAY WITH FINE SAND AND SILT
(5)		YELLOWISH ORANGE FINE MEDIUM SAND
(6)		FINE SAND WITH SMALL-LARGE SUBROUNDED TO ROUNDED QUARTZ GRAVEL
(7)		BROWN FINE-COARSE SAND WITH SMALL-MEDIUM SUBROUNDED QUARTZ GRAVEL
(8)		GRAY CLAY INTERBEDDED WITH ORANGE FINE-MEDIUM SAND

NOTES:

1) CROSS SECTION LINE (A TO A') IS SHOWN ON FIGURE 4-1.

2) VERTICAL SCALE: 1" = 6'.
HORIZONTAL SCALE: 1" = 20'.
VERTICAL EXAGGERATION = 3.33.

3) ELEV. = ELEVATION OF INNER WELL CASING SURVEY MARK (FEET ABOVE MEANSEA LEVEL).

4) EACH OF THE WELLS HAS A DIAMETER OF 4 INCHES, WHICH IS ENLARGED ON THIS DRAWING FOR PRESENTATION.

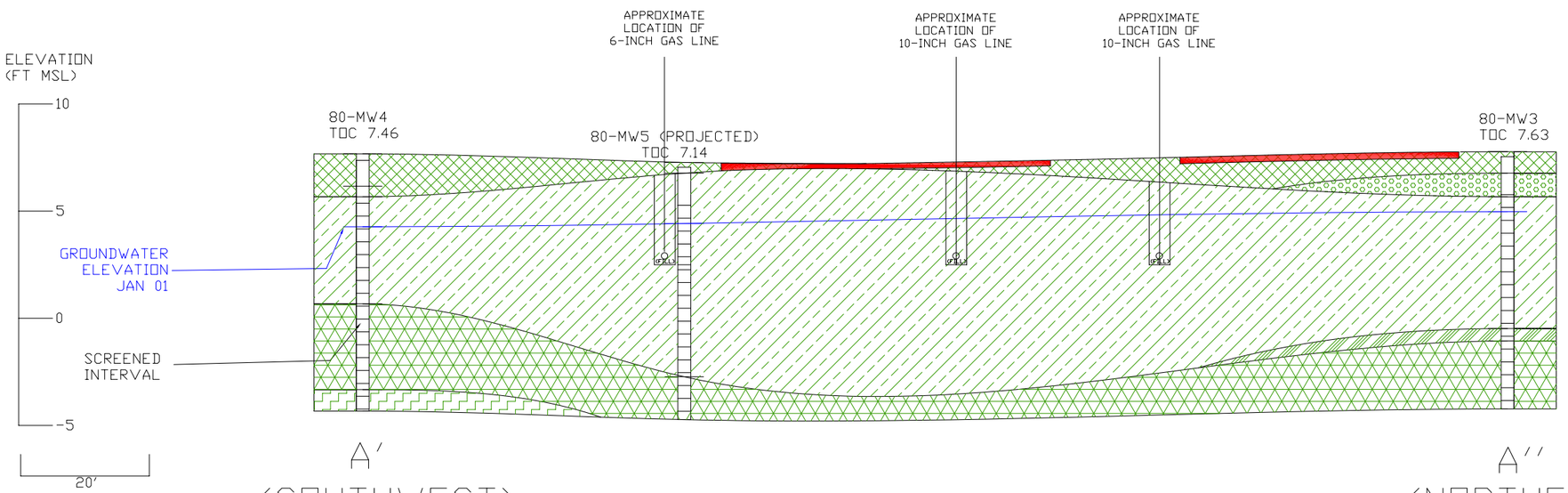
5) BOUNDARIES ARE DASHED WHERE INFERRED.

REV.	REVISIONS	APPROVED	DRAWN BY

TITLE:
FIGURE 4-2
GEOLOGIC CROSS SECTION A-A'
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JRA	DATE DRAWN: 27 NOV 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-2
	FILE No.: 80-166 FIG. 4-2
	SCALE: 1" = 20' (VERT:1"=6')
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



UNIT SYMBOL DESCRITPION

(1)		ASPHALT AND BASE STONE
		TINTON SAND FORMATION / FILL
(2)		BROWN TO BLACK FINE-MEDIUM SAND AND SILT (FILL?)
(3)		OLIVE GREEN TO GRAY CLAY, FINE SAND AND SILT
(4)		LIGHT BROWN AND ORANGE CLAY WITH FINE SAND AND SILT
(6)		FINE SAND WITH SMALL-LARGE SUBROUNDED TO ROUNDED QUARTZ GRAVEL

NOTES:

1) CROSS SECTION LINE (A' TO A'') IS SHOWN ON FIGURE 4-1.

2) VERTICAL SCALE: 1" = 6'.
HORIZONTAL SCALE: 1" = 20'.
VERTICAL EXAGGERATION = 3.33.

3) ELEV. = ELEVATION OF INNER WELL CASING SURVEY MARK (FEET ABOVE MEANSEA LEVEL).

4) EACH OF THE WELLS HAS A DIAMETER OF 4 INCHES, WHICH IS ENLARGED ON THIS DRAWING FOR PRESENTATION.

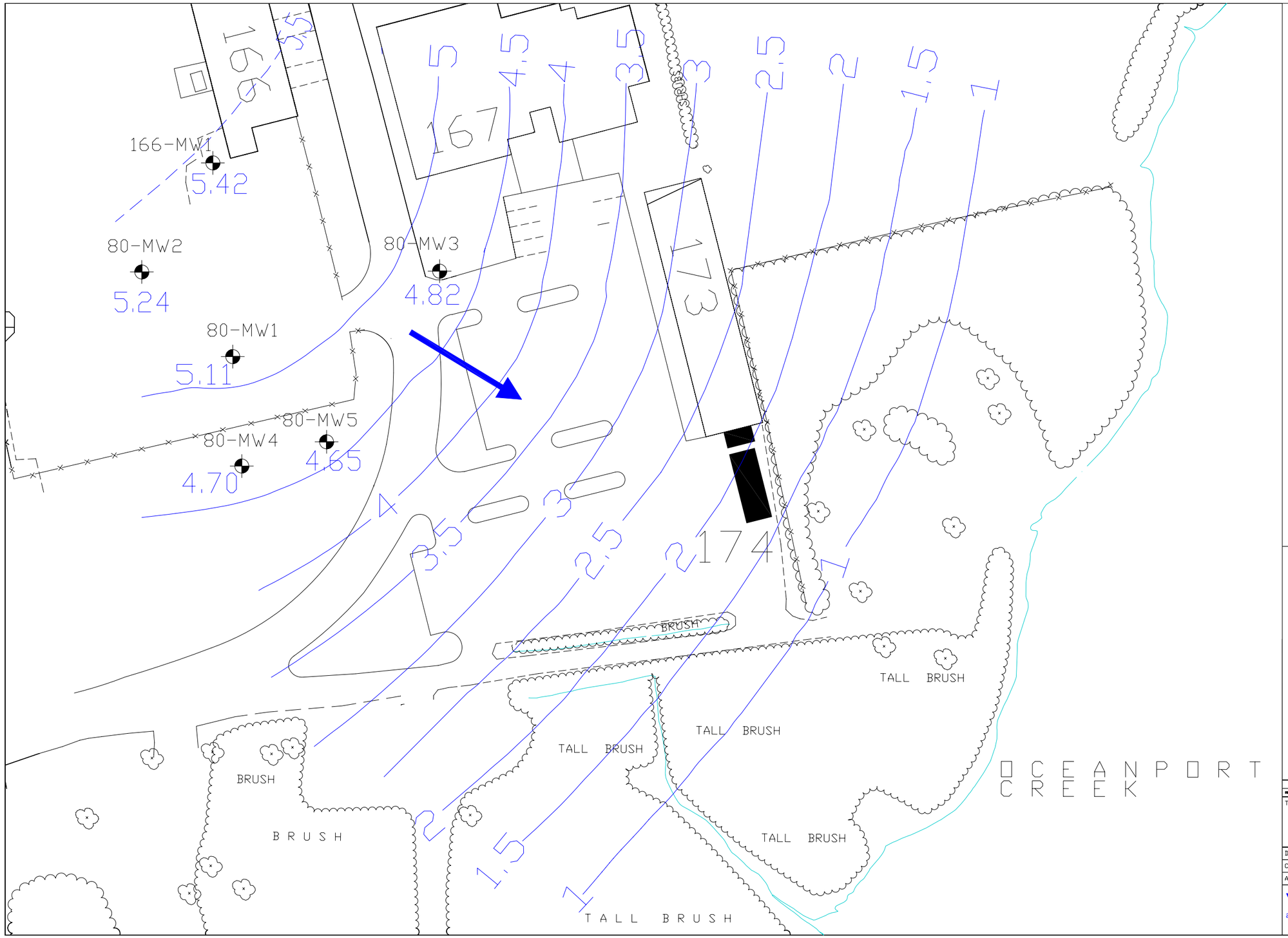
5) BOUNDARIES ARE DASHED WHERE INFERRED.

REV.	REVISIONS	APPROVED	DRAWN BY

TITLE:
FIGURE 4-3
GEOLOGIC CROSS SECTION A'-A''
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JRA	DATE DRAWN: 10 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-3
	FILE No.: 80-166 FIG. 4-3
	SCALE: 1" = 20' (VERT:1"=6')
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- MONITORING WELL
- 6.29 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 4 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF OCEANPORT CREEK IS ZERO FEET ABOVE MEAN SEA LEVEL

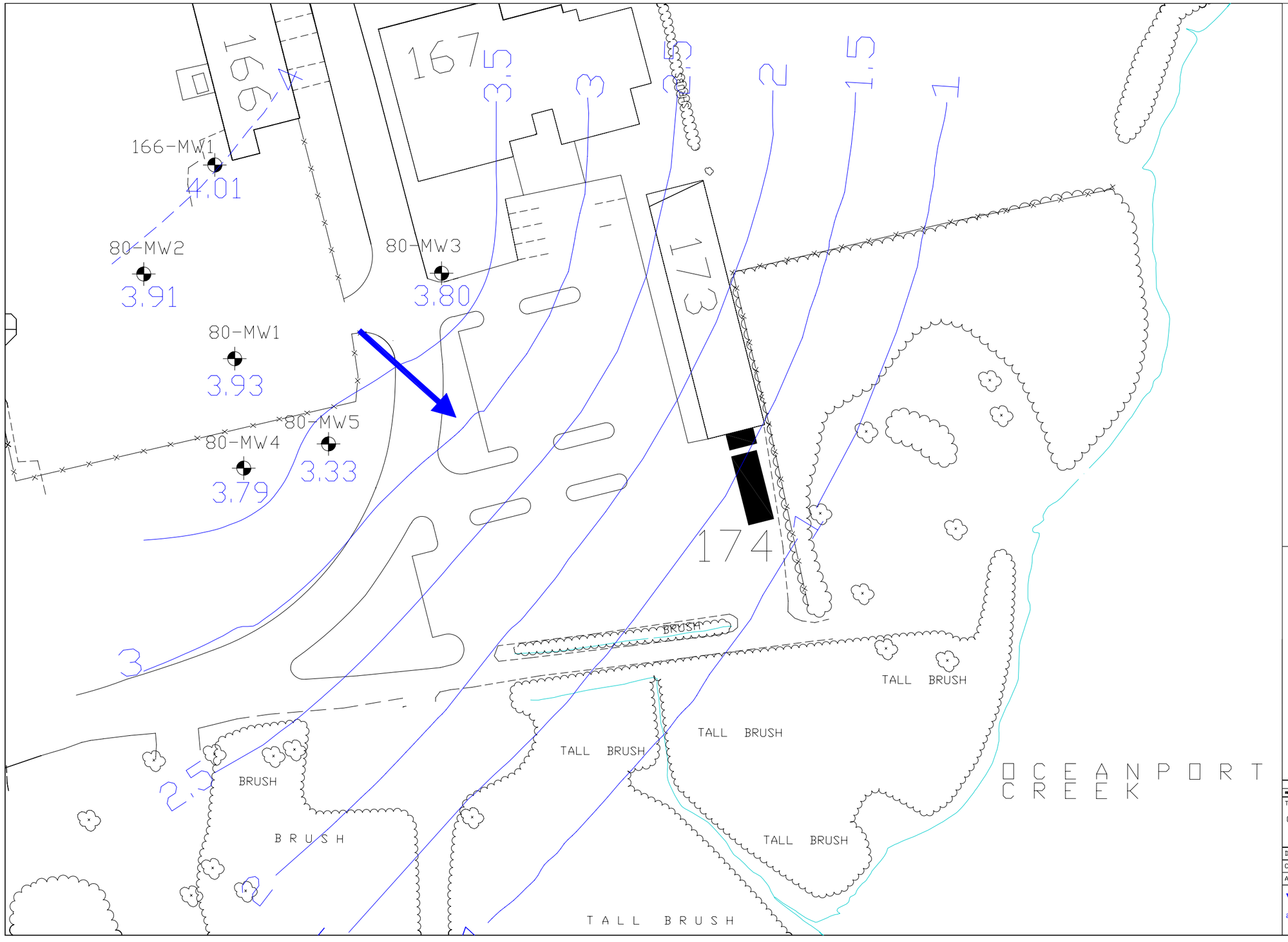
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4a
GROUNDWATER COUNTOUR MAP (AUG 00)
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 29 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4a
	FILE No.: 108 FIGURE 4-4a
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Versar INC.
2550 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- MONITORING WELL
- 6.29 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 4 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF OCEANPORT CREEK IS ZERO FEET ABOVE MEAN SEA LEVEL

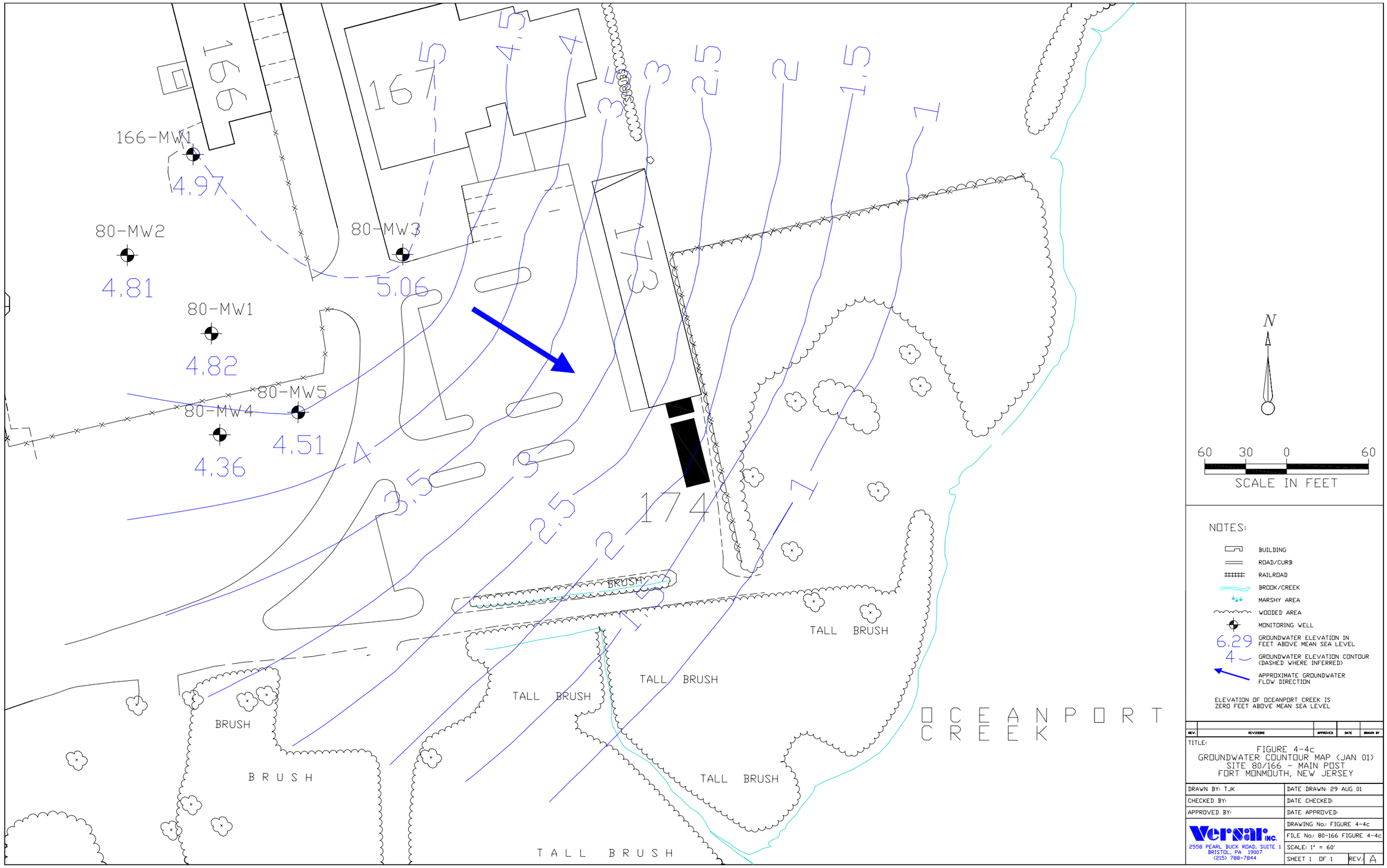
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4b
GROUNDWATER COUNTOUR MAP (27 OCT 00)
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 29 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4b
	FILE No.: 108 FIGURE 4-4b
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- MONITORING WELL
- 6.29 — GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 4 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF OCEANPORT CREEK IS ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:
FIGURE 4-4c
GROUNDWATER COUNTOUR MAP (JAN 01)
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 29 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4c
	FILE No.: 80-166 FIGURE 4-4c
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007
(215) 788-7844



CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	4/16/97	8/20/97	11/24/97	2/27/98	6/2/98	8/24/98	11/20/98	2/9/99	5/26/99	9/22/99	12/17/99	3/6/00	5/9/00	8/16/00	10/27/00	1/24/01	9/7/00	10/12/00
a- Chlordane	0.5	ND	ND	ND	ND	0.027	0.052	ND	ND	ND	0.048	ND	ND	ND	ND	ND	0.028	0.84	ND
g- Chlordane	0.5	ND	ND	ND	ND	0.022	0.05	ND	ND	ND	0.049	ND	ND	ND	ND	ND	0.024	0.46	ND
Arsenic	8	NS	4	23	ND	2.3	3.21	ND	ND	4.57	ND	ND	2.83	ND	ND	5.67	4.83	ND	3.13
Lead	10	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.73	22.5

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	8/16/00	8/30/00	10/27/00	1/24/01	9/7/00	10/12/00
a- Chlordane	0.5	0.197	0.233	ND	1.625	ND	ND
g- Chlordane	0.5	ND	0.303	ND	2.219	ND	0.929
Arsenic	8	ND	ND	ND	2.69	10.6	ND
Lead	10	N/A	N/A	N/A	N/A	ND	9.12

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	8/16/00	8/30/00	10/27/00	1/24/01	9/6/00	10/11/00
a- Chlordane	0.5	ND	ND	ND	ND	ND	ND
g- Chlordane	0.5	ND	ND	ND	ND	ND	ND
Arsenic	8	6.28	5.24	5.3	4.18	4.93	6
Lead	10	11.2	71.6	4.42	5.85	32.7	7.86

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	8/16/00	8/30/00	10/27/00	1/24/01	9/6/00	10/11/00
a- Chlordane	0.5	ND	ND	ND	ND	ND	ND
g- Chlordane	0.5	ND	ND	ND	ND	ND	ND
Arsenic	8	3.36	7.06	7.27	2.28	ND	ND
Lead	10	N/A	N/A	N/A	N/A	ND	ND

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	4/16/97	8/20/97	11/24/97	2/27/98	6/2/98	8/24/98	11/20/98	2/9/99	5/26/99	9/22/99	12/17/99	3/6/00	5/9/00	8/16/00	10/27/00	1/24/01	9/7/00	10/12/00
a- Chlordane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
g- Chlordane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Arsenic	8	NS	9	ND	24	11.9	41.5	34.3	8.49	24	11.8	6.56	17.9	11.3	26.8	16.8	32.4	ND	10.2
Lead	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	8/16/00	8/30/00	10/27/00	1/24/01	9/6/00	10/11/00
a- Chlordane	0.5	ND	ND	ND	ND	ND	ND
g- Chlordane	0.5	ND	ND	ND	ND	ND	ND
Arsenic	8	11.2	71.6	4.42	5.85	32.7	7.86
Lead	10	N/A	N/A	N/A	N/A	N/A	N/A

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	— x —	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

= MONITORING WELL LOCATION

1.) ALL CONCENTRATIONS ARE GIVEN IN MICROGRAMS PER LITER (ug/L), EQUIVALENT TO PARTS PER BILLION (PPB).
2.) NJDEP CLEANUP CRITERIA: HIGHER OF PRACTICAL QUANTITION LIMITS (PQLs) AND GROUNDWATER QUALITY STANDARDS (GWQS) PER NJAC 7:9-6.
3.) EXCEEDANCES OF THE NJDEP CLEANUP CRITERIA ARE HIGHLIGHTED AND PRINTED IN BOLD-FACED TYPE.
4.) ND: ANALYTE NOT DETECTED IN SAMPLE.
5.) SAMPLES COLLECTED USING LOW-FLOW SAMPLING ARE SHOWN IN GREEN TYPEFACE.
6.) NS: NOT SAMPLED.

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 5-1
GROUNDWATER CONTAMINANT DISTRIBUTION
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JMM	DATE DRAWN: 25 AUG 01
CHECKED BY: TJK	DATE CHECKED: 27 AUG 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: 80-166 FIG 5-1
	FILE No.: 80-166 FIG 5-1
	SCALE: 1" = 20'
	SHEET OF REV.: A

Versar INC.
201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044
(215) 957-0455

N

105

79

166MW01

MW

80-MW2

80-MW3

80-MW1

80-MW4

80-MW5

MH

CB.

CB.

CB.

CB.

42" (S)
3-7' (GW)

48" (S)
3-7' (GW)

36" (S)
3-8' (GW)

36" (S)
3.4-8' (GW)

BENZENE: 1.13 ug/L

BENZENE: 6.84 ug/L

BROMODICHLOROMETHANE: 2.06 ug/L

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

- ◯ = GROUNDWATER SAMPLE LOCATION
- ⌖ = MONITORING WELL LOCATION
- ● = GEOPROBE BORING LOCATION
- S = SOIL BORING
- GW = GROUNDWATER

24-30" (S)

SAMPLE DEPTH — SAMPLE TYPE

GEOPROBE SAMPLES THAT EXCEEDED THE NJDEP CRITERIA ARE HIGHLIGHTED AND THE RESULT IS SHOWN NEXT TO THE SAMPLE ID.

SEE TABLE 5-3 FOR GEOPROBE SAMPLE RESULTS FOR DETECTED ANALYTES.

NJDEP GROUNDWATER CRITERIA:
BENZENE: 1 UG/L
BROMODICHLOROMETHANE: 1 ug/L
CHLOROBENZENE: 4 ug/L

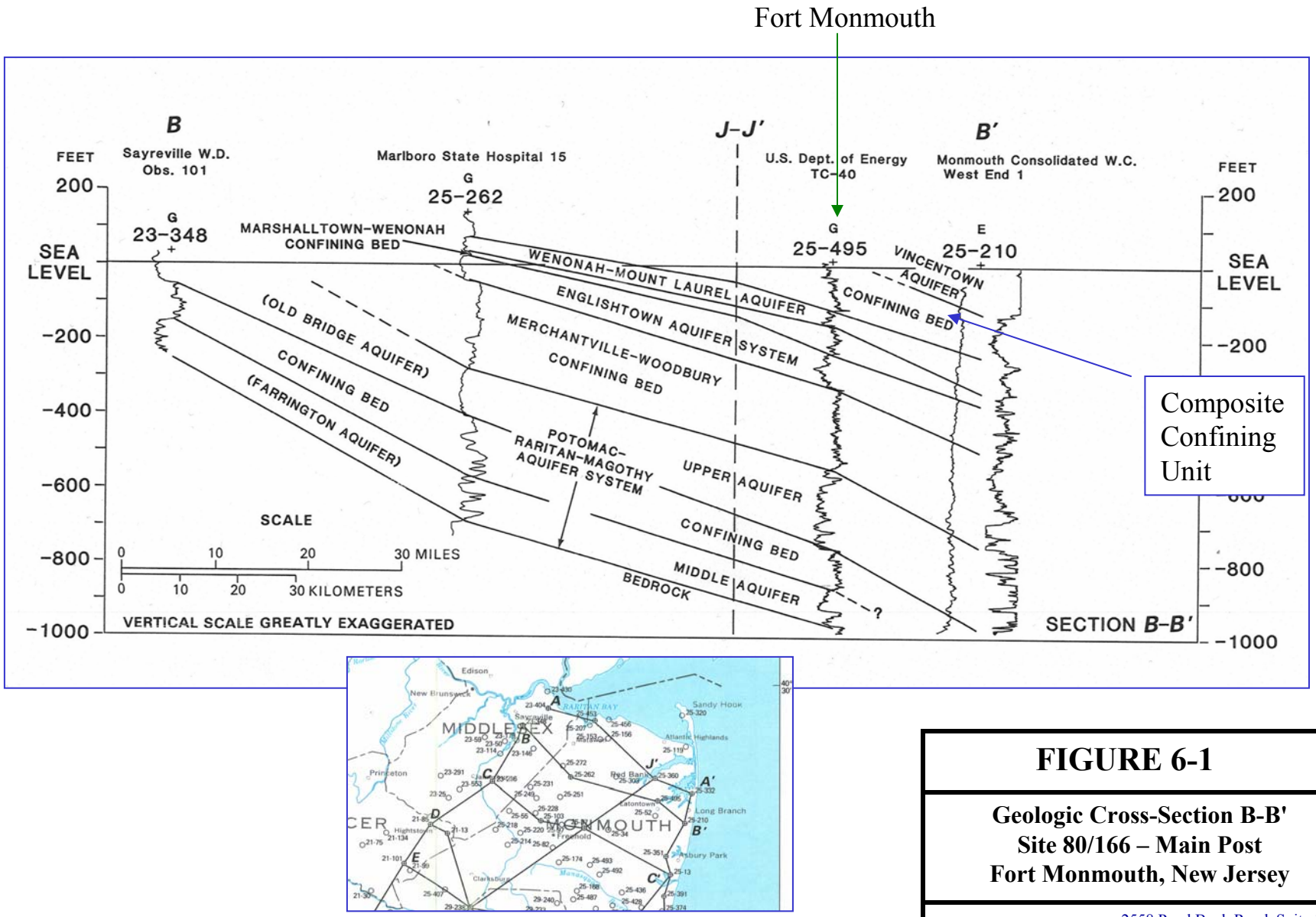
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 5-2
GEOPROBE SAMPLE RESULTS
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 6 SEP 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No: 80/166 FIG 3-3
	FILE No.: 80/166 FIG 3-3
	SCALE: 1" = 30'
	SHEET 1 OF 1 REV.: A

Versar INC.
2558 PEARL BUCK ROAD, SUITE 1
BRISTOL, PA 19007-6894
(215) 788-7844

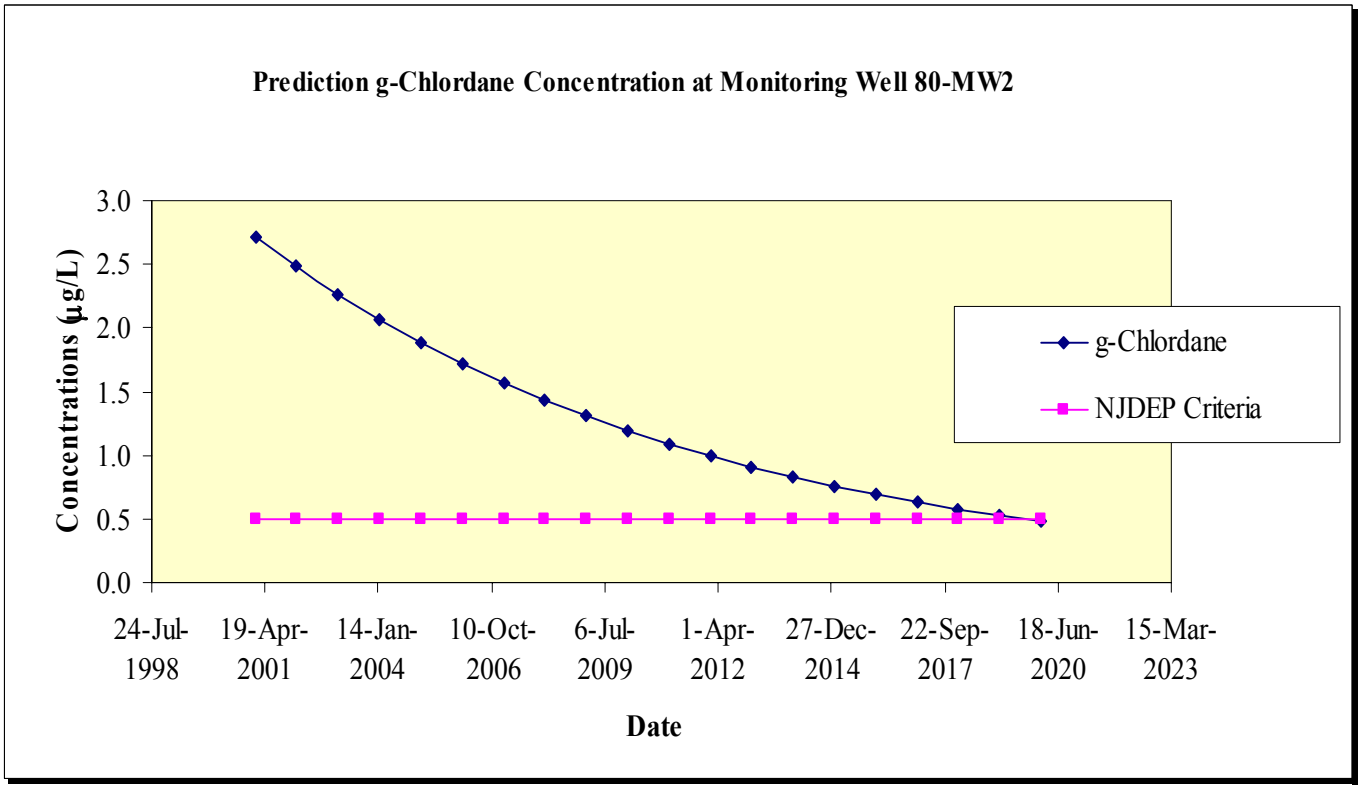


Source: Zapecza, O. 1989. *Hydrogeologic Framework of the New Jersey Coastal Plain.* USGS Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.

FIGURE 6-1

Geologic Cross-Section B-B'
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844

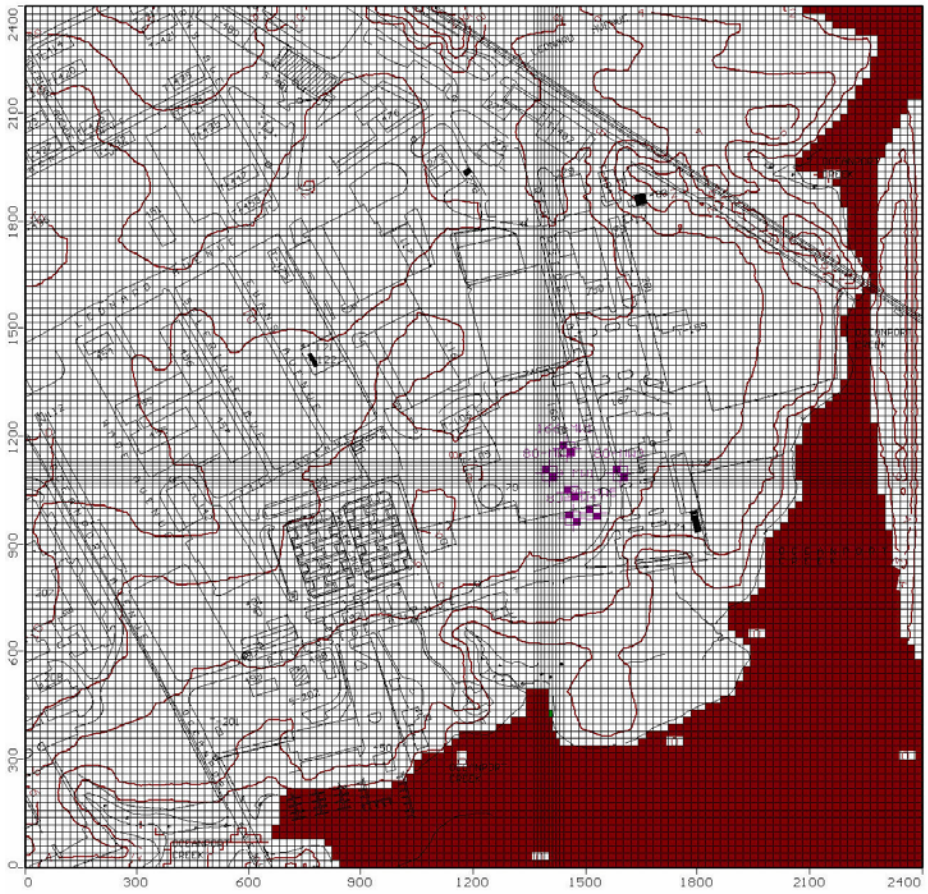


Notes:
1) Concentration is shown in micrograms per liter (ug/L), equivalent to parts per billion
2) Initial g-chlordane concentration at well 80-MW2 was considered to be 2.719 ug/L on January 24, 2001.
3) Estimated time for NJDEP compliance with the NJDEP groundwater quality criteria of 0.5 ug/L is 19 years.
4) Prediction was made using the biodegradation half-life of 7.6 years for chlordane (Howard, 1991). This prediction does not include the effects of dilution due to dispersion, which was simulated using MODFLOW.

FIGURE 6-2

Predicted g-Chlordane Concentration at 80-MW2
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



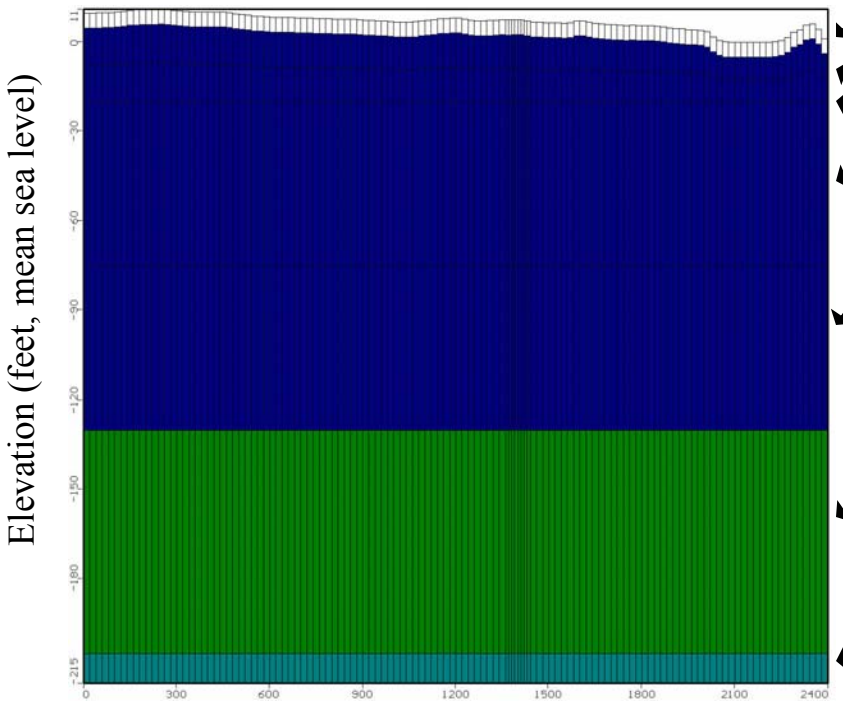
Notes:

1) Grid size is 20’ by 20’ in most of model area, 10’ x 10’ in vicinity of Site 80/166.
2) Monitoring wells at Site 80/166 are shown in purple.
3) Topographic contours for the ground surface are shown as brown lines. The contour interval is 1 foot.
3) Oceanport Creek shown in solid brown, represents river boundary with constant head of zero feet (mean sea level).
4) Coordinates shown represent NAD-83 survey feet.

FIGURE 6-3

MODFLOW Boundaries and Grid
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



Layer 1 [Fill]

Thickness = 5 feet

K = 3.8 ft/day (at Site 80/166)

Layers 2, 3, 4 and 5: Navesink-Hornerstown Confining Unit

Thickness = 125 feet

K = 0.12 ft/day

Layer 6: Wenonah-Mount Laurel Aquifer

Thickness = 75 feet

K = 15.96 ft/day

Layer 7: Marshaltown-Wenonah Confining Unit

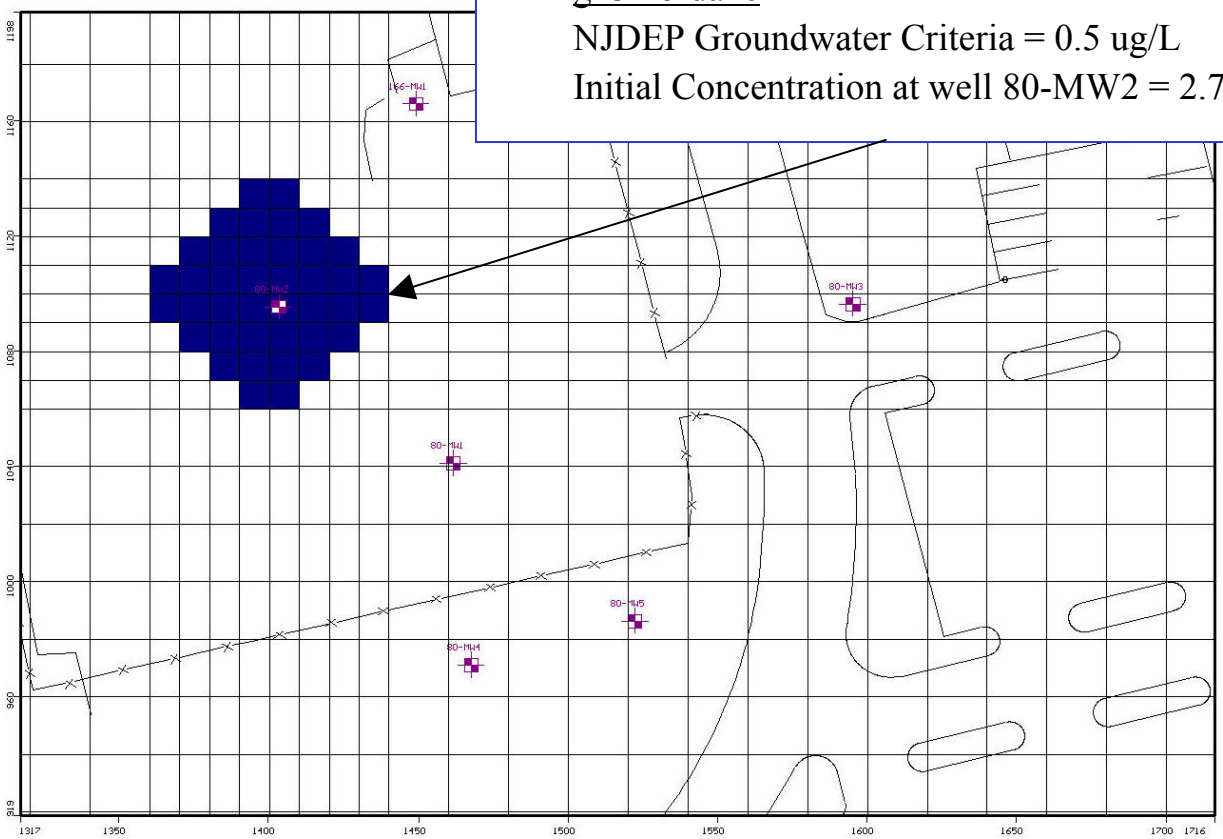
Thickness = 10 feet

K = 0.00018 ft/day

FIGURE 6-4

Cross Section of MODFLOW Area
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar Inc.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844

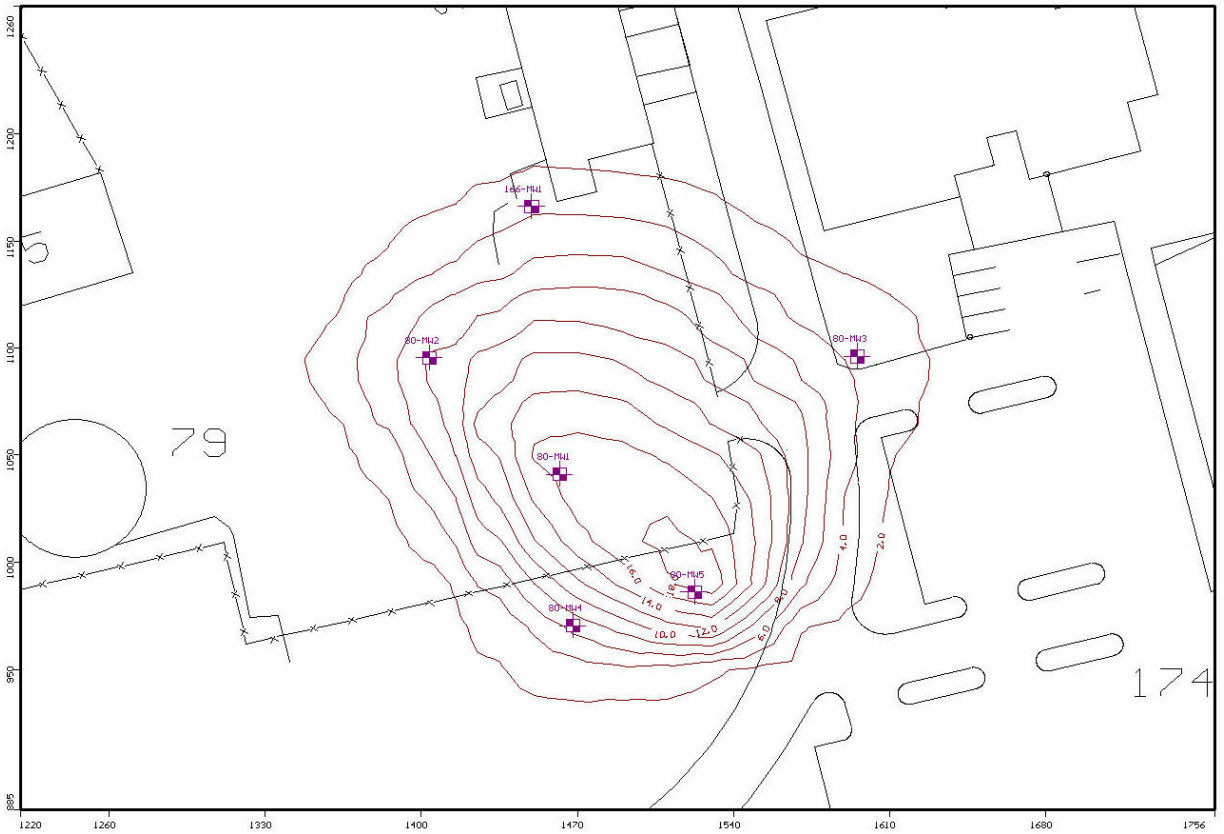


Notes:
1) Initial Concentrations based on most recent g-chlordane detection in well 80-MW2
   See Table 5-1 for groundwater sampling results for Site 80/166.
2) The NJDEP groundwater quality criteria for g-chlordane is 0.5 ug/L.
3) Monitoring wells for Site 80/166 are shown in purple.
4) Coordinates shown represent NAD-83 survey feet.

FIGURE 6-5a

Initial MODFLOW Concentration
g-Chlordane
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



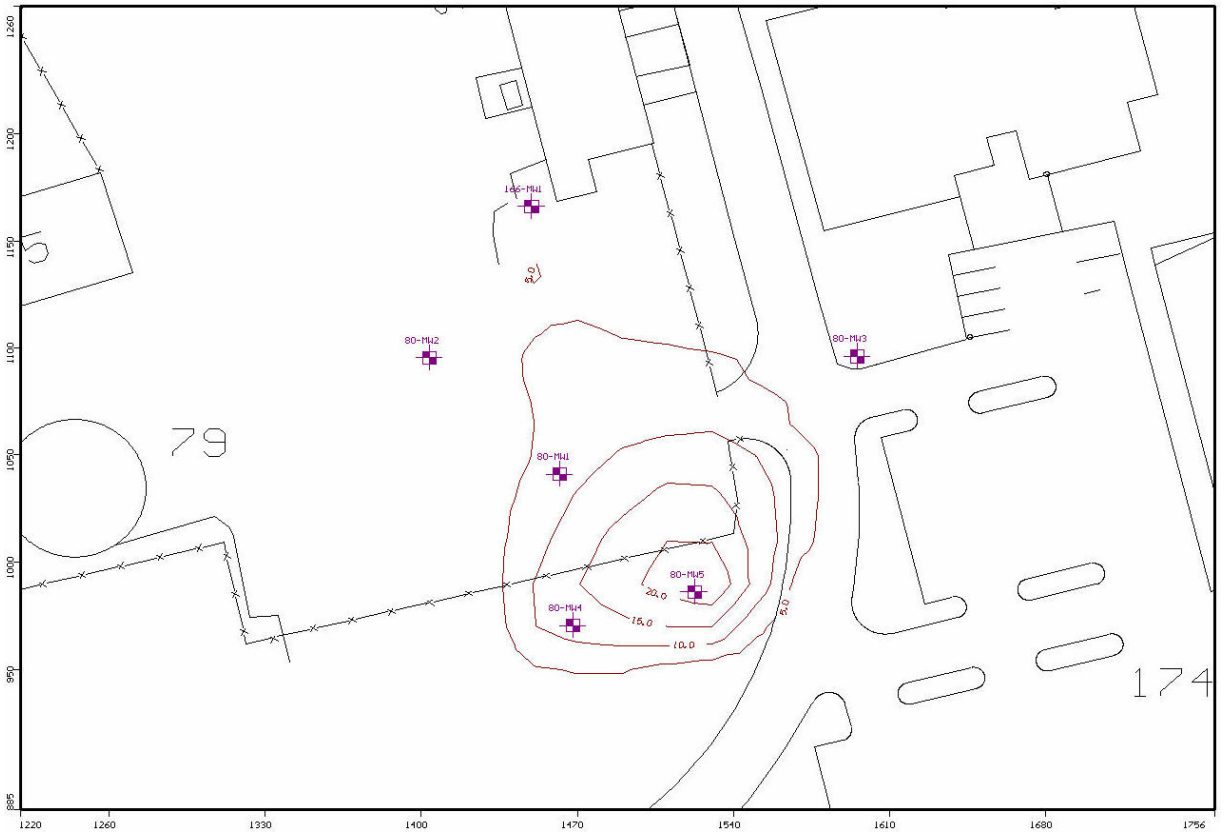
Notes:

1) Isoconcentration lines represent initial concentrations of arsenic in groundwater as used in the MODFLOW simulation. Contour Interval = 2 ug/L.
2) The NJDEP groundwater quality criteria for arsenic is 8 ug/L.
3) Monitoring wells for Site 80/166 are shown in purple.
4) Initial Concentrations based on averaged concentrations from groundwater sampling program. See Table 6-2 for averaged groundwater sampling results.
5) Coordinates shown represent NAD-83 survey feet.

FIGURE 6-5b

Initial Concentration of Arsenic
In MODFLOW Simulation
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



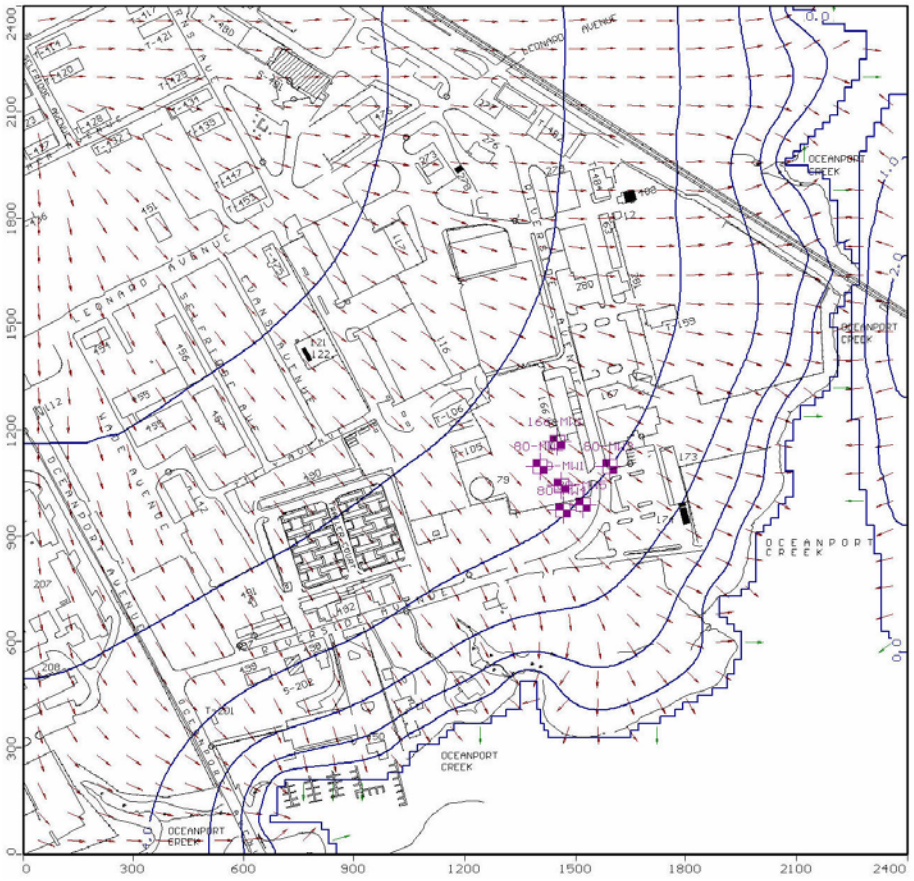
Notes:

1) Isoconcentration lines represent initial concentrations of lead in groundwater as used in the MODFLOW simulation. Contour Interval = 5 ug/L.
2) The NJDEP groundwater quality criteria for lead is 10 ug/L.
3) Monitoring wells for Site 80/166 are shown in purple.
4) Initial Concentrations based on averaged concentrations from groundwater sampling program. See Table 6-2 for averaged groundwater sampling results.
5) Coordinates shown represent NAD-83 survey feet.

FIGURE 6-5c

Initial Concentration of Lead
In MODFLOW Simulation
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



Notes:
1) Arrows indicate groundwater flow direction.
2) Monitoring wells for Site 80/166 are shown in purple.
3) Contour Lines indicate groundwater elevation contours. Contour Interval = 1 ft.
4) Coordinates shown represent NAD-83 survey feet.
5) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000

FIGURE 6-6

Flow Directions and Groundwater Elevation Contours Site 80/166 – Main Post Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844

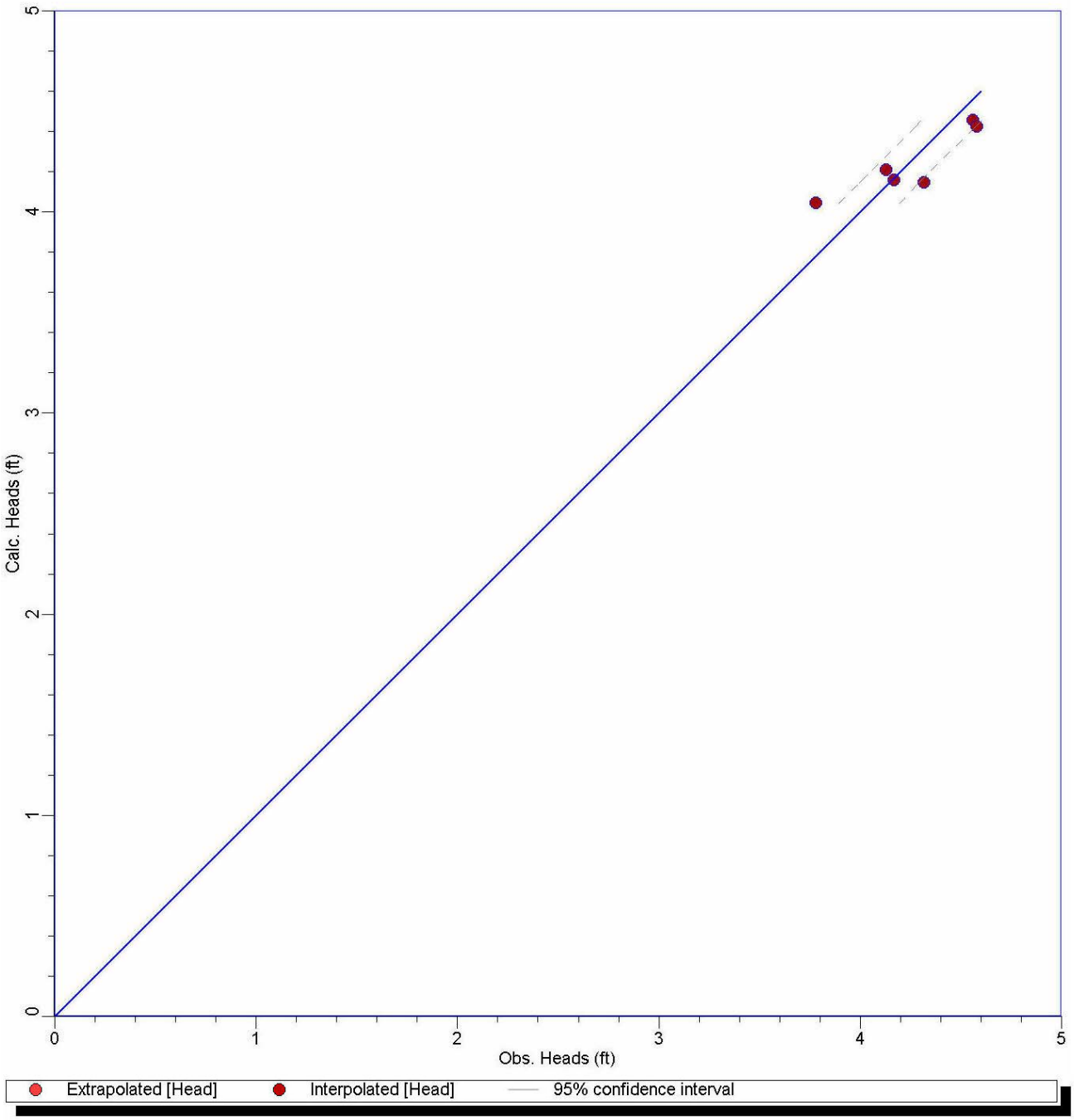
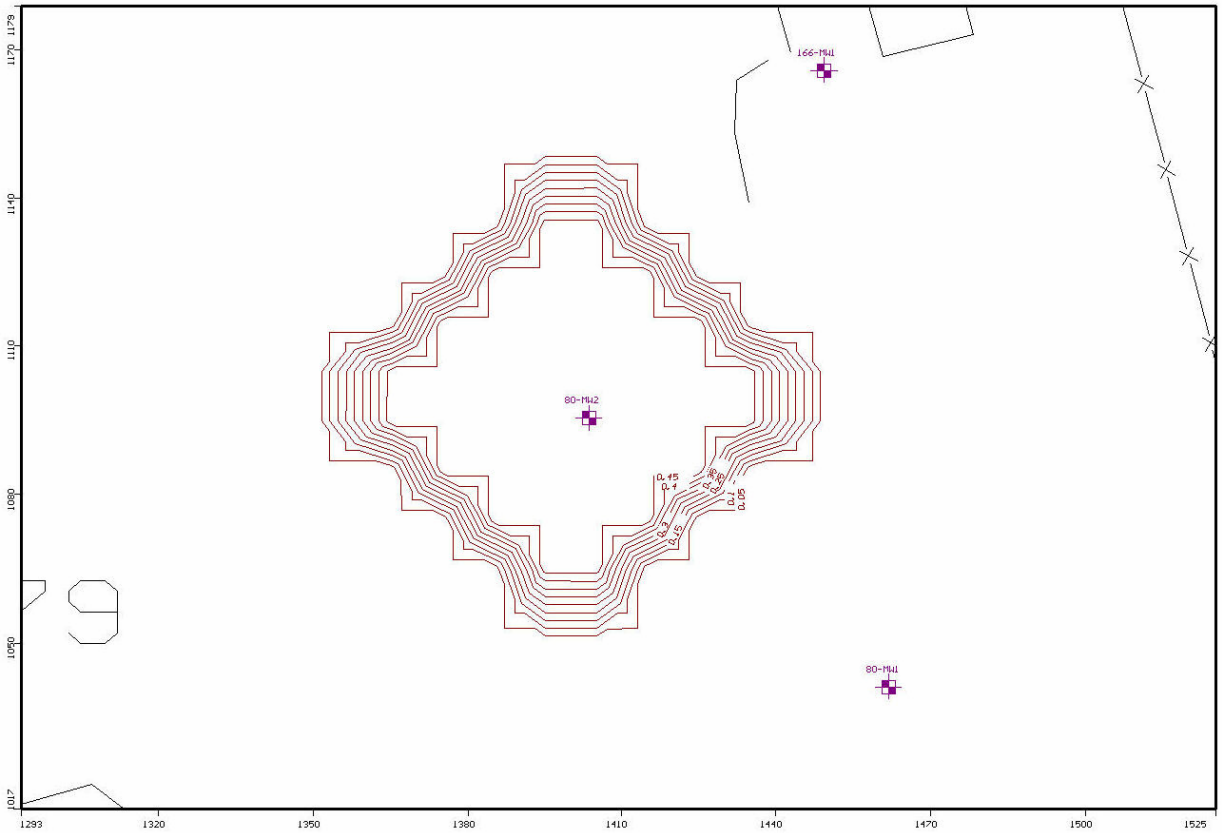


FIGURE 6-7

MODFLOW Calibration:
Calculated Versus Observed Head
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Notes:
1) This graph represents a comparison between heads calculated in the model with heads observed in monitoring wells at Site 80/166 on January 24, 2001.
2) Modeling Software: *Visual MODFLOW Version 2.7.2*, Waterloo Hydrogeologic, Inc., 2000.

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



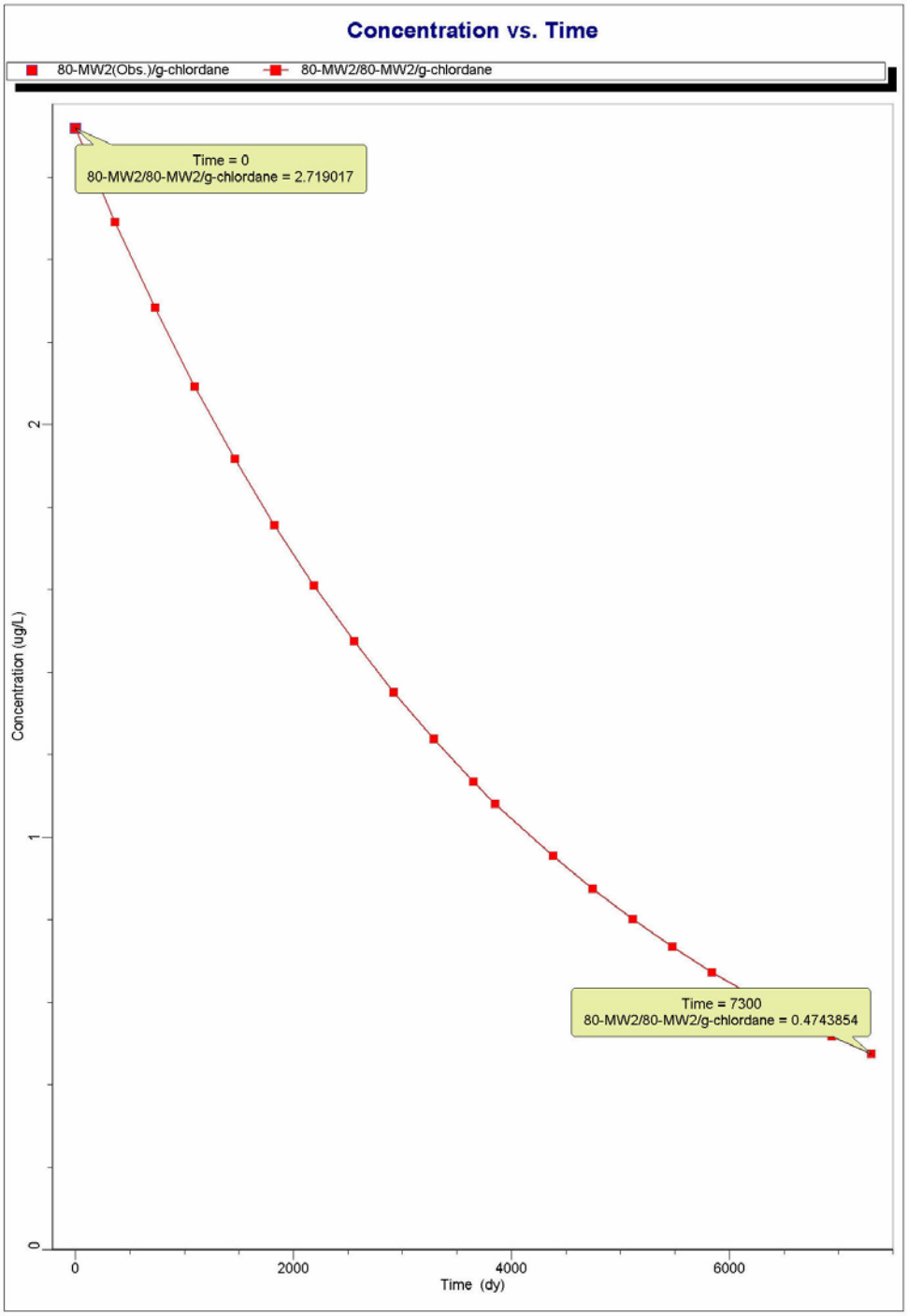
Notes:

1) Isoconcentration contours represent predicted g-chlordane concentrations at 20 years. Contour Interval = 0.05 ug/L
2) The NJDEP groundwater quality criteria for g-chlordane is 0.5 ug/L.
3) Monitoring wells for Site 80/166 are shown in purple.
4) Coordinates shown represent NAD-83 survey feet.
5) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000

FIGURE 6-8a

Predicted g-Chlordane Concentration
20 Years
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844

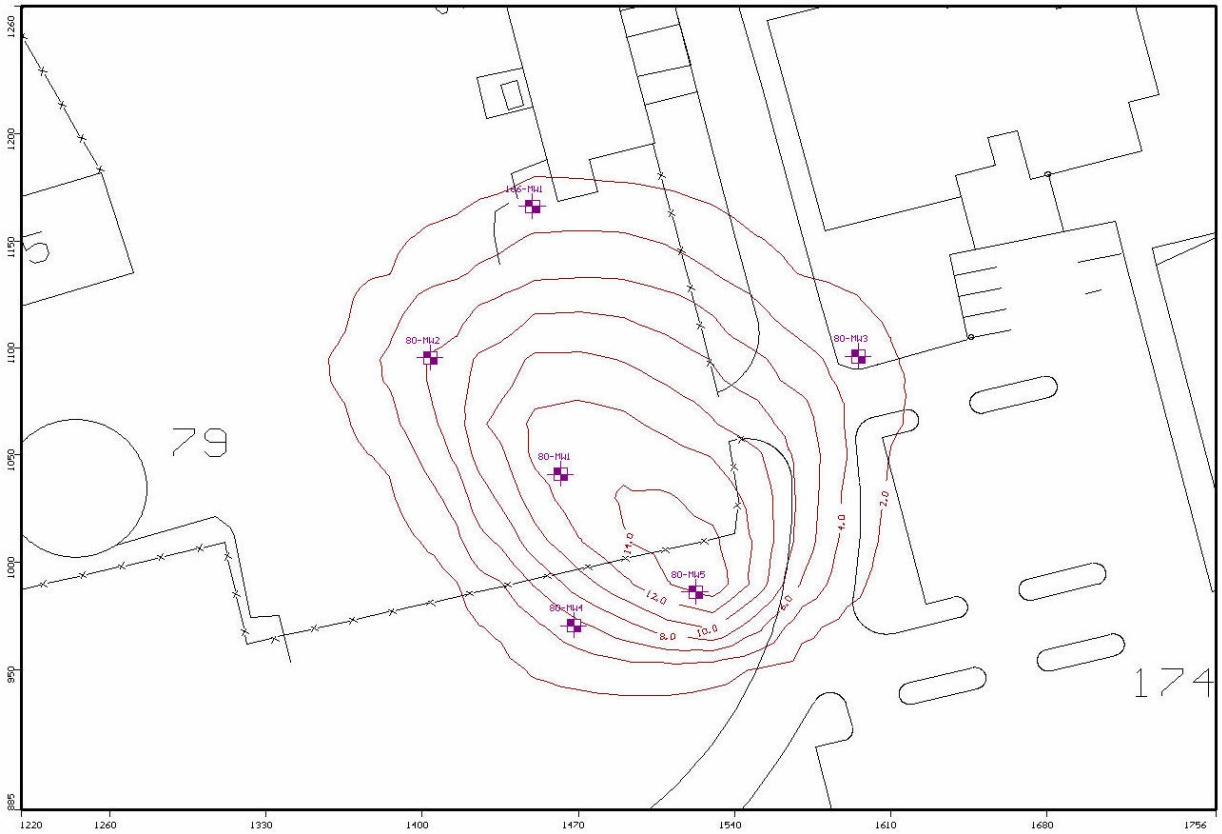


Notes:
1) NJDEP groundwater criteria for g-chlordane is 0.5 ug/L.
2) Time for compliance is estimated from this graph to be approximately 20 years.
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-8b

Predicted g-Chlordane Concentration Versus Time Site 80/166 – Main Post Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



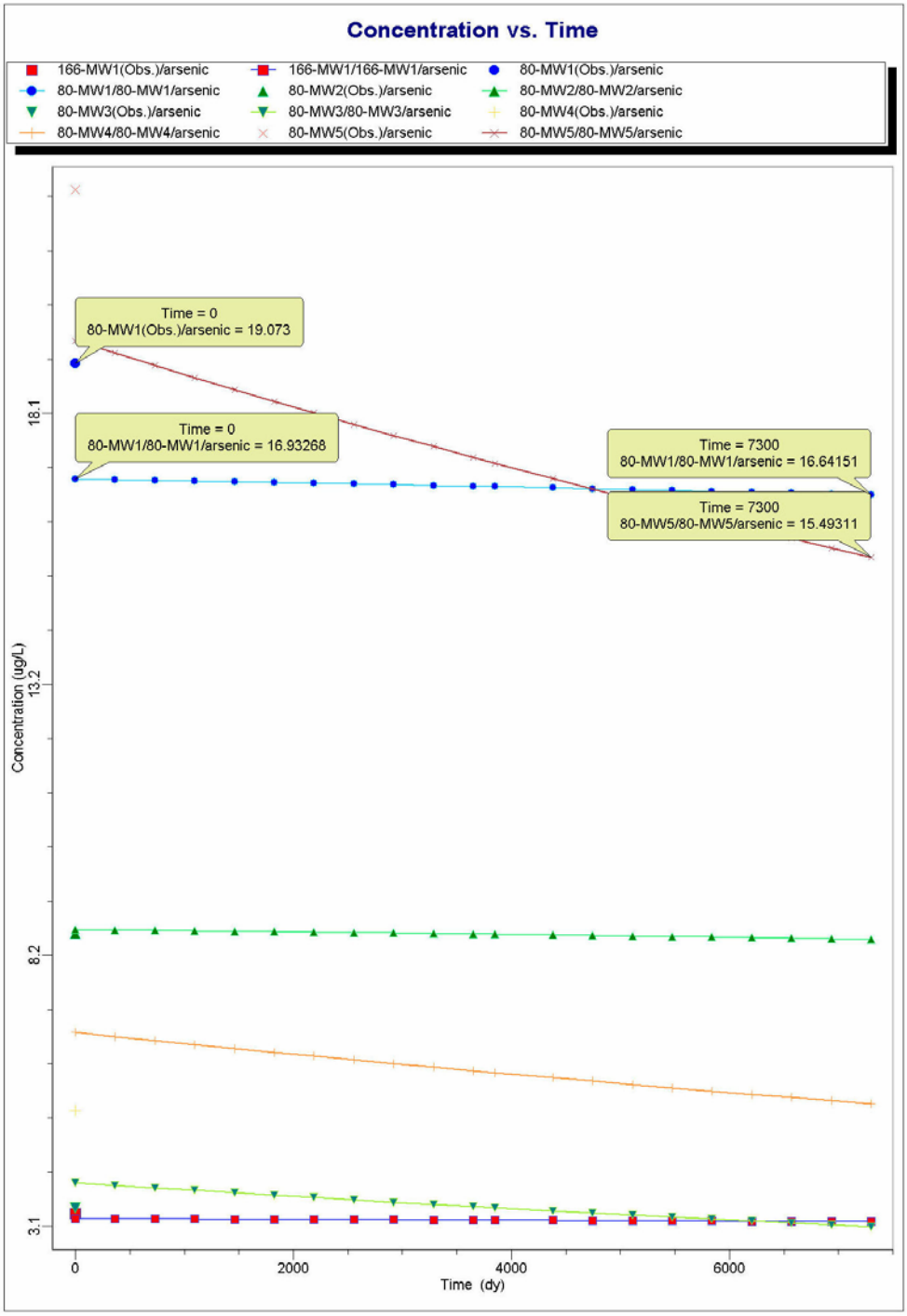
Notes:

1) Isoconcentration contours represent predicted arsenic concentrations at 20 years. Contour Interval = 2 ug/L.
2) The NJDEP groundwater quality criteria for arsenic is 8 ug/L.
3) Monitoring wells for Site 80/166 are shown in purple.
4) Coordinates shown represent NAD-83 survey feet.
5) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000

FIGURE 6-9a

Predicted Arsenic Concentration
20 Years
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844

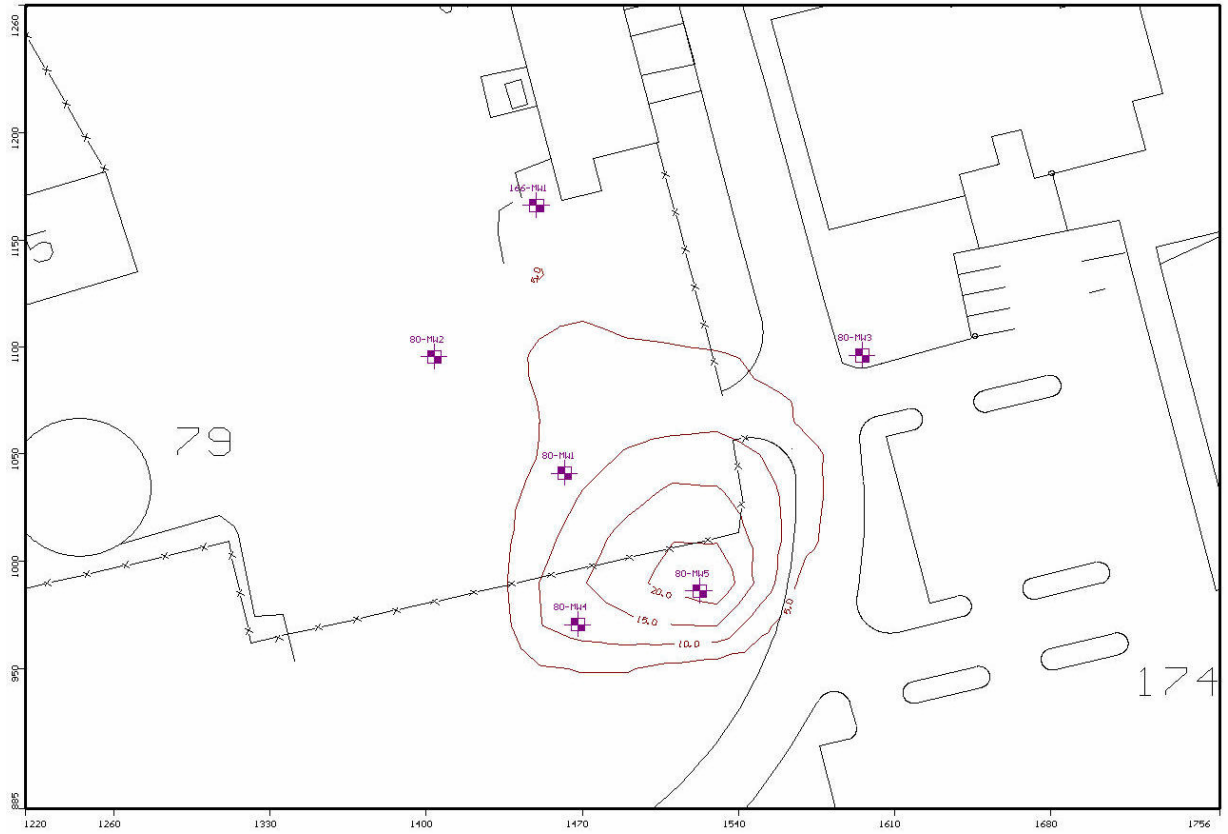


Notes:
1) NJDEP groundwater criteria for arsenic is 8 ug/L.
2) Time for compliance is estimated from this graph to be greater than 1,000 years.
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-9b

Predicted Arsenic Concentration Versus Time
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



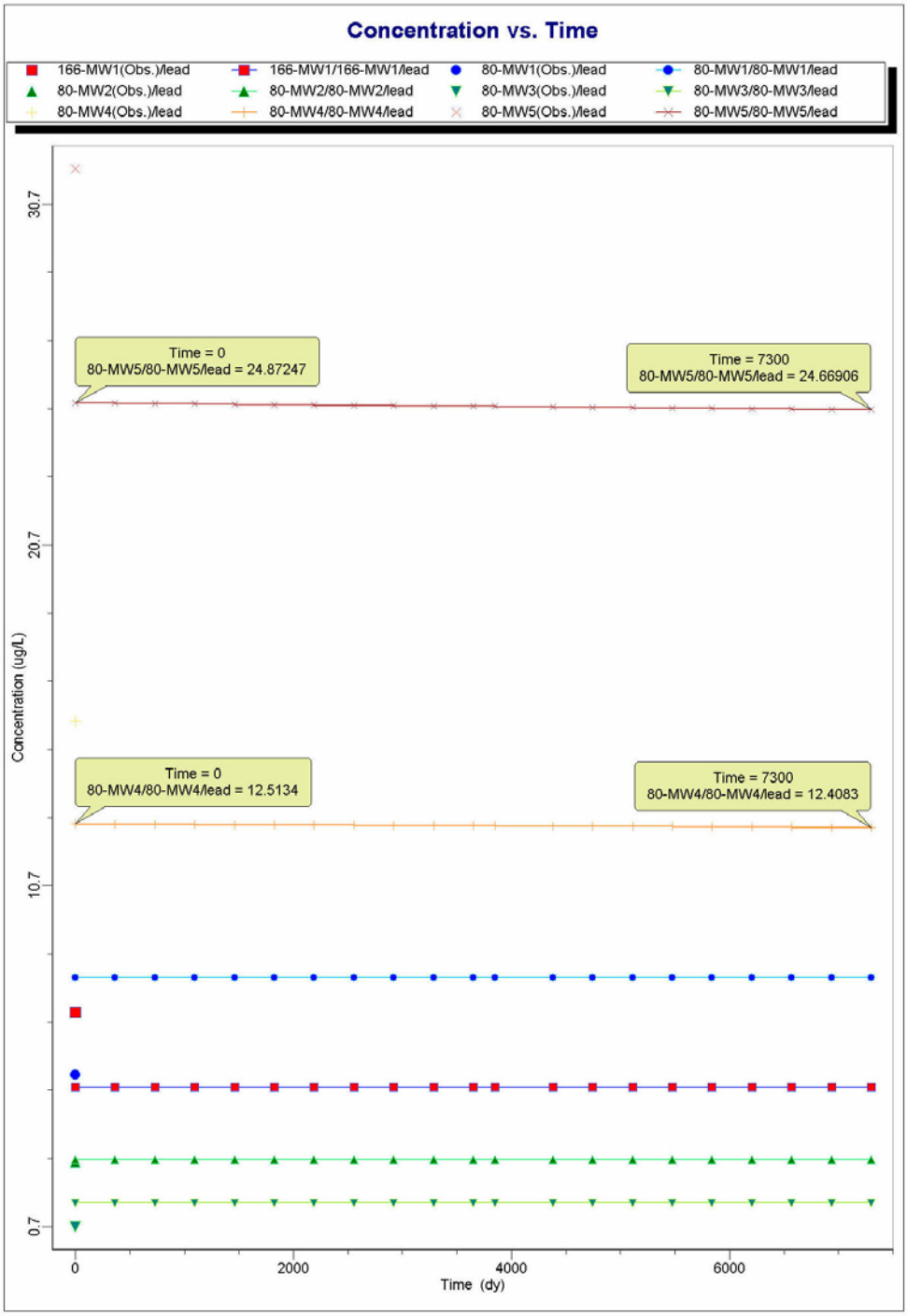
Notes:

1) Isoconcentration contours represent predicted lead concentrations at 20 years. Contour Interval = 5 ug/L.
2) The NJDEP groundwater quality criteria for arsenic is 10 ug/L.
3) Monitoring wells for Site 80/166 are shown in purple.
4) Coordinates shown represent NAD-83 survey feet.
5) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000

FIGURE 6-10a

Predicted Lead Concentration
20 Years
Site 80/166 – Main Post
Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844

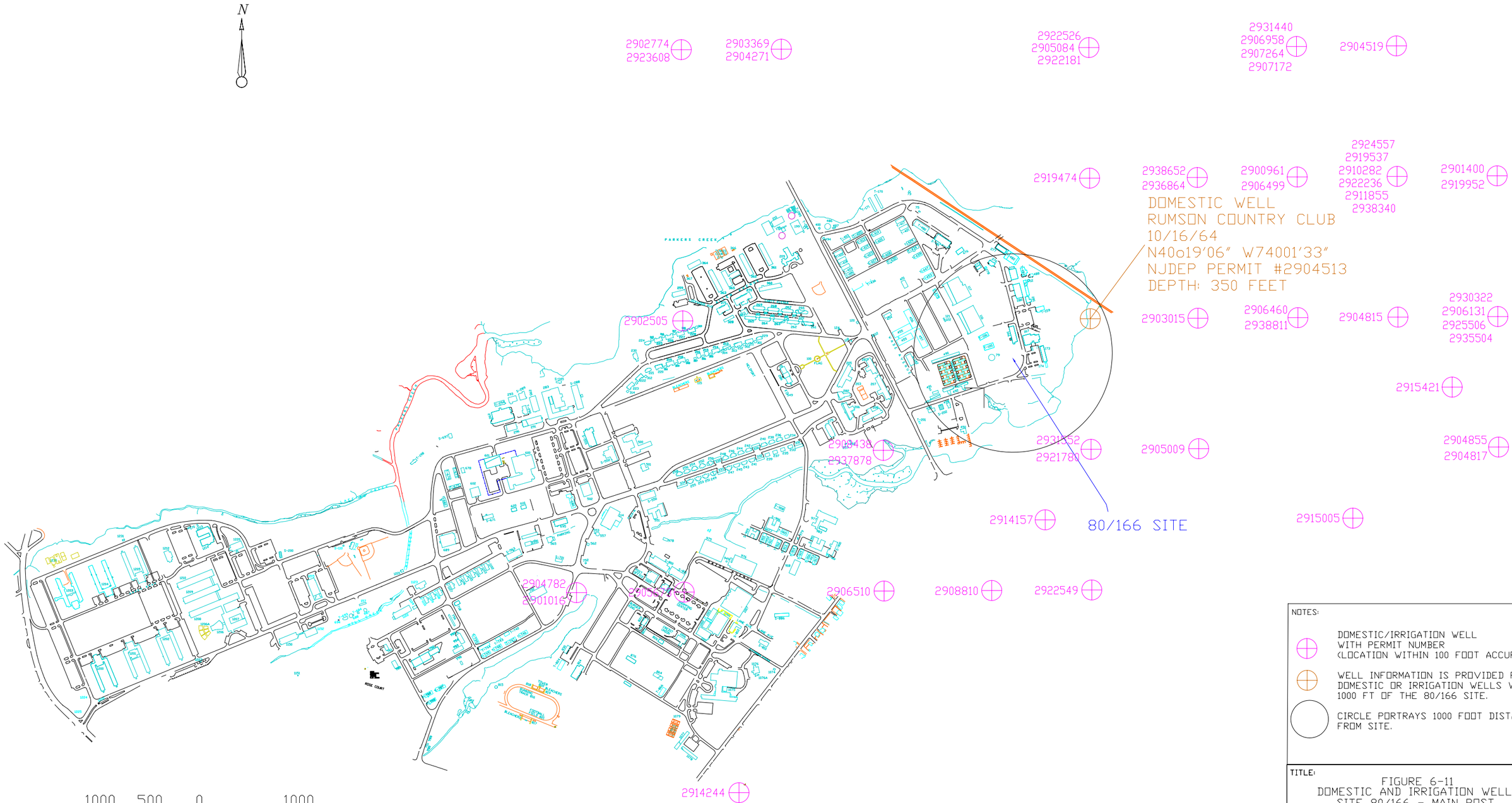


Notes:
1) NJDEP groundwater criteria for lead is 10 ug/L.
2) Time for compliance is estimated from this graph to be greater than 1,000 years.
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-10b

Predicted Lead Concentration Versus Time Site 80/166 – Main Post Fort Monmouth, New Jersey

Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



NOTES:

- DOMESTIC/IRRIGATION WELL WITH PERMIT NUMBER (LOCATION WITHIN 100 FOOT ACCURACY)
- WELL INFORMATION IS PROVIDED FOR DOMESTIC OR IRRIGATION WELLS WITHIN 1000 FT OF THE 80/166 SITE.
- CIRCLE PORTRAYS 1000 FOOT DISTANCE FROM SITE.

TITLE:

FIGURE 6-11
DOMESTIC AND IRRIGATION WELLS
SITE 80/166 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK/PS	DATE DRAWN: 30 AUGUST 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIG. 6-11
	FILE No.: 80-166 FIG. 6-11
	SCALE: 1" = 1000'
	SHEET OF REV.: A

Versar INC.
2558 PEARL BUCK ROAD SUITE 1
BRISTOL, PA 19007
(215) 788-7844

APPENDICES

Appendix A

UST Closure and Site Investigation Report for Former Building T-80
(UST No. 90010-06), ATC Associates, Inc., BCM Engineers Division, July 1998

United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Former Building T-80
Main Post

NJDEP UST Registration No. 090010-06
NJDEP Closure Approval No. C-93-4297
NJDEP Case No. 94-6-16-1127-25

July 1998

UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT

FORMER BUILDING T-80

MAIN POST
NJDEP UST REGISTRATION NO. 090010-06
NJDEP CLOSURE APPROVAL NO. C-93-4297
NJDEP CASE NO. 94-6-16-1127-25

JULY 1998

PROJECT NO.: 09-5004-12
CONTRACT NO.: DACA51-94-D-0014

PREPARED FOR:

UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY
DIRECTORATE OF PUBLIC WORKS
BUILDING 167
FORT MONMOUTH, NJ 07703

PREPARED BY:

BCM ENGINEERS
A DIVISION OF ATC
BROMLEY CORPORATE CENTER
THREE TERRI LANE
BURLINGTON, NEW JERSEY 08016

TABLE OF CONTENTS

EXECUTIVE SUMMARY IV

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES 1

1.1 OVERVIEW 1

1.2 SITE DESCRIPTION 2
1.2.1 Geological/Hydrogeological Setting 2

1.3 HEALTH AND SAFETY 3

1.4 REMOVAL OF UNDERGROUND STORAGE TANK 4
1.4.1 General Procedures 4
1.4.2 Underground Storage Tank Excavation and Cleaning 4

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL 5

1.6 MANAGEMENT OF EXCAVATED SOILS 5

2.0 SITE INVESTIGATION ACTIVITIES 6

2.1 OVERVIEW 6

2.2 FIELD SCREENING/MONITORING 7

2.3 SOIL SAMPLING 7

2.4 GROUNDWATER SAMPLING 7
2.4.1 Monitoring Well Installation 7
2.4.2 Monitoring Well Sampling 8

3.0 CONCLUSIONS AND RECOMMENDATIONS 9

3.1 SOIL SAMPLING RESULTS 9

3.2 GROUNDWATER SAMPLING RESULTS 9

3.3 CONCLUSIONS AND RECOMMENDATIONS 10

TABLE OF CONTENTS (CONTINUED)

Following Page No.

TABLES

Table 1 Summary of Post-Excavation Sampling Activities 7
Table 2 Post-Excavation Soil Sampling Results 9
Table 3 Groundwater Sampling Results 9

FIGURES

Figure 1 Site Location Map 1
Figure 2 Site Map 2
Figure 3 Soil Sampling Results 9
Figure 4 Groundwater Sampling Results 9

APPENDICES

Appendix A NJDEP-BUST Closure Approval
Appendix B Certifications
Appendix C Waste Manifest
Appendix D UST Disposal Certificate
Appendix E Monitoring Well Permit and Construction Log
Appendix F Soil Analytical Data Package
Appendix G Groundwater Analytical Data Package

EXECUTIVE SUMMARY

On June 16, 1994, a steel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) Closure Approval No. C-93-4297 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 090010-06, was located immediately adjacent to Former Building T-80 in the Main Post area of U.S. Army, Fort Monmouth. UST No. 090010-06 was a 1,000-gallon No. 2 fuel oil UST. The UST fill port was located directly above the tank. The tank closure was performed by Cleaning Up The Environment Inc. (CUTE).

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual*. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, the UST was inspected for corrosion holes. One corrosion hole was observed on each of the end seams of the UST, and evidence of potentially contaminated soils was observed surrounding the tank. Based on the inspection of the UST, Directorate of Public Works (DPW) concluded that a discharge was associated with this UST. On June, 1994 a spill was reported to the NJDEP "Hot Line" for UST number 090010-06 and Case Number 94-6-16-1127-25 was assigned. On July 16, 1994, following the removal of the UST, approximately 56 cubic yards of potentially contaminated soil were removed from the excavation. Groundwater was present in the excavation at approximately 6.0 feet below ground surface. No product lines were found during the excavation of the UST.

All post-excavation soil samples collected from the UST excavation at Former Building T-80 contained TPHC concentrations below the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 milligrams per kilogram (mg/kg) (N.J.A.C. 7:26D and revisions dated February 3, 1994). The soil samples contained TPHC concentrations ranging from non-detectable to 440.0 mg/kg. Following receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with a combination of uncontaminated excavated soil and certified clean fill. The excavation site was then restored to its original condition.

In response to the observation of potentially contaminated soil near the shallow water table, one shallow overburden monitoring well (MW-1) was installed at the Former Building T-80 area on September 15, 1994. On May 19, 1995, and June 13, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOCs), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). All groundwater analytical results were either below the detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC) with the exception to the volatile compound benzene. This compound was detected at a concentration of 1.4 ug/l, above the GWQC of 1.0 ug/l, in monitoring well MW-1 during both sampling events. No product or sheen was observed in MW-1 on either of the sampling dates.

Based on the analytical results of the groundwater samples collected on May 18, 1995 and June 13, 1995, groundwater quality at the Former Building T-80 UST closure site exceeds the New Jersey Groundwater Quality Standard for benzene. Collection of the samples on a quarterly basis from MW-1 for BTEX is recommended. The BTEX analysis will determine if the low levels of benzene detected previously are declining. The need for any additional actions to address groundwater quality should be evaluated following receipt of the additional groundwater data.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

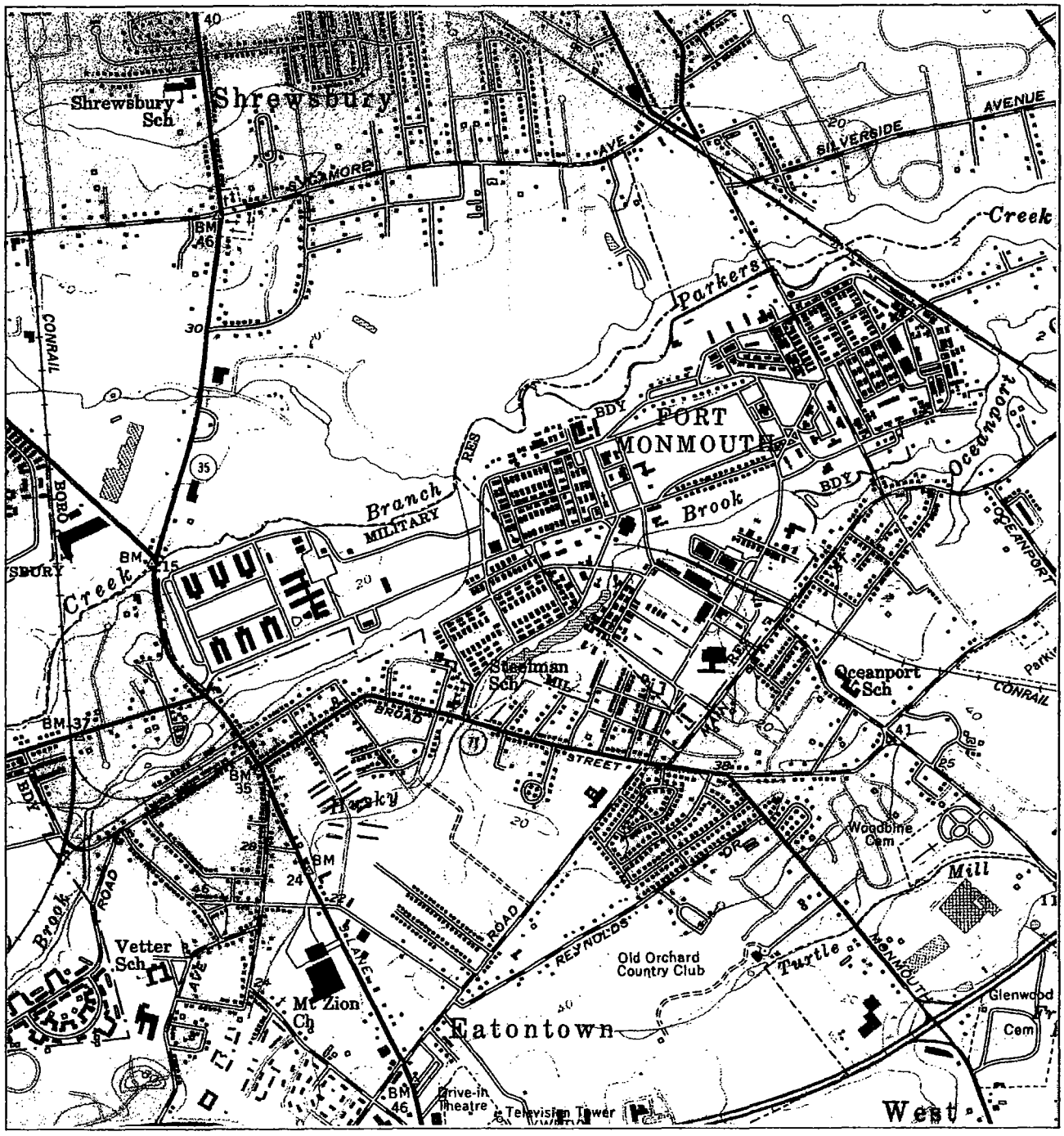
1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 090010-06, was closed at Former Building T-80 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on June 16, 1994. Refer to site location map on Figure 1. This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEP on August 5, 1993. The plan was approved on December 7, 1993 and assigned TMS No. C-93-4297. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 090010-06 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted on site for inspection. CUTE, the contractor that conducted the decommissioning activities, is registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 090010-06 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The NJDEP-BUST closure approval and signed certifications for UST No. 090010-06 are included in Appendices A and B, respectively.

This UST Closure and Site Investigation Report has been prepared by Smith Technology Corporation, to assist the United States Army Directorate of Public Works (DPW) in complying with the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST) regulations. The applicable NJDEP-BUST regulations at the date of closure were the *Interim Closure Requirements for Underground Storage Tank Systems* (N.J.A.C. 7:14B-1 et seq. September 1990 and revisions dated November 1, 1991).

This report was prepared using information required at the time of closure. Section 1 of this UST Closure and Site Investigation Report provides a summary of the UST decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report.



Source: Long Branch, New Jersey Quadrangle

Project No. 09-5004-14

Figure 1
Site Location Map

1.2 SITE DESCRIPTION

Former Building T-80 was located in the eastern portion of the Main Post area of Fort Monmouth, as shown on Figure 1. UST No. 090010-06, located north of the Former Building T-80, was exposed during excavation activities performed to demolish Building T-80. No product lines (piping) were found during the excavation of the UST or Building T-80. The fill port area was located directly above the tank. A site map is provided on Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Former Building T-80. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands.

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapecza, 1989). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

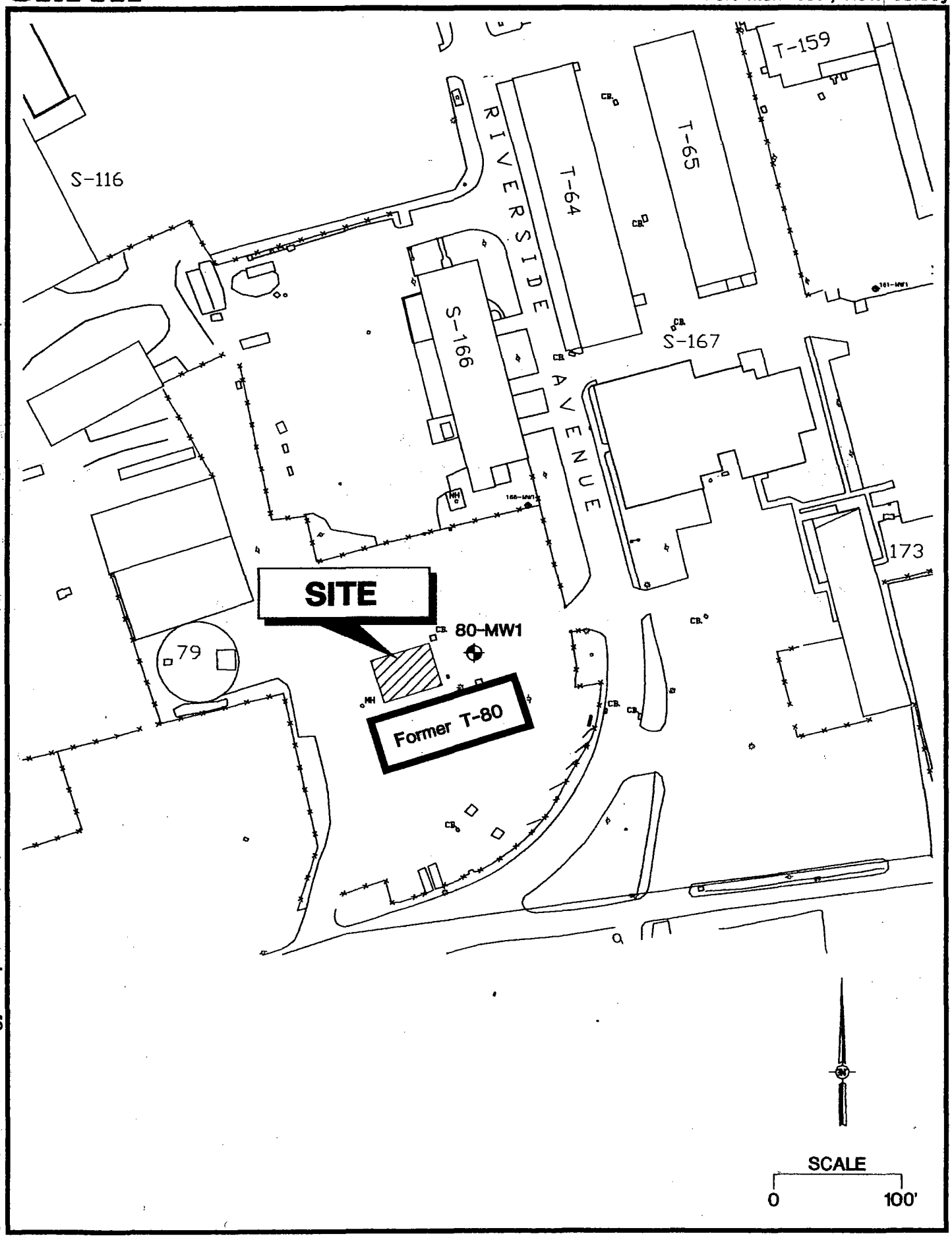
The formations record several major transgressive/regressive cycles and contain units which are generally thicker to the southeast and reflect a deeper water environment. Over 20 regional geologic units are present within the sediments of the Coastal Plain. Regressive, upward coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand) while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations). The individual thicknesses for these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish brown clayey, medium-to-

SMITH

U.S. Army
Department of Public Works
Fort Monmouth, New Jersey



Source: Smith Technology Corporation (157)

Project No. 09-5004-12

Figure 2
Former Building T-80
Site Map

coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark gray to black, medium-to-fine grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive. Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard).

Hydrogeology

The water table aquifer in the Main Post area is identified as part of the "composite confining units," or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

Based on records of wells drilled in the Main Post area, water is typically encountered at depths of 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Due to the proximity of the Atlantic Ocean to Fort Monmouth, shallow groundwater may be tidally influenced and may flow toward creeks and brooks as the tide goes out, and away from creeks and brooks as the tide comes in. However, an abundance of clay lenses and sand deposits were noted in borings installed throughout Fort Monmouth. Therefore the direction of shallow groundwater should be determined on a case by case basis.

1.3 HEALTH AND SAFETY

Before, during, and after all decommissioning activities, hazards at the work site which may have posed a threat to the Health and Safety of all personnel who were involve with, or were affected by, the decommissioning of the UST system were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing an organic vapor analyzer (OVA). The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- All underground obstructions (utilities, etc.) were marked out by the contractor performing the closure prior to excavation activities.
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an OVA for evidence of contamination. Potentially contaminated soils were identified and logged during closure activities.
- Surface materials (i.e., asphalt, concrete, etc.) were excavated and staged separately from all soil and recycled in accordance with all applicable regulations and laws.
- A Sub-Surface Evaluator from the DPW was present during all site assessment activities.

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST. No product lines (piping) were found during the excavation of the UST. The UST was purged to remove vapors prior to cutting. A manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 1,024 gallons of liquid were transported by Freehold Cartage Inc. to Lionetti Oil Recovery Co. Inc., a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifests (NJA-1603186 and NJA-1603243).

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. One hole was observed on each of the end seams of the tank during the inspection by the Sub-Surface Evaluator. Soil surrounding the UST were screened visually and with an OVA for evidence of contamination. Evidence of potential contamination was observed.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported by CUTE to Mazza and Sons Inc. for disposal in compliance with all applicable regulations and laws. See Appendix D for UST Disposal Certificate.

The removal contractor labeled the UST prior to transport with the following information:

- site of origin
- contact person
- NJDEP UST Facility ID number
- name of transporter/contact person
- destination site/contact person

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on visual observations, approximately 56 cubic yards of potentially contaminated soils were excavated from the UST excavation. Potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were stored on-site prior to ultimate disposal at Soil Remediation of Philadelphia. Soils that did not exhibit signs of contamination were used as backfill following removal of the UST.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with he NJDEP-BUST document *Interim Closure Requirements for Underground Storage Tank Systems* (September 1990 and revisions dated November 1, 1991) which was the applicable regulation at the date of the closure. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Investigation Activities.

- Closure Contractor: Cleaning Up The Environment Inc. (CUTE)
  Closure Supervisor: John Lonergan
  Phone Number: (201)427-2881
  NJDEP Company Certification No.: 0200128
  NJDEP -UST Closure Certification No.: 3248

- Subsurface Evaluator: Dinkerrai M. Desai
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908) 532-1475
  NJDEP Certification No.: E0002266

- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory
  Contact Person: Brian K. McKee
  Phone Number: (908)532-4359
  NJDEP Certification No.: 13461

- Hazardous Waste Hauler: Freehold Cartage Inc.
  Contact Person: Barry Olsen
  Phone Number: (908)721-0900
  NJDEP Hazardous Waste Hauler No.: 2265

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using an OVA and visual observations to identify potentially contaminated material. Additional soils were removed from the excavation surrounding UST No. 090010-06 until no evidence of contamination remained.

2.3 SOIL SAMPLING

On July 16, 1994, post-excavation soil samples A, B, C, D, E, F, G, and H were collected from a total of eight (8) locations along the sidewalls of the UST excavation, at a depth of 5.5 feet below ground surface (bgs). No product lines (piping) were found during the excavation of the UST or excavations performed to demolish Building T-80. The soil samples were analyzed for TPHC.

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements* and the NJDEP *Field Sampling Procedures Manual.* A summary of sampling activities including parameters analyzed is provided in Table 1. The post-excavation soil samples were collected using polystyrene scoops. Actual soil TPHC values may be higher than reported, due to sample utensil absorbency. If absorbency resulted in reducing the actual soil TPHC concentration by 50 %, the highest soil contaminant would have been 880.0 mg/kg, still below the applicable NJDEP soil cleanup standard for total organic contaminants of 10,000 mg/kg. Following soil sampling activities, the samples were chilled and delivered to U.S. Army Fort Monmouth Environmental Laboratory located in Fort Monmouth, New Jersey, for analysis.

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well (MW-1) was installed at the Former Building T-80 area on September 15, 1994. It was installed approximately 30 feet east of the former UST excavation. The monitoring well was screened in the 3.0 to 13.0 foot interval, across the water table, which is approximately 3.0 feet below grade surface.

The well was constructed in accordance with the NJDEP's well construction protocols outlined in its May 1992 *Field Sampling Procedures Manual.* The NJDEP well drilling permit and a well construction log is presented in Appendix E.

The well was constructed with 4-inch (ID) PVC riser and 0.020 slotted PVC well screen. A silica sand pack was installed in the annulus between the borehole wall and the screen. The sand

TABLE 1
SUMMARY OF SAMPLING ACTIVITIES
BUILDING 80, MAIN POST
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Matrix	Sample Type	Analytical Parameters (and USEPA Methods) *	Sampling Method
A	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
B	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
DUP B	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
C	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
D	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
DUP D	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
E	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
F	6/16/94	Soil	Post-Excavation	TPHC	Polystyrene Scoop
MW-1	5/18/95	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Fill Bailer
MW-1	6/3/95	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Fill Bailer

* NOTES:

TPHC: Total Petroleum Hydrocarbons (Method 418.1 / soil and aqueous)

VOCs: Volatile Organic Compounds plus 15 tentatively identified compounds (Method 624 / soil and aqueous)

SVOCs: Semivolatile organic compounds plus 15 tentatively identified compounds (Method 625 / aqueous)

Pb: Lead (Method SW-846 / soil and aqueous)

Source: Smith Technology Corporation (Smith Project No. 09-5004-12)

80TBL.XLS

pack was extended approximately 2 feet above the top of the screen. The sand pack above the well screen was graded down to a fine sand to minimize grout intrusion.

The borehole was tremie-grouted with bentonite-cement grout from the top of the sand pack to 0.5 inches bgs. The well was secured with a water-tight, flush-mounted locking road box. The road box was set in place with concrete, which was placed in the remaining open borehole. The elevation of the well riser was surveyed to the nearest 0.01 feet by a New Jersey-licensed surveyor. The well permit number was marked on the well casing as required.

The monitoring well was developed using a peristaltic surface pump. The well was pumped for 1 hour or until silt free. All residual soils and liquids generated during monitoring well installation and development program were collected in New Jersey Department of Transportation-approved 55-gallon drums. The drums were placed in a designated secure location for waste characterization and offsite disposal.

2.4.2 Monitoring Well Sampling

On May 18, 1995 and June 13, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOCs), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation.*

Prior to sampling, the water level was measured to the nearest 0.01 feet, and the distance to the bottom of the well was to be measured to the nearest 0.1 feet. The well was checked for floating product (light non-aqueous phase liquids). The well was purged of three to five well volumes of standing water. Sample volume was then collected using a dedicated decontaminated Teflon bottom-filled bailer attached to PTFE (Teflon)-coated stainless steel cable.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST, post-excavation soil samples were collected from a total of eight (8) locations on July 16, 1994. No product lines (piping) were found during the excavation activities. All samples were analyzed for TPHC. The post-excavation sampling results were compared to the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 mg/kg (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the analytical results and comparison to the NJDEP soil cleanup criteria is provided in Table 2 and the soil sampling results are shown on Figure 3. The analytical data package is provided in Appendix E.

All post-excavation soil samples contained concentrations of TPHC below the NJDEP soil cleanup criteria. Post-excavation soil samples C, E, F, and H contained TPHC concentrations ranging from 11.7 mg/kg to 440.0 mg/kg. All other samples contained non-detectable concentrations of TPHC.

3.2 GROUNDWATER SAMPLING RESULTS

The sample collected from MW-1 on May 18, 1995, contained methylene chloride at 1.4 ug/l, benzene at 1.7 ug/l, chlorobenzene at 3.6 ug/l, sec-butylbenzene at 1.6 ug/l, 1,4-dichlorobenzene at 0.9 ug/l, 1,2-dichlorobenzene at 2.3 ug/l, naphthalene at 2.0 ug/l, and di-n-butylphthalate at 70.0 ug/l. No other compounds were detected. The benzene concentration exceeded the GWQS of 1.0 ug/l. Methylene chloride and di-n-butylphthalate were detected in the field blank at concentrations of 5.1 ug/l and 55 ug/l, respectively. No other compounds were detected in the field blank.

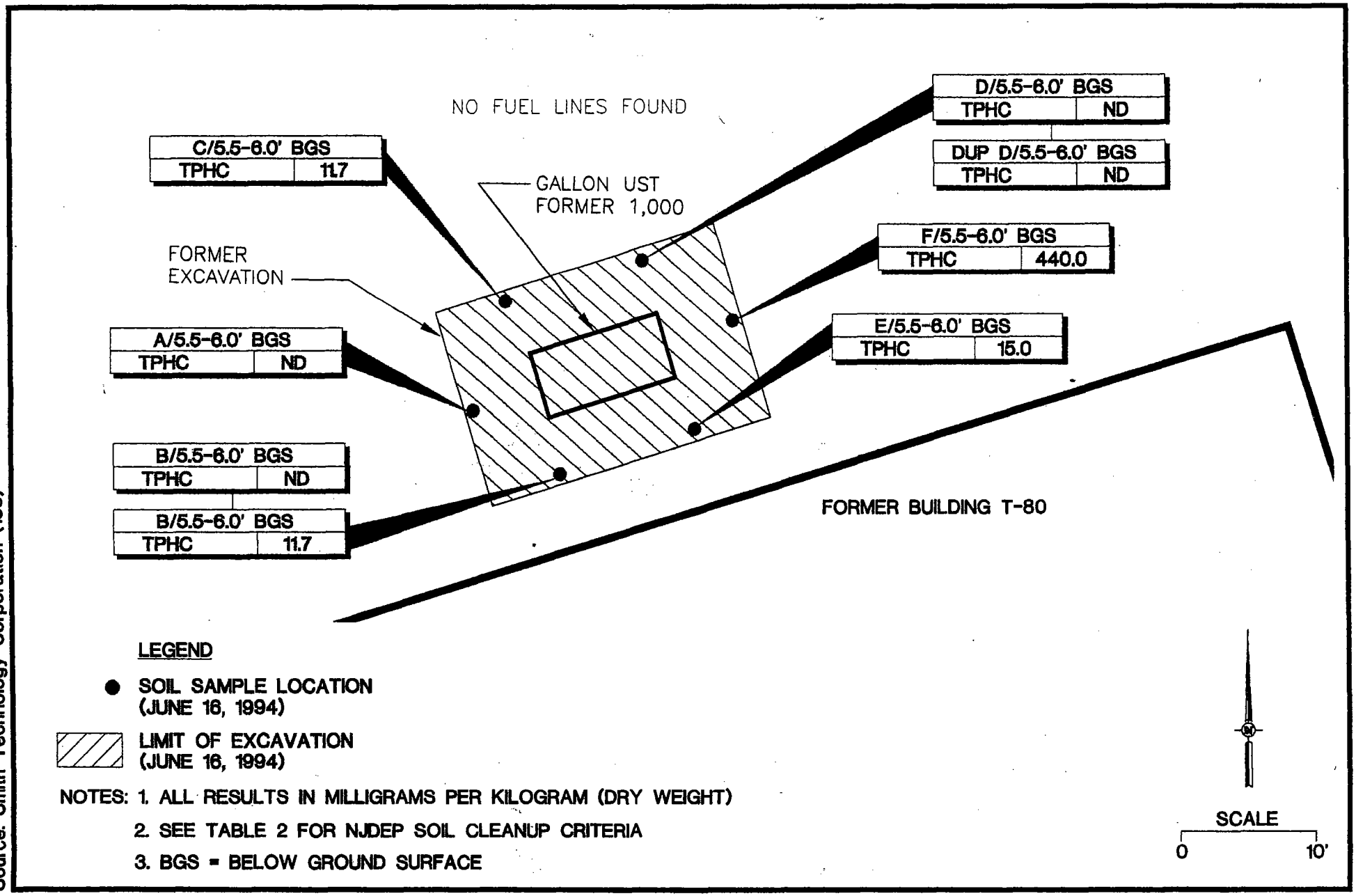
The sample collected from MW-1 on June 13, 1995, contained methylene chloride at 1.3 ug/l, benzene at 1.4 ug/l, chlorobenzene at 3.4 ug/l, isopropylbenzene at 1.4 ug/l, sec-butylbenzene at 1.6 ug/l, 1,4-dichlorobenzene at 1.0 ug/l, 1,2-dichlorobenzene at 2.3 ug/l, and n-butylbenzene at 1.0 ug/l. No other compounds were detected. The benzene concentration exceeded the GWQS of 1.0 ug/l. Methylene chloride was detected in the field blank at a concentration of 2.1 ug/l. No other compounds were detected in the field blank.

No product or sheen was observed in MW-1 on either of the sampling dates. The depth to the water table was 2.96 feet below grade surface on May 18, 1995 and 3.24 feet below grade surface on June 13, 1995.

All groundwater analytical results are presented in Table 3 and shown on Figure 4. The groundwater analytical data package is provided in Appendix F. The full data package, including quality control, is on file at U.S. Army Fort Monmouth, DPW.

SMITH

U.S. Army
Department of Public Works
Fort Monmouth, New Jersey



Source: Smith Technology Corporation (158)

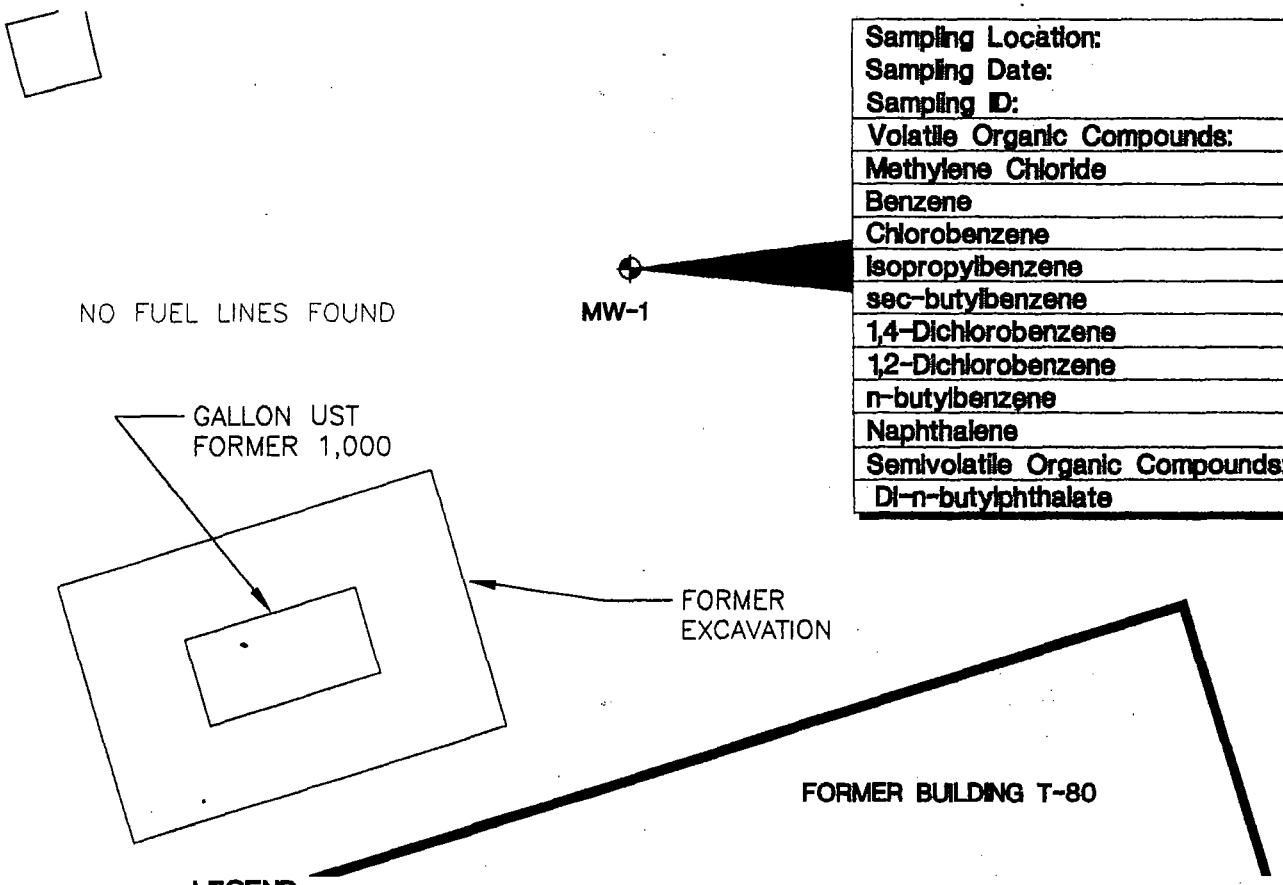
Project No. 09-5004-12

Figure 3
Former Build[illegible] T-80
So[illegible] Sampling Results

SMITH

U.S. Army
Department of Public Works
Fort Monmouth, New Jersey

Sampling Location: Sampling Date: Sampling ID:	Higher of NJDEP GWQS and PQL	MW-1 05/18/95 MW-1	MW-1 06/13/95 MW-1
Volatile Organic Compounds:			
Methylene Chloride	2.0	1.4 B	1.3 B
Benzene	1.0	1.7	1.4
Chlorobenzene	4.0	3.6	3.4
Isopropylbenzene	-	ND	1.4
sec-butylbenzene	-	1.6	1.6
1,4-Dichlorobenzene	75.0	0.9	1.0
1,2-Dichlorobenzene	600.0	2.3	2.3
n-butylbenzene	-	ND	1.0
Naphthalene	300.0	2.0	ND
Semivolatile Organic Compounds:			
Di-n-butylphthalate	900.0	70	ND



LEGEND

MW-1 ⊕	MONITORING WELL LOCATION
ND	INDICATES COMPOUND NOT DETECTED
-	INDICATES CRITERIA NOT AVAILABLE
1.7	INDICATES RESULT ABOVE THE GWQS
B	INDICATES ALSO PRESENT IN BLANK

NOTE:

1. ALL RESULTS IN MICROGRAMS PER LITER

SCALE
0 10'

Source: Smith Technology Corporation (159)

Project No. 09-5004-12

Figure 4

Former Building T-80
Goundwater Sampling Results

3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Former Building T-80 were below the NJDEP soil cleanup criteria for total organic contaminants.

Based on the post-excavation sampling results, soils with TPHC concentrations exceeding the NJDEP soil cleanup criteria for total organic contaminants of 10,000 mg/kg, do not exist in the former location of the UST or associated piping.

Based on the analytical results of the groundwater samples collected on May 18, 1995 and June 13, 1995, groundwater quality at the Former Building T-80 UST closure site exceeded the New Jersey Groundwater Quality Criteria (GWQC) for benzene. Based on the groundwater analytical results, the collection and analysis of two additional sets of samples from MW-1 for BTEX is recommended. The BTEX analysis will determine if the low levels of benzene detected previously are declining. The need for any additional actions to address groundwater quality should be evaluated following receipt of the additional groundwater data.

Appendix B

UST Closure and Site Investigation Report, Building 166 (UST No. 90017-17),
ATC Associates, Inc., May 2000

United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 166
Main Post

NJDEP UST Registration No. 090017-17
NJDEP Closure Approval Letter
Dated June 7, 1994

May 2000

UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 166

MAIN POST
NJDEP UST REGISTRATION NO. 090017-17
NJDEP CLOSURE APPROVAL LETTER
DATED JUNE 7, 1994

MAY 2000

PROJECT NO.: 09-5004-12
CONTRACT NO.: DACA51-94-D-0014

PREPARED FOR:

UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY
DIRECTORATE OF PUBLIC WORKS
BUILDING 167
FORT MONMOUTH, NJ 07703

PREPARED BY:

BCM ENGINEERS
A DIVISION OF ATC
BROMLEY CORPORATE CENTER
THREE TERRI LANE
BURLINGTON, NEW JERSEY 08016

TABLE OF CONTENTS

EXECUTIVE SUMMARY IV

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES 1

1.1 OVERVIEW 1
1.2 SITE DESCRIPTION 2
1.2.1 Geological/Hydrogeological Setting 2

1.3 HEALTH AND SAFETY 3

1.4 REMOVAL OF UNDERGROUND STORAGE TANK 4
1.4.1 General Procedures 4
1.4.2 Underground Storage Tank Excavation and Cleaning 4

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL 5

1.6 MANAGEMENT OF EXCAVATED SOILS 5

2.0 SITE INVESTIGATION ACTIVITIES 6

2.1 OVERVIEW 6

2.2 FIELD SCREENING/MONITORING 6

2.3 SOIL SAMPLING 7

2.4 GROUNDWATER SAMPLING 7
2.4.1 Monitoring Well Installation 7
2.4.2 Monitoring Well Sampling 8

3.0 CONCLUSIONS AND RECOMMENDATIONS 9

3.1 SOIL SAMPLING RESULTS 9

3.2 GROUNDWATER SAMPLING RESULTS 9

3.3 CONCLUSIONS AND RECOMMENDATIONS 10

TABLE OF CONTENTS (CONTINUED)

Following Page No.

TABLES

Table 1	Summary of Post-Excavation Sampling Activities	7
Table 2	Post-Excavation Soil Sampling Results	9
Table 3	Groundwater Sampling Results	9

Following Page No.

FIGURES

Figure 1	Site Location Map	1
Figure 2	Site Map	2
Figure 3	Soil Sampling Results	9
Figure 4	Groundwater Sampling Results	9

APPENDICES

Appendix A	NJDEP-BUST Closure Approval
Appendix B	Certifications
Appendix C	Waste Manifest
Appendix D	UST Disposal Certificate
Appendix E	Monitoring Well Permit and Construction Log
Appendix F	Soil Analytical Data Package
Appendix G	Groundwater Analytical Data Package

EXECUTIVE SUMMARY

On June 16, 1994, a fiberglass underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) Closure Approval letter dated June 7, 1994, at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 090017-17, was located immediately adjacent to Building 166 in the Main Post area of U.S. Army, Fort Monmouth. UST No. 090017-17 was a 4,000-gallon No. 2 fuel oil UST. The UST fill port was located directly above the tank. The tank closure was performed by Cleaning Up the Environment Inc. (CUTE Inc.).

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual.* Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, the UST was inspected for corrosion holes. No holes were noted in the UST, however, evidence of potentially contaminated soils was observed surrounding the tank. Based on an inspection of the UST, and field screening of subsurface soils, the Directorate of Public Works (DPW) concluded that an historical discharge was associated with the UST. On June 16, 1994, a spill was reported to the NJDEP "Hotline" for UST No. 090017-17 and was assigned Spill Case No. 94-6-16-1545-09.

On June 16, 1994, following the removal of the UST, approximately 24 cubic yards of potentially contaminated soil were removed from the excavation. All post-excavation soil samples collected, on June 16, 1994, from the UST excavation and from below piping associated with the former UST at Building 166 contained total petroleum hydrocarbons (TPHC) concentrations below the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 milligrams per kilogram (mg/kg) (N.J.A.C. 7:26D and revisions dated February 3, 1994). The samples contained TPHC concentrations ranging from non-detectable to 786.0 mg/kg. Following receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with a combination of uncontaminated excavated soil and certified clean fill.

In response to the observation of potentially contaminated soil near the shallow water table, one shallow overburden monitoring well (MW-1) was installed at the Building 166 area on September 14, 1994. On May 18, 1995 and June 13, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identifies compounds (VOCs), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). Groundwater analytical results were either below the detection limit or in compliance with the New Jersey Groundwater Criteria (GWQC). No product or sheen was observed in MW-1 on either of the sampling dates.

No further action is proposed in regard to the closure and site assessment of UST No. 090017-17 at Building 166.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 090017-17, was closed at Building 166 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on June 16, 1994. Refer to site location map on Figure 1. This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEP on May 25, 1994, and approved on June 7, 1994. The UST was a fiberglass 4,000-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 090017-17 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted on site for inspection. CUTE, Inc., the contractor that conducted the decommissioning activities, is registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 090017-17 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The NJDEP-BUST closure approval and signed certifications for UST No. 090017-17 are included in Appendices A and B, respectively.

Based on an inspection of the UST, field screening of subsurface soils and analytical results of collected soil samples, the DPW has concluded that a significant historical discharge was associated with this UST or more probable with a former UST. On June 16, 1994, a spill was reported to the NJDEP "Hotline" for UST No. 090017-17 and was assigned Spill Case No. 94-6-16-1545-09.

This UST Closure and Site Investigation Report has been prepared by Smith Technology Corporation, to assist the United States Army Directorate of Public Works (DPW) in complying with the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST) regulations. The applicable NJDEP-BUST regulations at the date of closure were the *Interim Closure Requirements for Underground Storage Tank Systems* (N.J.A.C. 7:14B-1 et seq. September 1990 and revisions dated November 1, 1991).

This report was prepared using information required at the time of closure. Section 1 of this UST Closure and Site Investigation Report provides a summary of the UST decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report.

1.2 SITE DESCRIPTION

Building 166 is located in the northeastern portion of the Main Post area of Fort Monmouth, as shown on Figure 1. UST No. 090017-17 was located west of Building 166 and appurtenant piping ran less than 10 feet east from the excavation to Building 166. The fill port area was located directly above the tank. A site map is provided on Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 166. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands.

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapecza, 1989). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units which are generally thicker to the southeast and reflect a deeper water environment. Over 20 regional geologic units are present within the sediments of the Coastal Plain. Regressive, upward coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand) while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations). The individual thicknesses for these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish brown clayey, medium-to-

coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark gray to black, medium-to-fine grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive. Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard).

Hydrogeology

The water table aquifer in the Main Post area is identified as part of the "composite confining units," or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

Based on records of wells drilled in the Main Post area, water is typically encountered at depths of 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Due to the proximity of the Atlantic Ocean to Fort Monmouth, shallow groundwater may be tidally influenced and may flow toward creeks and brooks as the tide goes out, and away from creeks and brooks as the tide comes in. However, an abundance of clay lenses and sand deposits were noted in borings installed throughout Fort Monmouth. Therefore the direction of shallow groundwater should be determined on a case by case basis.

1.3 HEALTH AND SAFETY

Before, during, and after all decommissioning activities, hazards at the work site which may have posed a threat to the Health and Safety of all personnel who were involve with, or were affected by, the decommissioning of the UST system were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing an organic vapor analyzer (OVA). The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- All underground obstructions (utilities, etc.) were marked out by the contractor performing the closure prior to excavation activities.
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an OVA for evidence of contamination. Potentially contaminated soils were identified and logged during closure activities.
- Surface materials (i.e., asphalt, concrete, etc.) were excavated and staged separately from all soil and recycled in accordance with all applicable regulations and laws.
- A Sub-Surface Evaluator from the DPW was present during all site assessment activities.

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST and all associated piping were removed. Approximately 3,348 gallons of liquid were removed from the UST prior to removal from the ground, and approximately 1,738 gallons were removed from the UST four days after the UST was removed from the excavation. A total of 5,086 gallons of liquid were transported by Freehold Cartage Inc. to Lionetti Oil Recovery Co. Inc., a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifests (NJA-1603243 and NJA-1603186).

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. No holes or punctures were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Evidence of contamination was observed.

Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The fiberglass tank was transported by CUTE, Inc. to Fort Monmouth Reclamation Center for disposal in compliance with all applicable regulations and laws. See Appendix D for UST Disposal Certificate.

The removal contractor labeled the UST prior to transport with the following information:

- site of origin
- contact person
- NJDEP UST Facility ID number
- name of transporter/contact person
- destination site/contact person

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on visual observations, approximately 24 cubic yards of potentially contaminated soils were excavated from the UST excavation. Potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were transported to a designated site on Main Post for storage prior to ultimate disposal at Soil Remediation of Philadelphia. Soils that did not exhibit signs of contamination were used as backfill following removal of the UST.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with he NJDEP-BUST document *Interim Closure Requirements for Underground Storage Tank Systems* (September 1990 and revisions dated November 1, 1991) which was the applicable regulation at the date of the closure. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Investigation Activities.

- Closure Contractor: Cleaning Up the Environment Inc. (CUTE)
  Closure Supervisor: John Lonergan
  Phone Number: (201)427-2881
  NJDEP Company Certification No. 200128
  NJDEP UST Closure Certification No.: 3248

- Subsurface Evaluator: Dinkerrai M. Desai
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908) 532-1475
  NJDEP Certification No.: E0002266

- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory
  Contact Person: Brian K. McKee
  Phone Number: (908)532-4359
  NJDEP Certification No.: 13461

- Hazardous Waste Hauler: Freehold Cartage Inc.
  Contact Person: Barry Olsen
  Phone Number: (908)721-0900
  NJDEP Hazardous Waste Hauler No.: 2265

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using an OVA and visual observations to identify potentially contaminated material. Additional soils were removed

from the excavation surrounding UST No. 090017-17 until no evidence of contamination remained.

2.3 SOIL SAMPLING

On June 16, 1994, post-excavation soil samples A, DUP A, B, C, D, E, F, G, and H were collected from a total of eight (8) locations along the sidewalls of the excavation, immediately above groundwater. The samples were collected at a depth of 7.5 feet below ground surface (bgs). Groundwater was present at approximately 8.0 feet bgs.

Following removal of the UST fuel lines, sample J was collected along the former piping length of the excavation, which ran less than 10 feet in length. The piping sample was collected at a depth of at 2.0 feet bgs. All soil samples were analyzed for total petroleum hydrocarbons (TPHC).

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements* and the NJDEP *Field Sampling Procedures Manual.* A summary of sampling activities including parameters analyzed is provided in Table 1. The post-excavation soil samples were collected using polystyrene scoops. Actual soil TPHC values may be higher than reported, due to sample utensil absorbency. If absorbency resulted in reducing the actual soil TPHC concentration by 50 %, the highest soil contaminant would have been 1,472.0 mg/kg, still below the applicable NJDEP soil cleanup standard for total organic contaminants of 10,000 mg/kg. Following soil sampling activities, the samples were chilled and delivered to U.S. Army Fort Monmouth Environmental Laboratory located in Fort Monmouth, New Jersey, for analysis.

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well (MW-1) was installed at the Building 166 area on September 14, 1994. It was installed approximately 12 feet southwest of Building 166 in the downgradient direction. It was screened in the 2 to 10 feet depth interval, across the water table, which is approximately 3.0 feet below ground surface.

The well was constructed in accordance with the NJDEP's well construction protocols outlined in its May 1992 *Field Sampling Procedures Manual.* The NJDEP well drilling permit and a well construction log is presented in Appendix F.

The well was constructed with 4-inch (ID) PVC riser and 0.020 slotted PVC well screen. A silica sand pack was installed in the annulus between the borehole wall and the screen. The

sandpack was extended approximately one foot above the top of the screen. The sand pack above the well screen was graded down to a fine sand to minimize grout intrusion.

The borehole was tremie-grouted with bentonite-cement grout from the top of the sand pack to 0.5 inches bgs. The well was secured with a water-tight, flush-mounted locking road box. The road box was set in place with concrete, which was placed in the remaining open borehole. The elevation of the well riser was surveyed to the nearest 0.01 feet by a New Jersey-licensed surveyor. The well permit number was marked on the well casing as required.

The monitoring well was developed using a peristaltic surface pump. The well was pumped for 1 hour or until silt free. All residual soils and liquids generated during monitoring well installation and development program were collected in New Jersey Department of Transportation-approved 55-gallon drums. The drums were placed in a designated secure location for waste characterization and off-site disposal.

2.4.2 Monitoring Well Sampling

On May 18, 1995 and June 13, 1995, MW-1 was sampled for VOCs and SVOCs. Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements for Site Remediation.*

Prior to sampling, the water level was measured to the nearest 0.01 feet, and the distance to the bottom of the well was to be measured to the nearest 0.1 feet. The well was checked for floating product (light non-aqueous phase liquids). The well was purged of three to five well volumes of standing water. Sample volume was then collected using a dedicated decontaminated Teflon bottom-filled bailer attached to PTFE (Teflon)-coated stainless steel cable.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST and associated piping, post-excavation soil samples were collected from a total of nine (9) locations on June 16, 1994. All samples were analyzed for TPHC. The post-excavation soil sampling results were compared to the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 mg/kg (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the analytical results and comparison to the NJDEP soil cleanup criteria is provided in Table 2 and the soil sampling results are shown on Figure 3. The analytical data package is provided in Appendix E.

All post-excavation soil samples collected on June 16, 1994 from the UST excavation and from below piping associated with the UST, contained concentrations of TPHC below the NJDEP soil cleanup criteria. Post-excavation soil samples A, DUP A, B, C, D, E, F, H, and J, contained TPHC concentrations ranging from 13.1 mg/kg to 786.0 mg/kg. Sample G contained a non-detectable concentration of TPHC.

3.2 GROUNDWATER SAMPLING RESULTS

All VOC and SVOC results were either below the detection limit or in compliance with the New Jersey Groundwater Quality Criteria (GWQC).

The sample collected on May 18, 1995 from MW-1 contained methylene chloride at a concentration of 1.8 ug/l, and di-n-butylphthalate at 64 ug/l. No other compounds were detected. The trip blank contained methylene chloride at 5.1 ug/l. The field blank contained di-n-butylphthalate at 55 ug/l, and methylene chloride at 5.1 ug/l.

The sample collected on June 13, 1995 from MW-1 contained methylene chloride at 1.5 ug/l, and chloroform at 0.7 ug/l. No other compounds were detected. The trip blank contained methylene chloride at 2.3 ug/l. The field blank contained methylene chloride at 2.1 ug/l.

No product or sheen was observed in MW-1 on either of the sampling dates. The depth to the water table was 3.02 feet below ground surface on May 18, 1995 and 3.34 feet below ground surface on June 13, 1995.

All groundwater analytical results are presented in Table 3 and shown on Figure 4. The groundwater analytical data package is provided in Appendix F. The full data package, including quality control, is on file at U.S. Army Fort Monmouth, DPW.

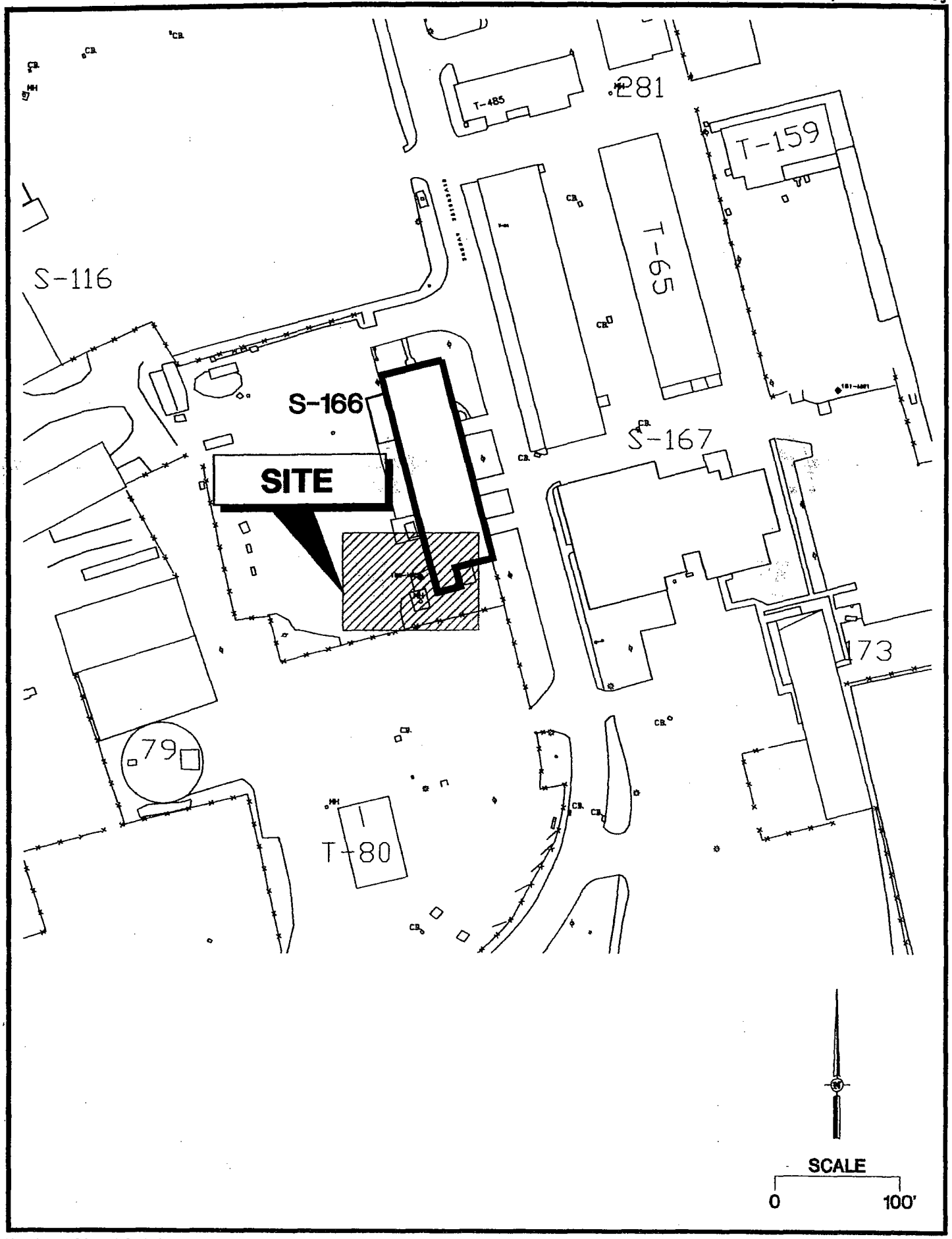
3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 166 were below the NJDEP soil cleanup criteria for total organic contaminants.

Based on the post-excavation sampling results, soils with TPHC concentrations exceeding the NJDEP soil cleanup criteria for total organic contaminants of 10,000 mg/kg, do not exist in the former location of the UST or associated piping.

Based on the analytical results of the groundwater samples collected on May 18, 1995 and June 13, 1995, groundwater quality at the Building 166 closure site complies with the New Jersey Groundwater Quality Standard for VOCs and SVOCs. The trace concentrations of methylene chloride detected during both sampling rounds is attributed to sampling and/or analytical interference, based on the detection of methylene chloride, a common source of laboratory interference, in the sampling blanks.

No further action is proposed in regard to the closure and site assessment of UST No. 090017-17 at Building 166.



Project No. 09-5004-12

Figure 2
Building 166

TABLE 1
SUMMARY OF SAMPLING ACTIVITIES
BUILDING 166, MAIN POST
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Matrix	Sample Type	Analytical Parameters (and USEPA Methods) *	Sampling Method
A	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
B	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
C	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
D	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
E	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
F	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
G	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
H	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
DUP A	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
J	6/16/1994	Soil	Post-Excavation	TPHC	Polystyrene Scoop
MW-1	5/18/1995	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Fill Bailer
MW-1	6/13/1995	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Fill Bailer

*Note:
TPHC: Total Petroleum Hydrocarbons (Method 418.1 / soil and aqueous)
VOCs: Volatile Organic Compounds calibrated for xylene plus 10 tentativley identified compounds (Method 524.2 / aqueous)
SVOCs: Semivolatile Organic Compounds plus 15 tentatively identified compounds (Method 625 / aqueous)

Source: Smith Technology Corporation (Smith Project No. 09-5004-12)

GWT166.XLS

TABLE 2
POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 166, MAIN POST
FORT MONMOUTH, NEW JERSEY

Sample ID/Depth	Sample Laboratory ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (mg/kg)	Compound of Concern	Result (mg/kg)	NJDEP Soil Cleanup Criteria * (mg/kg)	Exceeds Cleanup Criteria
A/7.5-8.0'	1529.1	6/16/1994	6/17/1994	Total % Solid	--	--	86%	--	--
				TPHC	6.6	yes	42.9	10,000	--
B/7.5-8.0'	1529.2	6/16/1994	6/17/1994	Total % Solid	--	--	87%	--	--
				TPHC	6.6	yes	103	10,000	--
C/7.5-8.0'	1529.3	6/16/1994	6/17/1994	Total % Solid	--	--	85%	--	--
				TPHC	6.6	yes	13.1	10,000	--
D/7.5-8.0'	1529.4	6/16/1994	6/17/1994	Total % Solid	--	--	78%	--	--
				TPHC	6.6	yes	224	10,000	--
E/7.5-8.0'	1529.5	6/16/1994	6/17/1994	Total % Solid	--	--	86%	--	--
				TPHC	6.6	yes	70.6	10,000	--
F/7.5-8.0'	1529.6	6/16/1994	6/17/1994	Total % Solid	--	--	85%	--	--
				TPHC	6.6	yes	786	10,000	--
G/7.5-8.0'	1529.7	6/16/1994	6/17/1994	Total % Solid	--	--	86%	--	--
				TPHC	6.6	yes	ND	10,000	--
H/7.5-8.0'	1529.8	6/16/1994	6/17/1994	Total % Solid	--	--	83%	--	--
				TPHC	6.6	yes	63.6	10,000	--
DUP A/7.5-8.0'	1529.9	6/16/1994	6/17/1994	Total % Solid	--	--	88%	--	--
				TPHC	6.6	yes	21.0	10,000	--
J/2.0-2.5'	1529.10	6/16/1994	6/17/1994	Total % Solid	--	--	93%	--	--
				TPHC	6.6	yes	28.4	10,000	--

--: Not applicable / does not exceed criteria
*: Cleanup criteria for total organics
ND: Indicates compound not detected

Actual soil TPHC values may be higher than reported due to absorbancy by polystyrene scoops. If absorbancy resulted in reducing the actual soil TPHC concentration by 50%, the highest soil contaminant would be 1,572 mg/kg.

Source: Smith Technology Corporation (Smith Project No. 09-5004-12)

GWT166.XLS

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, MW-1

FORT MONMOUTH, NEW JERSEY

SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	5/18/1995	6/2/1995	N-nitrosodimethylamine	2	--	ND	20	--
			bis(2-Chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)ether	5	--	ND	300	--
			N-Nitroso-Di-N-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	300	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalate	1	--	ND	--	--
			Dimethylphthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			n-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine(as azo)	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	64	--	64	900	--
			Fluoranthene	1	--	ND	300	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	5/18/1995	6/2/1995	Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)anthracene	2	--	ND	0.05	--
			3,3'-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	5	--
			bis(2-Ethylhexyl)phthalate	4	--	ND	30	--
			Di-n-octylphthalate	2	--	ND	100	--
			Benzo(b)fluoranthene	1	--	ND	0.05	--
			Benzo(k)fluoranthene	2	--	ND	0.5	--
			Benzo(a)pyrene	2	--	ND	0.005	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	0.05	--
			Dibenz(a,h)anthracene	3	--	ND	0.005	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			SEMIVOLATILE TICS:					
			Unknown Hydrocarbon	--	--	5 J	--	--
			Undecane,3,6-dimethyl-	--	--	6 J	--	--
			Heptadecane,2,6,10,14-tetra	--	--	13 J	--	--
			Dodecane,2,7,10-trimethyl-	--	--	9 J	--	--
			Unknown	--	--	6 J	--	--
			TOTAL TICS:	--	--	39	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, MW-1

FORT MONMOUTH, NEW JERSEY

VOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	5/18/1995	6/2/1995	Dichlorodifluoromethane	0.5	--	ND	1,000	--
			Chloromethane	0.5	--	ND	30	--
			Bromomethane	0.5	--	ND	10	--
			Vinyl Chloride	0.5	--	ND	5	--
			Chloroethane	0.5	--	ND	--	--
			Trichlorofluoromethane	0.5	--	ND	--	--
			Methylene Chloride	1.8	--	1.8 B	2	--
			trans-1,2-Dichloroethene	0.5	--	ND	100	--
			1,1-Dichloroethene	0.5	--	ND	2	--
			1,1-Dichloroethane	0.5	--	ND	70	--
			2,2-Dichloropropane	0.5	--	ND	--	--
			Bromochloromethane	0.5	--	ND	--	--
			cis-1,2-Dichloroethene	0.5	--	ND	10	--
			Chloroform	0.5	--	ND	6	--
			1,1-Dichloropropene	0.5	--	ND	--	--
			1,2-Dichloroethane	0.5	--	ND	2	--
			1,1,1-Trichloroethane	0.5	--	ND	30	--
			Dibromomethane	0.5	--	ND	--	--
			Carbon Tetrachloride	0.5	--	ND	2	--
			Bromodichloromethane	0.5	--	ND	1	--
			1,2-Dichloropropane	0.5	--	ND	1	--
			cis-1,3-Dichloropropene	0.5	--	ND	NA	--
			1,3-Dichloropropane	0.5	--	ND	--	--
			Trichloroethene	0.5	--	ND	1	--
			Dibromochloromethane	0.5	--	ND	10	--
			1,1,2-Trichloroethane	0.5	--	ND	3	--
			Benzene	0.5	--	ND	1	--
			trans-1,3-Dichloropropene	0.5	--	ND	NA	--
			Bromoform	0.5	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.5	--	ND	10	--
			Tetrachloroethene	0.5	--	ND	1	--
			1,1,2,2-Tetrachloroethane	0.5	--	ND	2	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	5/18/1995	6/2/1995	Toluene	0.5	--	ND	1,000	--
			1,2-Dibromoethane	0.5	--	ND	--	--
			Chlorobenzene	0.5	--	ND	4	--
			Ethylbenzene	0.5	--	ND	700	--
			Xylene (total)	0.5	--	ND	40	--
			Styrene	0.5	--	ND	100	--
			Isopropylbenzene	0.5	--	ND	--	--
			Bromobenzene	0.5	--	ND	--	--
			1,2,3-Tricloropropane	0.5	--	ND	40	--
			n-Propylbenzene	0.5	--	ND	--	--
			2-Chlorotoluene	0.5	--	ND	--	--
			4-Chlorotoluene	0.5	--	ND	--	--
			1,3,5-Trimethylbenzene	0.5	--	ND	--	--
			tert-Butylbenzene	0.5	--	ND	--	--
			1,2,4-Trimethylbenzene	0.5	--	ND	--	--
			sec-Butylbenzene	0.5	--	ND	--	--
			1,3-Dichlorobenzene	0.5	--	ND	600	--
			1,4-Dichlorobenzene	0.5	--	ND	75	--
			4-Isopropyltoluene	0.5	--	ND	--	--
			1,2-Dichlorobenzene	0.5	--	ND	600	--
			n-Butylbenzene	0.5	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.5	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.5	--	ND	9	--
			Hexachlorobutadiene	0.5	--	ND	1	--
			Naphthalene	0.5	--	ND	300	--
			1,2,3-Trichorobenzene	0.5	--	ND	--	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	5/18/1995	6/2/1995	Unknown	--	--	1 J	--	--
			Naphthalene,decahydro-2-met	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	1 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown Hydrocarbon	--	--	1 J	--	--
			Unknown	--	--	3 J	--	--
			Unknown	--	--	3 J	--	--
			Unknown	--	--	3 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	1 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	1 J	--	--
			Unknown	--	--	1 J	--	--
			TOTAL TICS:	--	--	27	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, TRIP BLANK

FORT MONMOUTH, NEW JERSEY

VOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
TRIP BLANK	5/18/1995	6/1/1995	Dichlorodifluoromethane	0.5	--	ND	1,000	--
			Chloromethane	0.5	--	ND	30	--
			Bromomethane	0.5	--	ND	10	--
			Vinyl Chloride	0.5	--	ND	5	--
			Chloroethane	0.5	--	ND	--	--
			Trichlorofluoromethane	0.5	--	ND	--	--
			Methylene Chloride	5.1	--	5.1 B	2	yes
			trans-1,2-Dichloroethene	0.5	--	ND	100	--
			1,1-Dichloroethene	0.5	--	ND	2	--
			1,1-Dichloroethane	0.5	--	ND	70	--
			2,2-Dichloropropane	0.5	--	ND	--	--
			Bromochloromethane	0.5	--	ND	--	--
			cis-1,2-Dichloroethene	0.5	--	ND	10	--
			Chloroform	0.5	--	ND	6	--
			1,1-Dichloropropene	0.5	--	ND	--	--
			1,2-Dichloroethane	0.5	--	ND	2	--
			1,1,1-Trichloroethane	0.5	--	ND	30	--
			Dibromomethane	0.5	--	ND	--	--
			Carbon Tetrachloride	0.5	--	ND	2	--
			Bromodichloromethane	0.5	--	ND	1	--
			1,2-Dichloropropane	0.5	--	ND	1	--
			cis-1,3-Dichloropropene	0.5	--	ND	NA	--
			1,3-Dichloropropane	0.5	--	ND	--	--
			Trichloroethene	0.5	--	ND	1	--
			Dibromochloromethane	0.5	--	ND	10	--
			1,1,2-Trichloroethane	0.5	--	ND	3	--
			Benzene	0.5	--	ND	1	--
			trans-1,3-Dichloropropene	0.5	--	ND	NA	--
			Bromoform	0.5	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.5	--	ND	10	--
			Tetrachloroethene	0.5	--	ND	1	--
			1,1,2,2-Tetrachloroethane	0.5	--	ND	2	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, TRIP BLANK

FORT MONMOUTH, NEW JERSEY

VOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
TRIP BLANK	5/18/1995	6/1/1995	Toluene	0.5	--	ND	1,000	--
			1,2-Dibromoethane	0.5	--	ND	--	--
			Chlorobenzene	0.5	--	ND	4	--
			Ethylbenzene	0.5	--	ND	700	--
			Xylene (total)	0.5	--	ND	40	--
			Styrene	0.5	--	ND	100	--
			Isopropylbenzene	0.5	--	ND	--	--
			Bromobenzene	0.5	--	ND	--	--
			1,2,3-Tricloropropane	0.5	--	ND	40	--
			n-Propylbenzene	0.5	--	ND	--	--
			2-Chlorotoluene	0.5	--	ND	--	--
			4-Chlorotoluene	0.5	--	ND	--	--
			1,3,5-Trimethylbenzene	0.5	--	ND	--	--
			tert-Butylbenzene	0.5	--	ND	--	--
			1,2,4-Trimethylbenzene	0.5	--	ND	--	--
			sec-Butylbenzene	0.5	--	ND	--	--
			1,3-Dichlorobenzene	0.5	--	ND	600	--
			1,4-Dichlorobenzene	0.5	--	ND	75	--
			4-Isopropyltoluene	0.5	--	ND	--	--
			1,2-Dichlorobenzene	0.5	--	ND	600	--
			n-Butylbenzene	0.5	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.5	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.5	--	ND	9	--
			Hexachlorobutadiene	0.5	--	ND	1	--
			Naphthalene	0.5	--	ND	300	--
			1,2,3-Trichorobenzene	0.5	--	ND	--	--
			VOLATILE TICS:					
			NONE FOUND	--	--	--	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, FIELD BLANK

FORT MONMOUTH, NEW JERSEY

SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	5/18/1995	6/2/1995	N-nitrosodimethylamine	2	--	ND	20	--
			bis(2-Chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)ether	5	--	ND	300	--
			N-Nitroso-Di-N-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	300	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalate	1	--	ND	--	--
			Dimethylphthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			n-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine(as azo)	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	55	--	55	900	--
			Fluoranthene	1	--	ND	300	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	5/18/1995	6/2/1995	Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)anthracene	2	--	ND	0.05	--
			3,3'-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	5	--
			bis(2-Ethylhexyl)phthalate	4	--	ND	30	--
			Di-n-octylphthalate	2	--	ND	100	--
			Benzo(b)fluoranthene	1	--	ND	0.05	--
			Benzo(k)fluoranthene	2	--	ND	0.5	--
			Benzo(a)pyrene	2	--	ND	0.005	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	0.05	--
			Dibenz(a,h)anthracene	3	--	ND	0.005	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			SEMIVOLATILE TICS:					
			Unknown	--	--	14 J	--	--
			TOTAL TICS:	--	--	14	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, FIELD BLANK

FORT MONMOUTH, NEW JERSEY

VOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	5/18/1995	6/1/1995	Dichlorodifluoromethane	0.5	--	ND	1,000	--
			Chloromethane	0.5	--	ND	30	--
			Bromomethane	0.5	--	ND	10	--
			Vinyl Chloride	0.5	--	ND	5	--
			Chloroethane	0.5	--	ND	--	--
			Trichlorofluoromethane	0.5	--	ND	--	--
			Methylene Chloride	5.1	--	5.1 B	2	yes
			trans-1,2-Dichloroethene	0.5	--	ND	100	--
			1,1-Dichloroethene	0.5	--	ND	2	--
			1,1-Dichloroethane	0.5	--	ND	70	--
			2,2-Dichloropropane	0.5	--	ND	--	--
			Bromochloromethane	0.5	--	ND	--	--
			cis-1,2-Dichloroethene	0.5	--	ND	10	--
			Chloroform	0.5	--	ND	6	--
			1,1-Dichloropropene	0.5	--	ND	--	--
			1,2-Dichloroethane	0.5	--	ND	2	--
			1,1,1-Trichloroethane	0.5	--	ND	30	--
			Dibromomethane	0.5	--	ND	--	--
			Carbon Tetrachloride	0.5	--	ND	2	--
			Bromodichloromethane	0.5	--	ND	1	--
			1,2-Dichloropropane	0.5	--	ND	1	--
			cis-1,3-Dichloropropene	0.5	--	ND	NA	--
			1,3-Dichloropropane	0.5	--	ND	--	--
			Trichloroethene	0.5	--	ND	1	--
			Dibromochloromethane	0.5	--	ND	10	--
			1,1,2-Trichloroethane	0.5	--	ND	3	--
			Benzene	0.5	--	ND	1	--
			trans-1,3-Dichloropropene	0.5	--	ND	NA	--
			Bromoform	0.5	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.5	--	ND	10	--
			Tetrachloroethene	0.5	--	ND	1	--
			1,1,2,2-Tetrachloroethane	0.5	--	ND	2	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, FIELD BLANK

FORT MONMOUTH, NEW JERSEY

VOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	5/18/1995	6/1/1995	Toluene	0.5	--	ND	1,000	--
			1,2-Dibromoethane	0.5	--	ND	--	--
			Chlorobenzene	0.5	--	ND	4	--
			Ethylbenzene	0.5	--	ND	700	--
			Xylene (total)	0.5	--	ND	40	--
			Styrene	0.5	--	ND	100	--
			Isopropylbenzene	0.5	--	ND	--	--
			Bromobenzene	0.5	--	ND	--	--
			1,2,3-Tricloropropane	0.5	--	ND	40	--
			n-Propylbenzene	0.5	--	ND	--	--
			2-Chlorotoluene	0.5	--	ND	--	--
			4-Chlorotoluene	0.5	--	ND	--	--
			1,3,5-Trimethylbenzene	0.5	--	ND	--	--
			tert-Butylbenzene	0.5	--	ND	--	--
			1,2,4-Trimethylbenzene	0.5	--	ND	--	--
			sec-Butylbenzene	0.5	--	ND	--	--
			1,3-Dichlorobenzene	0.5	--	ND	600	--
			1,4-Dichlorobenzene	0.5	--	ND	75	--
			4-Isopropyltoluene	0.5	--	ND	--	--
			1,2-Dichlorobenzene	0.5	--	ND	600	--
			n-Butylbenzene	0.5	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.5	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.5	--	ND	9	--
			Hexachlorobutadiene	0.5	--	ND	1	--
			Naphthalene	0.5	--	ND	300	--
			1,2,3-Trichorobenzene	0.5	--	ND	--	--
			VOLATILE TICS:					
			NONE FOUND	--	--	--	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, MW-1

FORT MONMOUTH, NEW JERSEY

SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	6/13/1995	6/22/1995	N-nitrosodimethylamine	2	--	ND	20	--
			bis(2-Chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)ether	5	--	ND	300	--
			N-Nitroso-Di-N-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	300	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalate	1	--	ND	--	--
			Dimethylphthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			n-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine(as azo)	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	6/13/1995	6/22/1995	Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)anthracene	2	--	ND	0.05	--
			3,3'-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	5	--
			bis(2-Ethylhexyl)phthalate	4	--	ND	30	--
			Di-n-octylphthalate	2	--	ND	100	--
			Benzo(b)fluoranthene	1	--	ND	0.05	--
			Benzo(k)fluoranthene	2	--	ND	0.5	--
			Benzo(a)pyrene	2	--	ND	0.005	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	0.05	--
			Dibenz(a,h)anthracene	3	--	ND	0.005	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE TICS:

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	6/13/1995	6/22/1995	Undecane,2,6-dimethyl-	--	--	5 J	--	--
			Cyclohexane,2-butyl-1,1,3-t	--	--	6 J	--	--
			Octane,3-ethyl-	--	--	13 J	--	--
			Unknown Hydrocarbon	--	--	5 J	--	--
			Unknown Hydrocarbon	--	--	4 J	--	--
			Dodecane,2,7,10-trimethyl	--	--	7 J	--	--
			Decahydo-4,4,8,9,10-pentame	--	--	12 J	--	--
			Naphthalene,2,3-dimethyl-	--	--	5 J	--	--
			Unknown Hydrocarbon	--	--	5 J	--	--
			Undecane,4,6-dimethyl-	--	--	21 J	--	--
			Unknown Hydrocarbon	--	--	10 J	--	--
			Unknnown	--	--	5 J	--	--
			1,1'-Biphenyl,4-methyl-	--	--	12 J	--	--
			Undecane,3,6-dimethyl-	--	--	23 J	--	--
			3-Tetradecene,(E)-	--	--	5 J	--	--
			Azulene,7-ethyl-1,4-dimethy	--	--	4 J	--	--
			Heptadecane,2-6-dimethyl-	--	--	53 J	--	--
			Tridecane,6-propyl-	--	--	30 J	--	--
			Unknown Hydrocarbon	--	--	4 J	--	--
			TOTAL TICS:	--	--	229	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, MW-1

FORT MONMOUTH, NEW JERSEY

VOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	6/13/1995	6/27/1995	Dichlorodifluoromethane	0.5	--	ND	1,000	--
			Chloromethane	0.5	--	ND	30	--
			Bromomethane	0.5	--	ND	10	--
			Vinyl Chloride	0.5	--	ND	5	--
			Chloroethane	0.5	--	ND	--	--
			Trichlorofluoromethane	0.5	--	ND	--	--
			Methylene Chloride	1.5	--	1.5 B	2	--
			trans-1,2-Dichloroethene	0.5	--	ND	100	--
			1,1-Dichloroethene	0.5	--	ND	2	--
			1,1-Dichloroethane	0.5	--	ND	70	--
			2,2-Dichloropropane	0.5	--	ND	--	--
			Bromochloromethane	0.5	--	ND	--	--
			cis-1,2-Dichloroethene	0.5	--	ND	10	--
			Chloroform	0.7	--	0.7	6	--
			1,1-Dichloropropene	0.5	--	ND	--	--
			1,2-Dichloroethane	0.5	--	ND	2	--
			1,1,1-Trichloroethane	0.5	--	ND	30	--
			Dibromomethane	0.5	--	ND	--	--
			Carbon Tetrachloride	0.5	--	ND	2	--
			Bromodichloromethane	0.5	--	ND	1	--
			1,2-Dichloropropane	0.5	--	ND	1	--
			cis-1,3-Dichloropropene	0.5	--	ND	NA	--
			1,3-Dichloropropane	0.5	--	ND	--	--
			Trichloroethene	0.5	--	ND	1	--
			Dibromochloromethane	0.5	--	ND	10	--
			1,1,2-Trichloroethane	0.5	--	ND	3	--
			Benzene	0.5	--	ND	1	--
			trans-1,3-Dichloropropene	0.5	--	ND	NA	--
			Bromoform	0.5	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.5	--	ND	10	--
			Tetrachloroethene	0.5	--	ND	1	--
			1,1,2,2-Tetrachloroethane	0.5	--	ND	2	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	6/13/1995	6/27/1995	Toluene	0.5	--	ND	1,000	--
			1,2-Dibromoethane	0.5	--	ND	--	--
			Chlorobenzene	0.5	--	ND	4	--
			Ethylbenzene	0.5	--	ND	700	--
			Xylene (total)	0.5	--	ND	40	--
			Styrene	0.5	--	ND	100	--
			Isopropylbenzene	0.5	--	ND	--	--
			Bromobenzene	0.5	--	ND	--	--
			1,2,3-Tricloropropane	0.5	--	ND	40	--
			n-Propylbenzene	0.5	--	ND	--	--
			2-Chlorotoluene	0.5	--	ND	--	--
			4-Chlorotoluene	0.5	--	ND	--	--
			1,3,5-Trimethylbenzene	0.5	--	ND	--	--
			tert-Butylbenzene	0.5	--	ND	--	--
			1,2,4-Trimethylbenzene	0.5	--	ND	--	--
			sec-Butylbenzene	0.5	--	ND	--	--
			1,3-Dichlorobenzene	0.5	--	ND	600	--
			1,4-Dichlorobenzene	0.5	--	ND	75	--
			4-Isopropyltoluene	0.5	--	ND	--	--
			1,2-Dichlorobenzene	0.5	--	ND	600	--
			n-Butylbenzene	0.5	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.5	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.5	--	ND	9	--
			Hexachlorobutadiene	0.5	--	ND	1	--
			Naphthalene	0.5	--	ND	300	--
			1,2,3-Trichorobenzene	0.5	--	ND	--	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE TICS:

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
MW-1	6/13/1995	6/27/1995	Unknown Hydrocarbon	--	--	2 J	--	--
			Unknown Hydrocarbon	--	--	3 J	--	--
			Unknown Hydrocarbon	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	4 J	--	--
			Unknown	--	--	3 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Unknown	--	--	2 J	--	--
			Naphthalene,decahydro-2-met	--	--	5 J	--	--
			Unknown	--	--	3 J	--	--
			Unknown	--	--	11 J	--	--
			Unknown	--	--	3 J	--	--
			TOTAL TICS:	--	--	48	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, TRIP BLANK

FORT MONMOUTH, NEW JERSEY

VOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
TRIP BLANK	6/13/1995	6/21/1995	Dichlorodifluoromethane	0.5	--	ND	1,000	--
			Chloromethane	0.5	--	ND	30	--
			Bromomethane	0.5	--	ND	10	--
			Vinyl Chloride	0.5	--	ND	5	--
			Chloroethane	0.5	--	ND	--	--
			Trichlorofluoromethane	0.5	--	ND	--	--
			Methylene Chloride	2.3	--	2.3 B	2	yes
			trans-1,2-Dichloroethene	0.5	--	ND	100	--
			1,1-Dichloroethene	0.5	--	ND	2	--
			1,1-Dichloroethane	0.5	--	ND	70	--
			2,2-Dichloropropane	0.5	--	ND	--	--
			Bromochloromethane	0.5	--	ND	--	--
			cis-1,2-Dichloroethene	0.5	--	ND	10	--
			Chloroform	0.5	--	ND	6	--
			1,1-Dichloropropene	0.5	--	ND	--	--
			1,2-Dichloroethane	0.5	--	ND	2	--
			1,1,1-Trichloroethane	0.5	--	ND	30	--
			Dibromomethane	0.5	--	ND	--	--
			Carbon Tetrachloride	0.5	--	ND	2	--
			Bromodichloromethane	0.5	--	ND	1	--
			1,2-Dichloropropane	0.5	--	ND	1	--
			cis-1,3-Dichloropropene	0.5	--	ND	NA	--
			1,3-Dichloropropane	0.5	--	ND	--	--
			Trichloroethene	0.5	--	ND	1	--
			Dibromochloromethane	0.5	--	ND	10	--
			1,1,2-Trichloroethane	0.5	--	ND	3	--
			Benzene	0.5	--	ND	1	--
			trans-1,3-Dichloropropene	0.5	--	ND	NA	--
			Bromoform	0.5	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.5	--	ND	10	--
			Tetrachloroethene	0.5	--	ND	1	--
			1,1,2,2-Tetrachloroethane	0.5	--	ND	2	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
TRIP BLANK	6/13/1995	6/21/1995	Toluene	0.5	--	ND	1,000	--
			1,2-Dibromoethane	0.5	--	ND	--	--
			Chlorobenzene	0.5	--	ND	4	--
			Ethylbenzene	0.5	--	ND	700	--
			Xylene (total)	0.5	--	ND	40	--
			Styrene	0.5	--	ND	100	--
			Isopropylbenzene	0.5	--	ND	--	--
			Bromobenzene	0.5	--	ND	--	--
			1,2,3-Tricloropropane	0.5	--	ND	40	--
			n-Propylbenzene	0.5	--	ND	--	--
			2-Chlorotoluene	0.5	--	ND	--	--
			4-Chlorotoluene	0.5	--	ND	--	--
			1,3,5-Trimethylbenzene	0.5	--	ND	--	--
			tert-Butylbenzene	0.5	--	ND	--	--
			1,2,4-Trimethylbenzene	0.5	--	ND	--	--
			sec-Butylbenzene	0.5	--	ND	--	--
			1,3-Dichlorobenzene	0.5	--	ND	600	--
			1,4-Dichlorobenzene	0.5	--	ND	75	--
			4-Isopropyltoluene	0.5	--	ND	--	--
			1,2-Dichlorobenzene	0.5	--	ND	600	--
			n-Butylbenzene	0.5	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.5	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.5	--	ND	9	--
			Hexachlorobutadiene	0.5	--	ND	1	--
			Naphthalene	0.5	--	ND	300	--
			1,2,3-Trichorobenzene	0.5	--	ND	--	--
			VOLATILE TICS:					
			NONE FOUND	--	--	--	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, FIELD BLANK

FORT MONMOUTH, NEW JERSEY

SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	6/13/1995	6/26/1995	N-nitrosodimethylamine	2	--	ND	20	--
			bis(2-Chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)ether	5	--	ND	300	--
			N-Nitroso-Di-N-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	300	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalate	1	--	ND	--	--
			Dimethylphthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			n-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine(as azo)	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	6/13/1995	6/26/1995	Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)anthracene	2	--	ND	NA	--
			3,3'-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	5	--
			bis(2-Ethylhexyl)phthalate	4	--	ND	30	--
			Di-n-octylphthalate	2	--	ND	100	--
			Benzo(b)fluoranthene	1	--	ND	0.05	--
			Benzo(k)fluoranthene	2	--	ND	0.5	--
			Benzo(a)pyrene	2	--	ND	0.005	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	0.05	--
			Dibenz(a,h)anthracene	3	--	ND	0.005	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			SEMIVOLATILE TICS:					
			NONE FOUND	--	--	--	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS

BUILDING 166, MAIN POST, FIELD BLANK

FORT MONMOUTH, NEW JERSEY

VOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	6/13/1995	6/21/1995	Dichlorodifluoromethane	0.5	--	ND	1,000	--
			Chloromethane	0.5	--	ND	30	--
			Bromomethane	0.5	--	ND	10	--
			Vinyl Chloride	0.5	--	ND	5	--
			Chloroethane	0.5	--	ND	--	--
			Trichlorofluoromethane	0.5	--	ND	--	--
			Methylene Chloride	2.1	--	2.1 B	2	yes
			trans-1,2-Dichloroethene	0.5	--	ND	100	--
			1,1-Dichloroethene	0.5	--	ND	2	--
			1,1-Dichloroethane	0.5	--	ND	70	--
			2,2-Dichloropropane	0.5	--	ND	--	--
			Bromochloromethane	0.5	--	ND	--	--
			cis-1,2-Dichloroethene	0.5	--	ND	10	--
			Chloroform	0.5	--	ND	6	--
			1,1-Dichloropropene	0.5	--	ND	--	--
			1,2-Dichloroethane	0.5	--	ND	2	--
			1,1,1-Trichloroethane	0.5	--	ND	30	--
			Dibromomethane	0.5	--	ND	--	--
			Carbon Tetrachloride	0.5	--	ND	2	--
			Bromodichloromethane	0.5	--	ND	1	--
			1,2-Dichloropropane	0.5	--	ND	1	--
			cis-1,3-Dichloropropene	0.5	--	ND	NA	--
			1,3-Dichloropropane	0.5	--	ND	--	--
			Trichloroethene	0.5	--	ND	1	--
			Dibromochloromethane	0.5	--	ND	10	--
			1,1,2-Trichloroethane	0.5	--	ND	3	--
			Benzene	0.5	--	ND	1	--
			trans-1,3-Dichloropropene	0.5	--	ND	NA	--
			Bromoform	0.5	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.5	--	ND	10	--
			Tetrachloroethene	0.5	--	ND	1	--
			1,1,2,2-Tetrachloroethane	0.5	--	ND	2	--

TABLE 3
GROUNDWATER SAMPLING RESULTS
BUILDING 166, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILES (continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQS (ug/l)	Exceeds Criteria
FIELD BLANK	6/13/1995	6/21/1995	Toluene	0.5	--	ND	1,000	--
			1,2-Dibromoethane	0.5	--	ND	--	--
			Chlorobenzene	0.5	--	ND	4	--
			Ethylbenzene	0.5	--	ND	700	--
			Xylene (total)	0.5	--	ND	40	--
			Styrene	0.5	--	ND	100	--
			Isopropylbenzene	0.5	--	ND	--	--
			Bromobenzene	0.5	--	ND	--	--
			1,2,3-Tricloropropane	0.5	--	ND	40	--
			n-Propylbenzene	0.5	--	ND	--	--
			2-Chlorotoluene	0.5	--	ND	--	--
			4-Chlorotoluene	0.5	--	ND	--	--
			1,3,5-Trimethylbenzene	0.5	--	ND	--	--
			tert-Butylbenzene	0.5	--	ND	--	--
			1,2,4-Trimethylbenzene	0.5	--	ND	--	--
			sec-Butylbenzene	0.5	--	ND	--	--
			1,3-Dichlorobenzene	0.5	--	ND	600	--
			1,4-Dichlorobenzene	0.5	--	ND	75	--
			4-Isopropyltoluene	0.5	--	ND	--	--
			1,2-Dichlorobenzene	0.5	--	ND	600	--
			n-Butylbenzene	0.5	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.5	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.5	--	ND	9	--
			Hexachlorobutadiene	0.5	--	ND	1	--
			Naphthalene	0.5	--	ND	300	--
			1,2,3-Trichorobenzene	0.5	--	ND	--	--
			VOLATILE TICS:					
			NONE FOUND	--	--	--	--	--

US ARMY
FORT MONMOUTH NJ

DIRECTORATE OF
ENGINEERING AND HOUSING
ENVIRONMENTAL OFFICE

UNDERGROUND STORAGE TANK
CLOSURE PLAN

BUILDING 166
NJDEPE UST NO.0090010 - 17

PREPARED BY

CHARLES M. APPLEBY
ENVIRONMENTAL PROTECTION SPECIALIST
NJDEPE UST SUBSURFACE CERTIFICATION # 002056

MAY 25, 1994

U.S. Army
DEH Bldg. 167
SELFM-PW-EV
Fort Monmouth, NJ 07703

Date: 25 MAY 1994
Building No.: 166
NJDEPE UST Reg. No.: 0090010 - 17

UNDERGROUND STORAGE TANK (UST)
DECOMMISSIONING / CLOSURE PLAN

A. General Requirements:

All activities associated with the decommissioning of any underground storage tank (UST) shall comply with all applicable Federal, State and Local laws and ordinances. These laws include but are not limited to: NJAC 7:14B et seq., 5:23 et seq. and OSHA 1910.146, 1910.120. All permits including but not limited to this document, the NJDEP Closure Plan Approval Package, etc..., shall be posted on site for inspection. The Contractor conducting the decommissioning activities shall be registered and certified by the NJDEP for performing said activities.

B. Safety and Health:

Before, during, and after all activities, the work site shall be made free of all hazards which may pose a threat to the health and safety of all personnel who are involved with, or are affected by, the decommissioning of the UST. All areas which pose, or may be suspected of posing, a vapor hazard shall be monitored by a qualified individual utilizing approved equipment. This individual will ascertain if the area is properly vented to render the area safe, as defined by OSHA.

C. UST Excavation:

1. All underground obstructions (utilities,... etc.) shall be marked out by the contractor performing the excavation.

2. All activities shall be carried out with the greatest regard to safety and health and the safeguarding of the environment.

3. All excavated soils will be evaluated as to the possibility of contamination. Soils suspected to be contaminated with product shall be staged on poly-sheeting separate from soils not suspected to be contaminated (see Section E - Excavated Soils Management).

4. Surface materials (ie. asphalt, concrete, etc...) shall be excavated and staged separate from all soils.

5. Soil will be excavated to expose the UST and associated piping. The piping shall not be removed/disturbed until all free product is drained into the UST. The UST will be rendered vapor free by purging or addition of dry ice prior to any cutting or access. After the removal of the associated piping, a manway will be made in the UST to allow for the proper cleaning of the UST. The UST will be completely emptied of all liquids prior to removal of the UST from the ground. All of the openings in the tank will be plugged except for one vent hole.

6. After the UST is removed from the ground, it will be staged on poly-sheeting and examined for corrosion holes. The presence or absence of corrosion holes will be documented by the Sub-Surface Evaluator. If corrosion holes are observed, or if upon inspection of the excavation site evidence of a discharge to the environment exists, the NJDEPE hotline shall be notified at (609) 292-7172.

7. In the event of a discharge to the environment, additional soils will be excavated as needed. Site assessment activities under the direct supervision of the Sub-Surface Evaluator will determine to what extent the contractor will excavate.

8. After completion of the Site Assessment activities, the excavation will be backfilled to grade with noncontaminated soils from the site and additional certified clean fill provided by the contractor.

D. UST Transport/Disposal:

1. The tank will be transported and disposed/recycled in compliance with all applicable regulations and laws.

2. The contractor shall label the tank with the following information:

a. site of origin
b. generator/contact person
c. NJDEPE UST ID number
d. product previously stored
e. name of transporter/contract person
f. destination site/contact person
g. other information as required

3. The contractor shall provide Fort Monmouth with sufficient documentation certifying that transport/disposal (recycling) of the tank was completed according to all applicable Federal and State regulations.

E. Excavated Soils Management:

1. All excavated soils suspected to be contaminated will be transported, by the contractor, to a designated staging area within Fort Monmouth. The designated area will contain the soils and direct all stormwater runoff away from any contact with the soil.

2. All soils stored in the designated staging areas will be maintained in piles no larger than 100 cubic yards each. Each pile will be lined and covered with poly-sheeting and weighted to ensure proper containment.

3. Each soil pile will be sampled and analyzed for waste classification as outlined in the NJDEPE document titled "Management of Excavated Soils" dated August 17, 1990.

4. All soils categorized as Hazardous waste or nonhazardous waste will be managed as such, in accordance with N.J.A.C. 7:26-1 et seq..

5. All soils that contain levels of contaminants below the Category 3 soil limits will be used in accordance with Federal and State requirements.

F. Changes/Authorizations:

All deviations in activities related to the closure of a UST as outlined in this document shall require prior authorization from the NJDEPE-DWR-BUST.

U.S. Army
DEH Bldg. 167
SELFM-PW-EV
Fort Monmouth, NJ 07703

Date: 25 MAY 1994
Building No.: 166
NJDEPE UST Reg. No.: 0090010 - 17

UNDERGROUND STORAGE TANK (UST) SITE ASSESSMENT PLAN

General:

This site specific assessment plan will be managed and carried out by U.S. Army DEH and Serv-Air Inc. personnel. All analyses will be performed and reported by NJDEPE certified testing laboratories. All sampling will be performed under the direct supervision of a NJDEPE Certified Sub-Surface Evaluator and according to the methods described in the 1992 NJDEP Field Sampling Procedures Manual. All records of the Site Assessment will be maintained by DEH and submitted to the NJDEPE-DWR-Bust in accordance with NJAC 7:14B-9.2 and 9.3.

PHASE I
UST DECOMMISSIONING

A. Initial Soil Excavation:

1. Soil will be excavated from the UST site and screened utilizing a Photo Ionization Detector (PID) and/or a Flame Ionization Detector (FID).

2. All soils suspected to be contaminated will be treated in accordance with the UST Decommissioning Plan.

B. Continued Excavation:

1. Excavation of suspect contaminated soil will continue until one of the following situations is encountered:

a. groundwater

b. excavated soils no longer exhibit characteristics of contamination determined in the field by the Sub-Surface Evaluator

c. excavation equipment can no longer remove soils due to the depth of the excavation or other restrictive cause.

U.S. Army
DEH Bldg. 167
SELFM-PW-EV
Fort Monmouth, NJ 07703

Date: 25 MAY 1994
Building No.: 166
NJDEPE UST Reg. No.: 0090010 - 17

PHASE II
Site Survey

A. Vapor Screening:

1. An individual under the direct supervision of a NJDEPE Sub-Surface Evaluator and trained in the operation of a FID and/or PID shall evaluate the sides and pit bottom of the excavation.

2. All observed instrument readings will be documented and included in the Site Assessment Survey report. This documentation will include all factory and daily calibrations of the instrument.

PHASE III
Site Sampling

A. Soil samples will be collected from the UST excavation and analyzed according to the following schedule:

PRODUCT	SIZE (gal.)	# TPHC SAMPLES	VOA+15 (if TPHC >10000)
#2 HEATING OIL	4000	8	8
FIELD BLANKS		1	1
DUPLICATE SAMPLES		1	1
TOTAL # SAMPLES		10	10

U.S. Army
DEH Bldg. 167
SELFM-PW-EV
Fort Monmouth, NJ 07703

Date: 25 MAY 1994
Building No.: 166
NJDEPE UST Reg. No.: 0090010 - 17

B. Soil samples will be collected from the Pipe excavation at the same time as UST pit sampling and analyzed according to the following schedule:

PRODUCT	LENGTH OF PIPING	# TPHC SAMPLES	VOA+15 (if TPHC >10000)
#2 HEATING OIL	15 FEET	1	1
FIELD BLANKS		0	0
DUPLICATE SAMPLES		0	0
TOTAL # SAMPLES		1	1

C. All TPHC samples will be taken in the native soil below the bedding material. The sample locations should be along the mid-lines of the tank outline except for at least two of the samples which should be taken within one foot of each of the two highest field survey readings. All of the soil samples should be discrete samples taken within a 6" vertical interval. All samples will be collected by utilizing laboratory decontaminated stainless steel trowels dedicated to each sample location. All VOA+15 samples will be taken within 24 hours of UST excavation at a depth of 0-6" with the use of a laboratory decontaminated stainless steel core sampler. Each VOA+15 sample will be screened with an FID and\or PID and recorded immediately after collection.

D. The excavations of USTs containing #2 Fuel Oil will remain open until laboratory results determine all TPHC samples are less than 10000 ppm. If levels greater than 10000 ppm are reported, further excavation and resampling may be requested by the Sub-Surface Evaluator for those contaminated areas. If further excavation is not possible, additional VOA+15 analyses on 25% of the TPHC samples with the highest results will be performed and the excavation will be filled to grade with certified clean fill.

U.S. Army
DEH Bldg. 167
SELFM-PW-EV
Fort Monmouth, NJ 07703

Date: 25 MAY 1994
Building No.: 166
NJDEPE UST Reg. No.: 0090010 - 17

UNDERGROUND STORAGE TANK REMOVAL
IMPLEMENTATION SCHEDULE

Facility Name: U.S. Army, Fort Monmouth
Facility Location: Building #166
Fort Monmouth, NJ 07703
Owner's Mailing Address: DEH Bldg. #167
Fort Monmouth, NJ 07703
Owner's Name: U.S. Army
Contact Person: Charles Appleby
Phone Number: (908) 532-6224

UST Registration Number: 0090010

TANK ID #	PRODUCT	CAPACITY (gal.)	SITE ASSESS. REQUIRED	MONITORING WELL REQ.
17	#2 FUEL OIL	4000	YES	NO

SCHEDULE

ACTIVITY	START DATE	COMPLETION
TANK REMOVAL	6-14-94	6-14-94
SITE ASSESSMENT	6-14-94	6-14-94
MONITORING WELL INSTALL	N/A	
ANALYTICAL RESULTS		
SITE ASSESSMENT	6-16-94	6-16-94
MONITORING WELL	N/A	
SITE ASSESSMENT SUMMARY	10/16-94	10-16-94

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL
PROTECTION AND ENERGY

CHRISTINE TODD WHITMAN
Governor

ROBERT C. SHINN,
Commissioner

Mr. Joseph Fallon
SELFM-EH-EV
Department of the Army
Headquarters CECOM Fort Monmouth
Fort Monmouth, NJ 077703-5000

JUN 7 1994

Dear Mr. Fallon:

Re: UST Closures - Fort Monmouth
Fort Monmouth Army Base
Tinton Falls, Monmouth County

The NJDEPE has reviewed the four underground storage tank closure plans for UST number 0081533 tanks 1 and 171 and for UST number 0090010 tanks 17 and 18 submitted on May 31, 1994 for NJDEPE review and approval. The NJDEPE has determined that the closure plans for these tanks are consistent with the Technical Requirements for Site Remediation.

The remedial efforts associated with the closures of these tanks may commence as scheduled in each of the associated closure plans. This letter must be made available to any authorized personnel responsible for review and oversight of UST removals. This approval does not relinquish Fort Monmouth from fulfilling any Federal, County or Municipal requirement associated with the removal of underground storage tanks.

If you should have any questions or require additional information, please do not hesitate to contact me at (609) 633-1455.

Sincerely,

Ian R. Curtis, Case Manager
Bureau of Federal Case Management

RPCE\BFCM\FTMMTH12.IRC

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr
Commissioner

Mr. Dinkerrai Desai
DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY COMMUNICATIONS-ELECTRONIC COMMAND
FORT MONMOUTH, NJ 07703-5000

AUG 2 9 2000

Re: UST Closure Approval/NFA
Fort Monmouth Main Post
Monmouth County

Dear Mr. Desai:

The NJDEP is in receipt of seventeen (17) UST closure reports dated June 1, 2000. The Army has requested to receive No Further Action approval letters for each of these reports. This letter approves the NFA requests for the following 17 UST located on the Main Post of the Fort Monmouth site:

NJDEP Req. #	Bldg. #	NJDEP Req. #	Bldg. #
0090010—06	80	0081533—226	707
0090010—17	166	0081533—119	745
0081533—5	207A	0081533—160	1076
0081533—211	207B	0081533—161	1076
0081533—57	282	0081533—168	1108
0081533—64	290	00192486—1	2000
0081533—68	295	0081515—62	2700.4
0081533—108	689A	00192486—30	3050
0081533—109	689B		

The NJDEP has determined that the Army has performed the remedial actions in a manner consistent or in excess of the regulatory requirements, specifically the Technical Requirements For Site Remediation (N.J.A.C. 7:26E et seq.). Soils with contamination in excess of the NJDEP residential cleanup criteria have been excavated and the Army has taken great care to provide documentation which assures us that all sources of contamination have been remediated.

The NJDEP has one comment in that we request that future reports provide ground water flow direction indications on the well location maps.

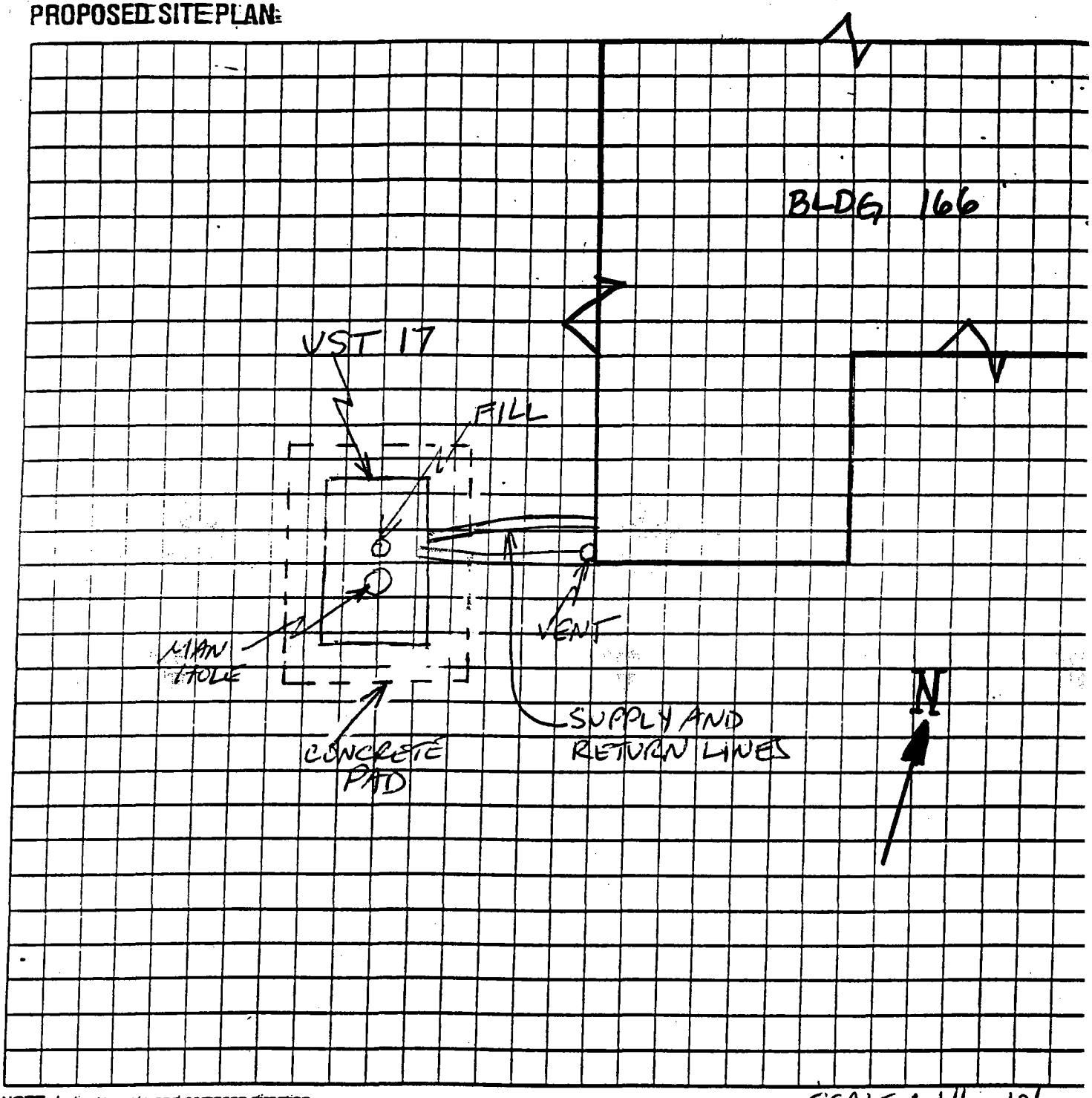
If you should have any questions or comments, please do not hesitate to contact me at (609) 633-7232 or via E-mail.

Sincerely,

Ian R. Curtis, Case Manager
Bureau of Case Management
ICURTIS@DEP.STATE.NJ.US

SERV-AIR, INC. FORT MONMOU NEW JERSEY

PROPOSED SITE PLAN:



NOTE: *Indicate scale and compass direction.*

SCALE: 1" = 10'

REMARKS

TANK LOCATION

BLDG# 166

TANK # ØØ9ØØ1Ø - 17

TANK SIZE 4000 GALS

TANK CONTENTS #2 FUEL OI

Appendix C

Boring Logs and Monitoring Well Construction Records

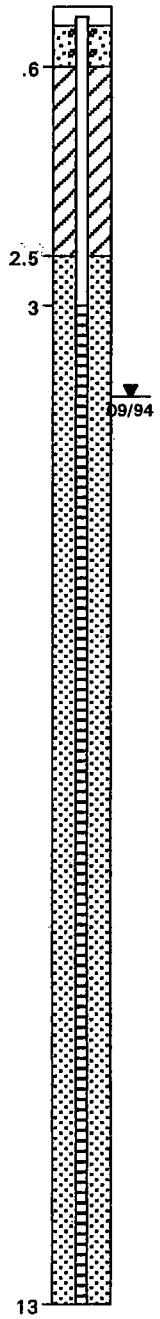
U.S. ARMY
FORT MONMOUTH
SELFM PW EV

LOG OF BORING T-80-MW1

Mainpost Well Logs

Project Name	: BLDG. T-80	Completion Date	: 09/15/94
NJDEP CASE #	: 94-6-16-1127-25	NORTHING	: N 541120.967
Logged By	: TYREE INC.	EASTING	: E 2177811.318
start date	: 09/15/94	Driller	: M. BECK

29-31774
ELEV: 6.91



Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Samples	Blows/Ft
0	Asphalt/subbase		14		
.6	Black fine sand		SW		
	Black silts and fine sands		SM		
2.5	Olive gray silts and fine sands		SM		
3	Olive gray soft clay and black soft clay		CL		
10	Olive gray soft clay with pebbles		CL		
	Yellowish organge, fine medium sand		SW		
13					
14					

Well Construction Information

WELL CONSTRUCTION

Date Compl.	: 9/15/94
Hole Diameter	: 8 in
Drill. Method	: HSA
Company Rep.	: M. BECK

WELL CASING

Material	: PVC
Diameter	: 4 in.
Joints	: threaded

WELL SCREEN

Material	: PVC
Diameter	: 4 in.
Joints	: threaded
Opening	: 20 slot
SAND PACK	: #2 MORIE SAND
ANNULUS SEAL	: Bentonite/Portland : TREMMIE

WELL SCREEN

Material	: PVC
Diameter	: 4 in.
Cap	:

NOTES

Well #1 is T-80 MW1
Flushmount
Water depth is 3'
.92 adjustment for elevation

3-4-1996 c:\mp1\geo\t80 mw.ge3

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.
1340 Campus Parkway, PO Box 1750
Wall, New Jersey

Well/Boring MW-2
Sheet 1 of 1

PROJECT	Fort Monmouth	DATE STARTED	07/24/2000
LOCATION	Building 167	DATE FINISHED	07/24/2000
PROJECT NO.		ELEVATION & DATUM	
RIG TYPE	Canterra 80	COMPLETION DEPTH	12'
DRILLING METHOD	HSA	ROCK DEPTH	NA
BIT DIAMETER	12"	NO. OF SAMPLES	0
		WATER LEVEL	Approx. 4'
SAMPLER		DRILLING CO.	Lutz
HAMMER/FALL		LICENSED DRILLER	Tim Westover
		INSPECTOR	Brian Finnegan

DEPTH SCALE (ft.)	Rec (in.)	Blow Count	Sample ID	PID (ppm)	STRATIGRAPHY	REMARKS
1					0-8" Asphalt	Hand clear 0-5'
					8"-1' Brown Silt with fine Sand, dry	USGS symbol ML
2						
3					Olive green Clay and Silt with trace fine Sand moist at approximately 4'	USGS symbol ML-CL
4						
5						
6					Same as above, moist-wet	
7						
8					Light brown and tan Silt and Clay with trace/ little fine Sand, wet	USGS symbol ML-CL
9						
10					Red brown Silt with Clay and trace fine Sand wet	USGS symbol ML-CL
11						
12					fine-coarse Sand with some small subangular-subrounded quartz gravel, wet	USGS symbol SP
13					End of boring at 12'	
14					Note: no Sand sample collected for laboratory analysis. Stratigraphy descriptions based on drill cuttings	
15						
16						
17						
18						
19						
20						

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.
1340 Campus Parkway, PO Box 1750
Wall, New Jersey

Well/Boring MW-3
Sheet 1 of 1

PROJECT	Fort Monmouth	DATE STARTED	07/24/2000
LOCATION	Building 167	DATE FINISHED	07/24/2000
PROJECT NO.		ELEVATION & DATUM	
RIG TYPE	Canterra 80	COMPLETION DEPTH	12'
DRILLING METHOD	HSA	ROCK DEPTH	NA
BIT DIAMETER	12"	NO. OF SAMPLES	3
		WATER LEVEL	approx. 4'
SAMPLER	140 lbs.	DRILLING CO.	Lutz
HAMMER/FALL	30"	LICENSED DRILLER	Tim Westover
		INSPECTOR	Brian Finnegan

DEPTH SCALE (ft.)	Rec (in.)	Blow Count	Sample ID	PID (ppm)	STRATIGRAPHY	REMARKS
1				0	Brown and black fine-medium Sand with trace Silt, dry, no odor, no stain	Hand clear 0-5' USGS symbol SM
2				0	Brown fine-coarse Sand with small-medium subrounded quartz gravel, slightly moist	USGS symbol SP
3						
4					Olive green and gray Silt and Clay with trace fine-medium Sand, slightly moist, slight odor	USGS symbol CL-ML slight marsh smell
5	12"	2 3	S1	0 0	Light gray Silt with some fine sand and Clay, wet	USGS symbol ML
6		3 4	(5'-7')	0 0	0-7" Olive green fine-medium Sand and Silt with trace/some Clay, wet. 7"-12" Orange and reddish brown fine-medium Sand and Silt, wet, no odor, no stain	USGS symbol SM
7	24"	5 2	S2	0 0		
8		5 11	(7'-9')	0 0	0-15" Orange and gray fine-medium Sand with Silt, wet, no odor. 15"-22" Gray Clay, moist-wet, no odor. 22"-24" Orange fine-medium Sand with trace Silt, no odor	USGS symbol SM USGS symbol CL USGS symbol SM
9	24"	2 3	S3	0 0		
10		3 5	(9'-11)	0 0	0-12" Light tan and orange fine-medium Sand with trace Silt, no odor. 12"-20" Orange Silt with fine Sand and trace Clay, wet. 20"-24" Light gray Silt and Clay with some fine Sand, wet	USGS symbol ML USGS symbol ML-CL
11						
12						
13					End of boring at 12'	
14						
15						
16						
17						
18						
19						
20						

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.
1340 Campus Parkway, PO Box 1750
Wall, New Jersey

Well/Boring MW-4
Sheet 1 of 1

PROJECT	Fort Monmouth	DATE STARTED	07/24/2000
LOCATION	Building 167	DATE FINISHED	07/24/2000
PROJECT NO.		ELEVATION & DATUM	
RIG TYPE	Canterra 80	COMPLETION DEPTH	12'
DRILLING METHOD	HSA	ROCK DEPTH	NA
BIT DIAMETER	10"	NO. OF SAMPLES	0
		WATER LEVEL	Approx. 3.5-4'
SAMPLER		DRILLING CO.	Lutz
HAMMER/FALL		LICENSED DRILLER	Tim Westover
		INSPECTOR	Brian Finnegan

DEPTH SCALE (ft.)	Rec (in.)	Blow Count	Sample ID	PID (ppm)	STRATIGRAPHY	REMARKS
1				0	Brown fine-medium Sand and Silt, dry, no odor	0-5' Hand clear USGS symbol SM
2						
3				0	Olive green and gray Silt with fine-medium Sand, moist at 3.5'-4'	USGS symbol ML
4						
5						
6				0	Same as above with Clay, wet, no odor	USGS symbol ML
7						
8						
9				0	Light brown soft Clay with trace fine Sand, wet, no odor	USGS symbol CL
10						
11					11'-11.5' Same as above with small-large subrounded to rounded quartz Gravel	USGS symbol CL
12						
13					End of boring at 12'	
14					Note: no Sand sample collected for laboratory analysis. Stratigraphy descriptions based on drill cuttings	
15						
16						
17						
18						
19						
20						

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.
1340 Campus Parkway, PO Box 1750
Wall, New Jersey

Well/Boring MW-5
Sheet 1 of 1

PROJECT	Fort Monmouth	DATE STARTED	07/24/2000
LOCATION	Building 167	DATE FINISHED	07/24/2000
PROJECT NO.		ELEVATION & DATUM	
RIG TYPE	Canterra 80	COMPLETION DEPTH	12'
DRILLING METHOD	HSA	ROCK DEPTH	NA
BIT DIAMETER	12"	NO. OF SAMPLES	0
		WATER LEVEL	approx. 4'
SAMPLER	none	DRILLING CO.	Lutz
HAMMER/FALL	none	LICENSED DRILLER	Tim Westover
		INSPECTOR	Brian Finnegan

DEPTH SCALE (ft.)	Rec (in.)	Blow Count	Sample ID	PID (ppm)	STRATIGRAPHY	REMARKS
1				0	Dark brown Silt with fine Sand, dry, topsoil	Hand clear 0-5'
2					Olive green Silt and Clay with trace fine Sand, dry, no odor	USGS symbol ML-CL
3						
4					Olive green fine-medium Sand with Silt and trace Clay, moist, wet	USGS symbol SM
5				0	Dark gray Clay and Silt, moist, slight odor	Marsh like odor
6						USGS symbol CL-ML
7				0	Same as above, wet	
8						
9				0	Greenish gray Silt and Clay with fine-medium Sand, wet	USGS symbol CL-ML
10						
11				0	Light brown Silt and Clay with trace fine Sand, wet	USGS symbol CL-ML
12						
13					End of boring at 12'	
14					Note: no Sand sample collected for laboratory analysis. Stratigraphy descriptions based on drill cuttings	
15						
16						
17						
18						
19						
20						

SERIAL # 41183

DWR-133M (10/93)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
TRENTON, NJ

Mail to
NJDEPE
Bureau Water Allocation
426
nton, NJ 08625

Permit No 93 1224

MONITORING WELL PERMIT

VALID ONLY AFTER APPROVAL BY THE D.E.P.E.

Owner US Army Fort Monmouth
Address SELFM PW EV
Fort Monmouth NJ 07703

Driller Tyree Organization, Ltd
Address 1350 Rte 130 Hwy
Burlington NJ 08016

Name of Facility T-80
Address Main Post
Fort Monmouth NJ

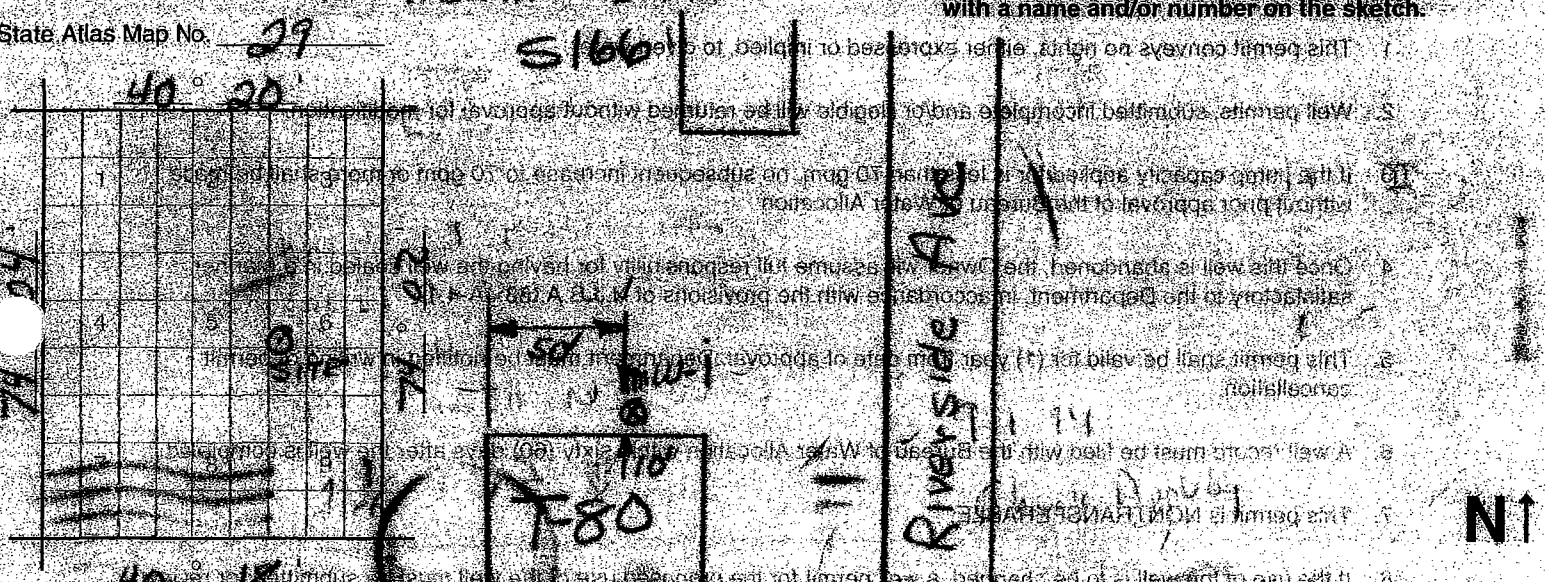
Diameter of Well(s)	4	Proposed Depth of Well(s)	15 Feet
# of Wells Applied for (max. 10)	1	Will pumping equipment be installed? YES ☐ NO ☒	
Type of Well (see reverse)	Monitoring	If Yes, give pump capacity	N/A GPM

LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
		Fort Monmouth	Monmouth

State Atlas Map No. 29

Draw sketch of well(s) nearest roads, buildings, etc. with marked distances in feet. Each well MUST be labeled with a name and/or number on the sketch.


40° 20'
40° 18'
S166
T-80
Site
Site
Site

SERIAL # 41182

DWB-133M (10/93)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
TRENTON, NJ

Mail to

NJDEPE
Bureau Water Allocation
[illegible]
Trenton, NJ 08625

Permit No 29317

MONITORING WELL PERMIT

VOID ONLY AFTER APPROVAL BY THE D.E.P.E.

COUNTY # 13364

Owner U.S. Army Fort Monmouth

Address SELFM-PW-EV
Fort Monmouth, NJ 07703

Name of Facility Bldg 1166

Address Main Post
Fort Monmouth, NJ

Driller Tyree Organization, Ltd

Address 1330 US Hwy 130
Burlington NJ 08016

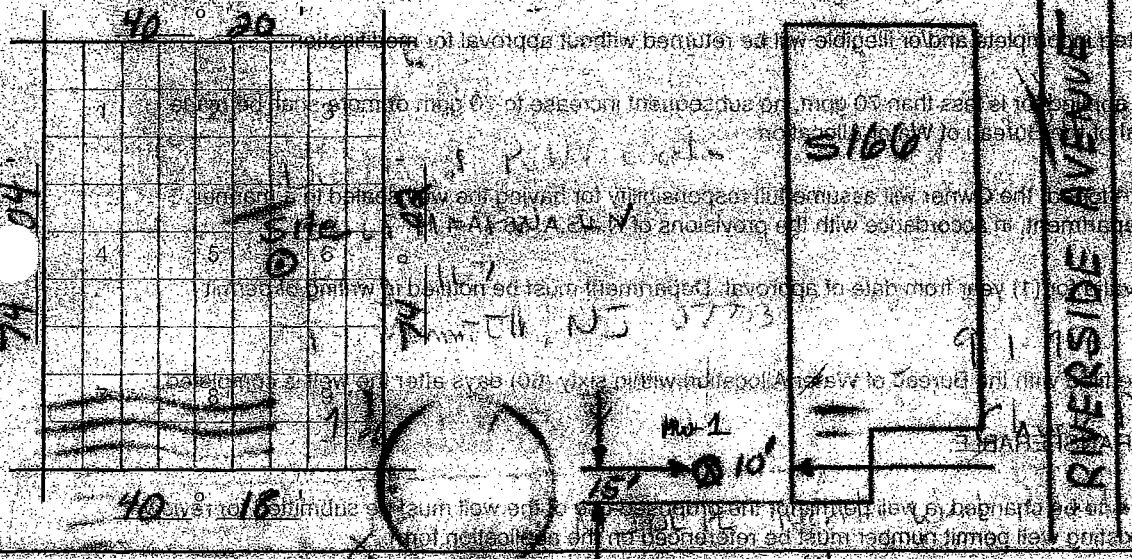
Diameter of Well(s) 4 inches	Proposed Depth of Well(s) 15 Feet
# of Wells Applied for (max. 10) 1	Will pumping equipment be installed? YES ☐ NO ☒
Type of Well (see reverse) Monitoring	If Yes, give pump capacity N/A GPM

LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
		Fort Monmouth	Monmouth

State Atlas Map No. 29 Oceanport

Draw sketch of well(s) nearest roads, buildings, etc. with marked distances in feet. Each well MUST be labeled with a name and/or number on the sketch.



FOR MONITORING WELLS, RECOVERY WELLS, OR PIEZOMETERS, THE FOLLOWING MUST BE COMPLETED BY THE APPLICANT. PLEASE INDICATE WHY THE WELLS ARE BEING INSTALLED.

- ☐ Spill Site
- ☐ ISRA Site
- ☐ CERCLA (Superfund) Site
- ☐ RCRA Site
- ☒ Underground Storage Tank Site
- ☐ Operational Ground Water Permit Site
- ☐ Pretreatment and Residuals Site
- ☐ Water and Hazardous Waste Enforcement Case
- ☐ Water Supply Aquifer Test Observation Well
- ☐ Other (explain)

CASE I.D. Number

~~N/A~~
94-6-16-1545-09
(Site Bldg 166)

This Space for Approval Stamp

9/1/94

WELL PERMIT APPROVED
N.J.D.E.P.
AUG 31 1994
BUREAU OF WATER ALLOCATION

FOR D.E.P.E. USE

☐ Issuance of this permit is subject to the conditions attached. (see next page)
☐ For monitoring purposes only

☐ The well(s) may not be completed with more than 25 feet of total screen or uncased borehole.

REVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT.

In compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well as described above.

Date 7-25-94

Signature of Driller [signature] License # 1421

Signature of Owner [signature] SELFM-PW-EV

COPIES: Water Allocation — White and Pink Health Dept. — Yellow Owner — Blue Driller — White

SERIAL # 016986

DWR-T33M (10/95)

29431?
29432?
29432?
29432?

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Permit No. 29432?

Mail to
NJDEP
Bureau Water Allocation
426
nton, NJ 08625-0426

MONITORING WELL PERMIT

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COORD.: 79, 13, 6.6, 4

Owner U.S. ARMY

Address 173 RIVERSIDE AVE.
FT. MONMOUTH N.J. 07703

Name of Facility BLDG. 166 (FORMER BLDG. 80)

Address 166 RIVERSIDE AVE.
FT. MONMOUTH, N.J. 07703

Driller Lutz Environmental Co. Inc

Address P.O. Box 1242, 2020 Clinton St
Linden, N.J. 07036

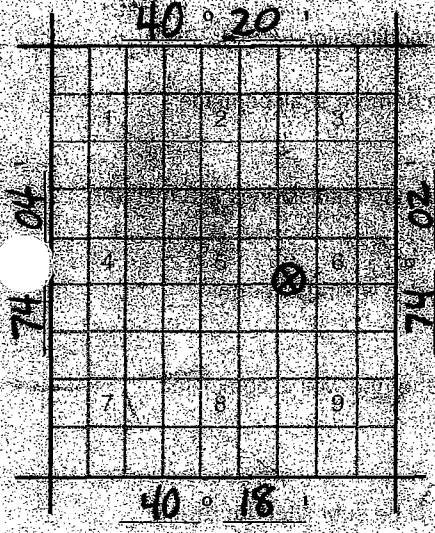
Diameter of Well(s)	4 inches	Proposed Depth of Well(s)	20 Feet
# of Wells Applied for (max. 10)	4	Will pumping equipment be installed?	YES ☐ NO ☑
Type of Well (see reverse)	MONITOR	If yes, give pump capacity	N/A cumulative GPM

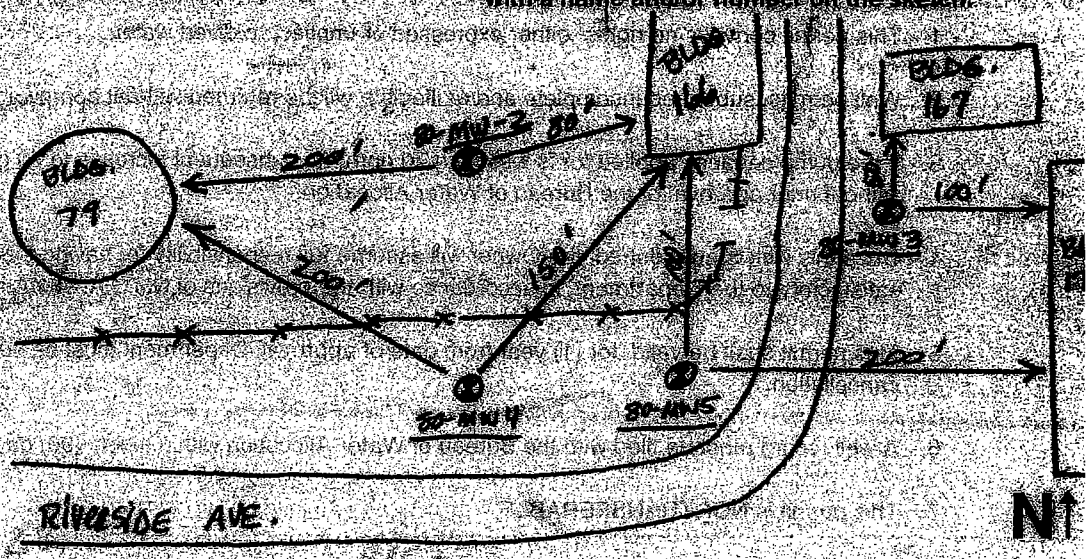
LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
N/A	N/A	OCEANPORT	MONMOUTH

State Atlas Map No. 29

Draw sketch of well(s) nearest roads, buildings, etc. with marked distances to them. Each well MUST be labeled with a name and/or number on the sketch.





FOR MONITORING WELLS, RECOVERY WELLS, OR PIEZOMETERS, THE FOLLOWING MUST BE COMPLETED BY THE APPLICANT. PLEASE INDICATE WHY THE WELLS ARE BEING INSTALLED:

- ☐ Spill Site
- ☐ ISRA Site
- ☑ CERCLA (Superfund) Site
- ☐ RCRA Site
- ☑ Underground Storage Tank Site
- ☐ Operational Ground Water Permit Site
- ☐ Pretreatment and Residuals Site
- ☐ Water and Hazardous Waste Enforcement Case
- ☐ Water Supply Aquifer Test Observation Well
- ☑ Other (explain) OWNER INVESTIGATION

CASE I.D. Number

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
JUN 19 2000
BUREAU OF WATER ALLOCATION

FOR D.E.P. USE

☐ Issuance of this permit is subject to the conditions attached. (see next page)
☑ For monitoring purposes only
☑ The well(s) may not be completed with more than 26 feet of total screen or uncased borehole.

REVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT

In compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well as described above.

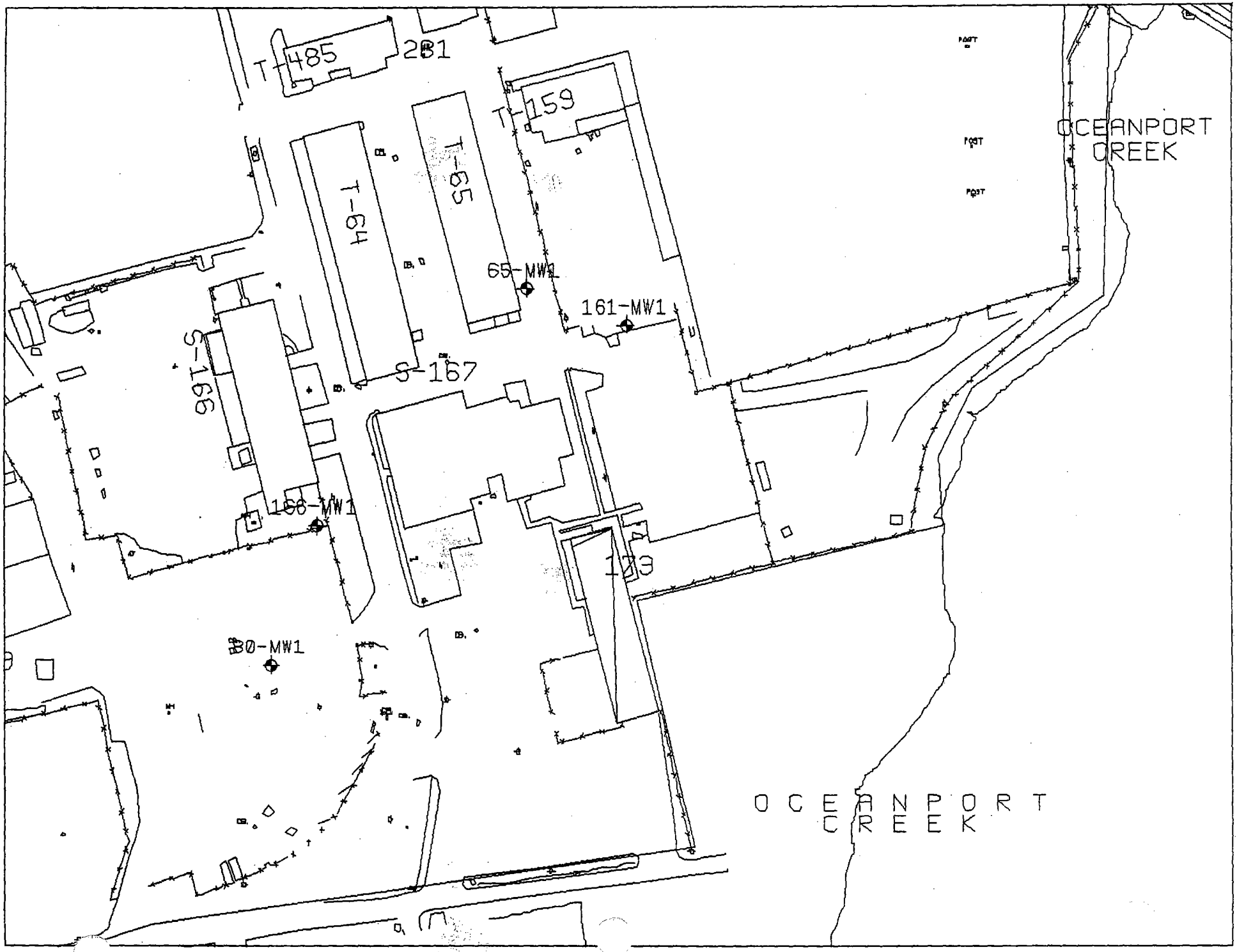
Date 6-9-00

Signature of Driller Timothy Washburn

Registration No. 14444

Signature of Owner Joseph J. Fallon

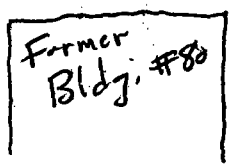
COPIES: Water Allocation — White Health Dept. — Yellow Owner — Blue Driller — White


T-485
281
T-159
T-64
T-65
65-MW1
161-MW1
S-167
S-166
166-MW1
133
80-MW1
OCEANPORT
CREEK
OCEANPORT
CREEK

FIELD LOG OF BORING

SHEET 1 OF 2

LOCATION OF BORING:



PROJECT: US Army Fort Monmouth
BORING NO: MW-1
TOTAL DEPTH: 13'
JOB NO:
LOGGED BY: E. Pike
PROJ. MGR.: Capriffi
EDITED BY:
DRILLING CONTRACTOR: Tyree
DRILL RIG TYPE: B 80
DRILLERS NAME: M. Beck
SAMPLING METHODS: SS
HAMMER WT.: 120 | 165, DROP:
STARTED, TIME: 8:30 DATE:
COMPLETED, TIME: 9:20 DATE:
BORING DEPTH (ft): 13
CASING DEPTH (ft): 3
WATER DEPTH (ft): 3'2"
TIME:
DATE: 9/13/94
BACKFILLED, TIME: 9:25 DATE: 9/15/94 BY: Tyree
SURFACE ELEV: DATUM:
CONDITIONS:

SAMPLE DEPTH	SAMPLER TYPE	BLOWS / 6 IN.	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	DRILLING RATE (min./ft.)	PID READING (ppm)	ODOR (Y / N ?)	GRAPHIC WELL CONST.	DEPTH IN FEET	GRAPHIC LOG	
									* *			Asphalt / Subbase
									Casing / Bentonite	1	SP	Black fine sand with crumbly asphalt
2-4'	SS	11	6	20			50	Y		2	SM	Black silts + fine sands; wet at ≡ 3'. Sample collected at the 2-4' interval. Strong waste oil, heating oil odors.
		3	6									
		1	6				100	Y		3	SM	Olive gray silts + fine sands
		3	6									
										4		Olive gray soft clay w/ black soft clay; soil discoloration; strong waste oil, heating oil odors
									Screen / Morie sand	5		
										6	CL	
										7		
										8		
										9		
											CL	Olive gray soft clay w/ pebbles
										10	SP	Yellowish-orange, fine-medium sand; wet

TYREE ENVIRONMENTAL TECHNOLOGIES

80

FIELD LOG OF BORING (CONTINUED)

SHEET 2 OF 2

DEPTH	TYPE	BLOWS	DRIVEN	REC'VD	COND.	D. RATE	PID	ODOR	GR.WELL	DEPTH	GRAPHIC LOG
									Screen / Sand	11	
										12	
										13	
										14	
										5	
										6	
										7	
										8	
										9	
										0	
										1	
										2	
										3	
										4	
										5	
										6	
										7	
										8	

PROJECT: | NO: | BORING NO: MW-1

Bldg. #80

TYREE ENVIRONMENTAL TECHNOLOGIES

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth County, NJ

NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-31774
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74°01'44.1"
Latitude (one tenth of a second): North 40°19'02.1"
Elevation of Top of Casing (cap off) 6.84
Distance from Top of Casing (cap off) to ground 0.81
Owner's Well Number (As shown in the application or Plans): 80-MW-1
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Frederick W. Kocen Jr.
Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name SEAL

N.J. Lic. #34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.

MONITORING WELL CERTIFICATION-FORM B-LOCATION CERTIFICATION

Name of Permittee: U.S. ARMY
Name of Facility: FORT MONMOUTH
Location: MONMOUTH COUNTY, NJ
~~NJPDES~~ Number: 94-6-16-1127-25
Drar

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing. 29-31774-

Longitude (to nearest second): West 74° 01' 44.54"

Latitude (to nearest second): North 40° 19' 01.84"

Elevation of Top of Inner Casing (cap off) (one-hundredth of a foot): 6.91

Elevation of ground level (1/100th ft.) 7.83

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the Department, identify here, assume datum of 100', and give approximated actual elevation.) Source: MON. FM-6

☒ 1927 ☐ 1983

Elev.:

Owners Well Number (As shown on application or plans): BLDG. T-80 MW-1

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from Federal or State benchmarks if not more than 1000 feet from the site or from an alternate datum approved by the Department. Tolerances should meet third order standards, which are 0.05 ft x (miles)$^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Wayne W. Burgett
PROFESSIONAL LAND SURVEYOR'S SIGNATURE

WAYNE W. BURGETT
PROFESSIONAL LAND SURVEYOR'S NAME
(Please print or type)

SEAL

31654
PROFESSIONAL LAND SURVEYOR'S LICENSE #

Monitoring Well Construction Sheet

Project:	Fort Monmouth	Owner:	U.S. Army		
Location:	Building 167	Permit Number:			
Well Number:	MW-2	Total Depth:	12'		
Casing Elev.:		Water Level Initial:	approx. 4'		
Screen Diam.:	4 inches	Length:	10'	Slot Size:	0.010"
Casing Diam.:	4 inches	Length:	2'	Type:	PVC
Drilling Method:	Hollow Stem Auger	Sample Method:	2 inch Split Spoon		
Driller: Lutz		Log By: Brian Finnegan	Date: 07/24/2000		

Depth	Component Depth Below Ground Surface	Well Const.	Well Components
+3			
+2			
+1			
0			ground surface
1	top of grout		approximately 0.5-4' 4" diameter schedule 40 PVC soild riser pipe
2	top of plug 0.75'		
3	top of gravel pack 1.5'		
4			
5	top of screen 2'		
6			approximately 1.5'-12' #2 gravel pack
7			
8			
9			2'-12' 4" diameter, 0.010" slot, schedule 40 PVC screen
10	total depth of well 12'		
11			
12	total depth of boring 12'		
13			
14			
15			12" diameter bore hole
16			
17			native material
18			
19			
20			
21			

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

BORING LOG:

WELL NO. 80-MW-2 COORDINATE NO. 29-13-664 PERMIT NO. 29-43199

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 07

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA. 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT; 2" SOLID CASING; CEMENT; BENT; BENT; #1 WELL GRAVEL; 10'-.010 SLOT SCREEN; #1 WELL GRAVEL	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		WQ1		
		REC		
		ORD		
		ED		
		BY		
		DRILLER		

Cut well @ 12'

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth County, NJ

NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-43199
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74°01'44.9"
Latitude (one tenth of a second): North 40°19'02.6"
Elevation of Top of Casing (cap off) 7.68
Distance from Top of Casing (cap off) to ground 0.33
Owner's Well Number (As shown in the application or Plans): 80-MW-2
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Frederick W. Kocen Jr.
Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name SEAL

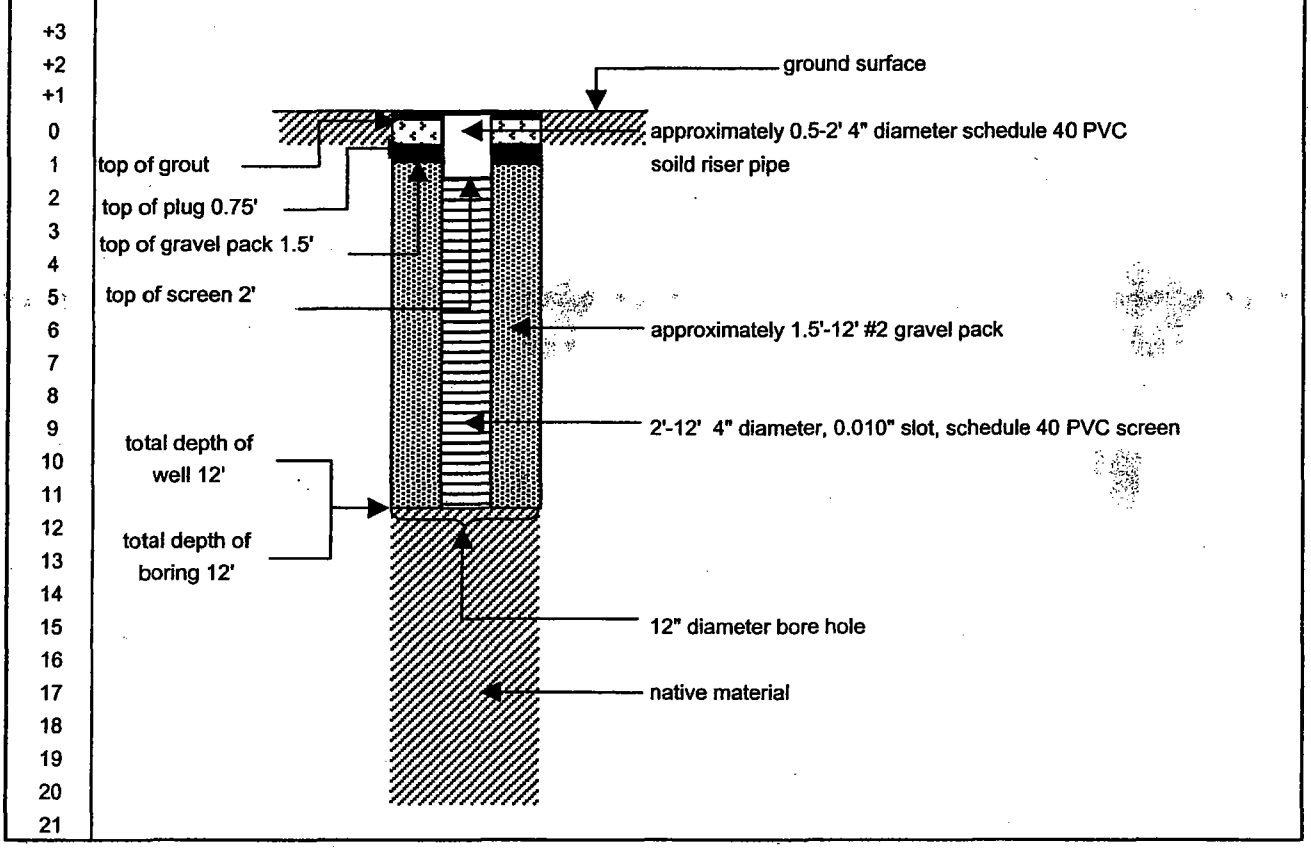
N.J. Lic. #34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.

Monitoring Well Construction Sheet

Project:	Fort Monmouth	Owner:	U.S. Army		
Location:	Building 167	Permit Number:			
Well Number:	MW-3	Total Depth:	12'		
Casing Elev.:		Water Level Initial:	approx. 4'		
Screen Diam.:	4 inches	Length:	10'	Slot Size:	0.010"
Casing Diam.:	4 inches	Length:	2'	Type:	PVC
Drilling Method:	Hollow Stem Auger	Sample Method:	2 inch Split Spoon		
Driller: Lutz		Log By: Brian Finnegan		Date: 07/24/2000	

Depth	Component Depth Below Ground Surface	Well Const.	Well Components



LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

BORING LOG:

WELL NO. 80-MW-3 COORDINATE NO. 29-13-664 PERMIT NO. 29-43201

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 0

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 0

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOON COMPOSITE	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT; 2" SOLID CASING; CEMENT; #1 WELL GRAVER; 10' - .010 SLOT SCREEN; #1 WELL GRAVER	0'-12' → ORANGE/TAN, CLAYEY SILTS AND SANDS

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ

NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-43202
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74°01'42.4
Latitude (one tenth of a second): North 40°19'02.7
Elevation of Top of Casing (cap off) 7.63
Distance from Top of Casing (cap off) to ground 0.23
Owner's Well Number (As shown in the application or Plans): 80-MW-3
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name SEAL

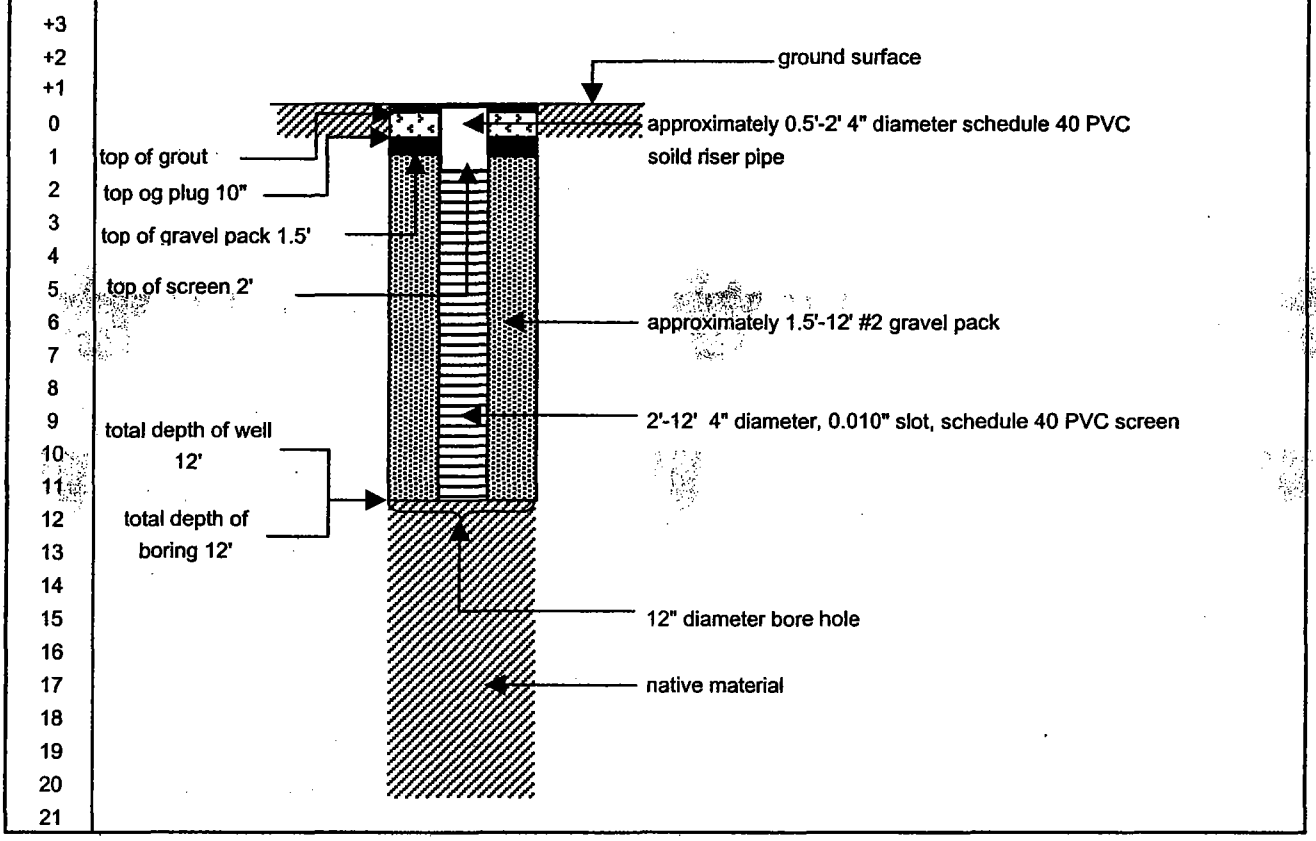
N.J. Lic. # 34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.

Monitoring Well Construction Sheet

Project:	Fort Monmouth	Owner:	U.S. Army		
Location:	Building 167	Permit Number:			
Well Number:	MW-4	Total Depth:	12'		
Casing Elev.:		Water Level Initial:	approx. 4'		
Screen Diam.:	4 inches	Length:	10'	Slot Size:	0.010"
Casing Diam.:	4 inches	Length:	2'	Type:	PVC
Drilling Method:	Hollow Stem Auger	Sample Method:	2 inch Split Spoon		
Driller: Lutz		Log By: Brian Finnegan		Date: 07/24/2000	

Depth	Component Depth Below Ground Surface	Well Const.	Well Components



LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

BORING LOG:

WELL NO. 80-MW-4 COORDINATE NO. 29-13-664 PERMIT NO. 29-43200

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 07703

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07703

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA. 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT; 2" SOLID CASING; CEMENT; #1 WELL GRAVEL; 10'-.010 SLOT SCREEN; #1 WELL GRAVER	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		WATER		
		RECOVERED		
		BY		
		DRILLER		

EOT @ 12'

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ

NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-43200
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74° 01' 44.0"
Latitude (one tenth of a second): North 40° 19' 01.4"
Elevation of Top of Casing (cap off) 7.46
Distance from Top of Casing (cap off) to ground 0.30
Owner's Well Number (As shown in the application or Plans): 80-MW-4
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name SEAL

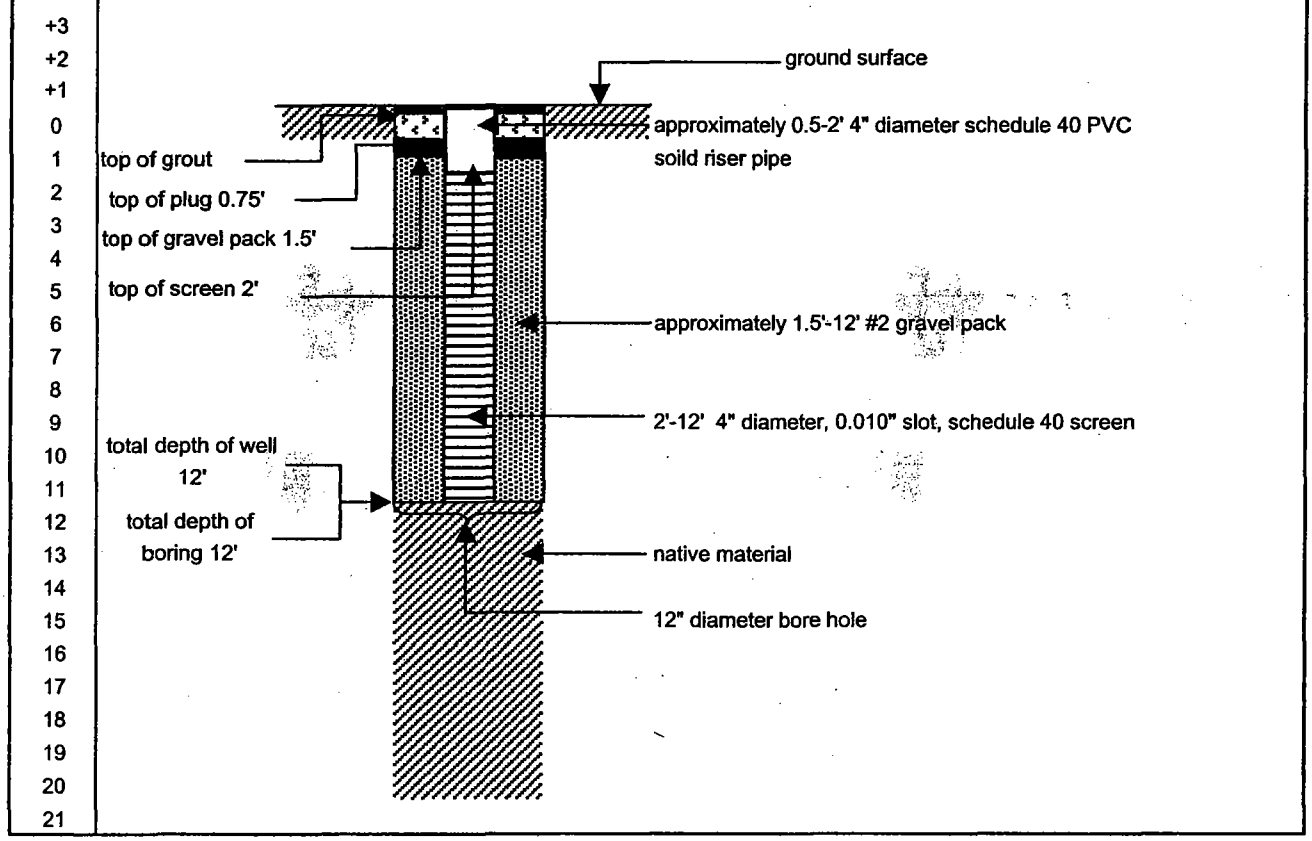
N.J. Lic. # 34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.

Monitoring Well Construction Sheet

Project:	Fort Monmouth	Owner:	U.S. Army		
Location:	Building 167	Permit Number:			
Well Number:	MW-5	Total Depth:	12'		
Casing Elev.:		Water Level Initial:	approx. 4'		
Screen Diam.:	4 inches	Length:	10'	Slot Size:	0.010"
Casing Diam.:	4 inches	Length:	2'	Type:	PVC
Drilling Method:	Hollow Stem Auger	Sample Method:	2 inch Split Spoon		
Driller: Lutz		Log By: Brian Finnegan		Date: 07/24/2000	

Depth	Component Depth Below Ground Surface	Well Const.	Well Components



LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

BORING LOG:

WELL NO. 80-MW-5 COORDINATE NO. 29-13-664 PERMIT NO. 29-43202

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 0

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 0

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE WITH 1X1 CONCRETE PAD; CEMENT GROUT; 2' SOLID CASING; CEMENT GROUT	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		WATER	10', .010 SLOT SCREEN; #1 WELL GRAVEL	
		RECORDED BY		
		DRILLER		SET WELL @ 12'

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ

NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-43202
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74° 01' 43.3"
Latitude (one tenth of a second): North 40° 19' 01.6"
Elevation of Top of Casing (cap off) 7.14
Distance from Top of Casing (cap off) to ground 0.22
Owner's Well Number (As shown in the application or Plans): 80-MW-5
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name SEAL

N.J. Lic. # 34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.

U.S. ARMY
FORT MONMOUTH
SELFM PW EV

LOG OF BORING 166-MW1

Mainpost Well Logs

Project Name	: BLDG. 166	Completion Date	: 08/03/94
NJDEP CASE #	: 94-6-16-1545-09	NORTHING	: N 541238.652
Logged By	: TYREE INC.	EASTING	: E 2177852.302
start date	: 08/03/94	Driller	: M. BECK

29-31777
ELEV: 6.96

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Samples	Blows/Ft	% Recovery
0	Asphalt subbase		14			
1.	Black fine sand with asphalt		SP			
2.	Medium brown silts and fine sand with few pebbles		SM			
	Medium brown, fine/medium sand wet at 3ft with black fines		SP	1	12	100
4	Greenish grey soft clay with light brown, fine sand + silts		CL			
	Dark brown silts with light brown soft clay, moist at approx. 6'		CL	2	10	100
6	Brown soft clay with black fines; wet at approx. 11'					
8						
10			CL			
12						
12.						
13						
14						

10/94

Well Construction Information

WELL CONSTRUCTION

Date Compl.	: 10/05/94
Hole Diameter	: 8 in
Drill. Method	: HSA
Company Rep.	: M. BECK

WELL CASING

Material	: PVC
Diameter	: 4 in.
Joints	: threaded

WELL SCREEN

Material	: PVC
Diameter	: 4 in.
Joints	: threaded
Opening	: 20 slot
SAND PACK	: #2 MORIE SAND
ANNULUS SEAL	: Bentonite/Portland : TREMMIE

WELL SCREEN

Material	: PVC
Diameter	: 4 in.
Cap	:

NOTES

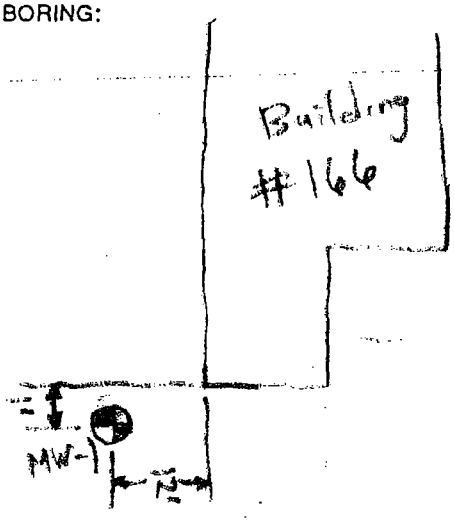
Well #1 is 166 MW1
Flushmount
Water depth 3.5'

3-5-1996 c:\mp1\geo\166mw1.ge3

FIELD LOG OF BORING

SHEET 1 OF 2

LOCATION OF BORING:



PROJECT: US Army Fort Monmouth	BORING NO: MW-1
	TOTAL DEPTH: 10'
JOB NO:	LOGGED BY: E. Pyle
PROJ. MGR.: Capriotti	EDITED BY:
DRILLING CONTRACTOR: Tyree	
DRILL RIG TYPE: B 80	
DRILLERS NAME: M. Beck	
SAMPLING METHODS: SS	
HAMMER WT.: 120 lbs.	DROP:
STARTED, TIME: 12:00	DATE:
COMPLETED, TIME: :00	DATE:
BORING DEPTH (ft): 10'	
CASING DEPTH (ft): —	
WATER DEPTH (ft): 3'1"	
TIME:	
DATE: 10/3/94	
BACKFILLED, TIME: 1:05	DATE: 9/14/94 BY: Tyree
SURFACE ELEV:	DATUM:
CONDITIONS:	

SAMPLE DEPTH	SAMPLER TYPE	BLOWS / 6 IN.	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	DRILLING RATE (min./ft.)	PID READING (ppm)	ODOR (Y / N ?)	GRAPHIC WELL CONST.	DEPTH IN FEET	GRAPHIC LOG	
						Bentonite						Asphalt / Subbase
										1	SP	Black fine sand with cmmbly app
												Medium brown, silts + fine sand
2-4'	SS	3	6	18			<1	N		2	SM	w/ few pebbles
		3	6									
		5	6							3		Med. brown, fine-medium sand,
		6	6					N				wet at ≈ 3'
										4		
										5		
									Screen Sand	6	SP	
										7		
										8		
										9		
										10		
											SP	Medium brown, fine-medium sand w/ [illegible]

1616

FIELD LOG OF BORING (CONTINUED) SHEET 2 OF 2

DEPTH	TYPE	BLOWS	DRIVEN	REC'VD	COND.	D. RATE	PID	ODOR	GR.WELL	DEPTH	GRAPHIC LOG
							0	Y		11	
										12	GP
										13	
										14	
										5	
										6	
										7	
										8	
										9	
										0	
										1	
										2	
										3	
										4	
										5	
										6	
										7	
										8	

PROJECT: | NO: | BORING NO: MW-1

Pea gravel; rounded

Note: No sample was collected. However, pea gravel at approx. 11'-13' had a strong waste oil, heating oil odor. HNu reading was approx. 5 ppm.

MONITORING WL CERTIFICATION-FORM B-LOCAT] CERTIFICATION

Name of Permittee: U.S. ARMY
Name of Facility: FORT MONMOUTH
Location: MONMOUTH COUNTY, NJ
~~NJPDES~~ Number: 94-6-16-1545-09
Dear
LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 29-31773-
This number must be permanently affixed to the well casing.

Longitude (to nearest second): West 74°01'44.69"

Latitude (to nearest second): North 40°19'03.08"

Elevation of Top of Inner Casing (cap off) (one-hundredth of a foot): 6.96

Elevation of ground level (1/100th ft) 7.49

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the Department, identify here, assume datum of 100', and give approximated actual elevation.) Source: MON. FM-6

☒ 1927 ☐ 1983

Elev.:

Owners Well Number (As shown on application or plans): BLDG. 166 MW-E

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from Federal or State benchmarks if not more than 1000 feet from the site or from an alternate datum approved by the Department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Wayne W. Burgett
PROFESSIONAL LAND SURVEYOR'S SIGNATURE

WAYNE W. BURGETT
PROFESSIONAL LAND SURVEYOR'S NAME
(Please print or type)

SEAL

31654
PROFESSIONAL LAND SURVEYOR'S LICENSE

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ

NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-31773
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74°01'44.3"
Latitude (one tenth of a second): North 40°19'03.3"
Elevation of Top of Casing (cap off) 6.91
Distance from Top of Casing (cap off) to ground 0.38
Owner's Well Number (As shown in the application or Plans): 166-MW-1
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name SEAL

N.J. Lic. # 34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.

Appendix D

Site Investigation Report – Main Post and Charles Wood Areas, Fort Monmouth, New Jersey, Roy F. Weston, Inc., December 1995

4.2 MAIN POST

Subsection 4.2 presents a description of each Main Post site, the sampling rationale, and the results of sampling activities. The sites and the sampling effort are summarized in Table 4.2-1. Additional historical information on each site may be obtained from the *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey*, 1993.

This subsection also summarizes the results of the sediment, surface-water, soil, and groundwater sampling program that was implemented to characterize site conditions on the Main Post, as identified in the WESTON report titled *Site Investigation, Chemical Data Acquisition Plan* (CDAP). A total of 4 sediment and 8 surface-water samples were taken on the Main Post. In addition, a total of 15 soil borings and 29 monitor wells were installed on Main Post sites. Soil and groundwater samples were collected from the borings and monitor wells and were analyzed for compounds determined to be characteristic of the wastes associated with each area, i.e., TCL and TAL analytes (Tables 3.6-1 and 3.8-1).

The field effort was conducted in accordance with the scope and procedures outlined in the CDAP. However, there were slight differences, which are summarized in Table 4.2-2. Appendix D presents the analytical results of the Main Post sampling activities. Detailed information regarding the specific sampling protocols for each site is provided in the subsections that follow. In addition to the results of groundwater and soil analyses, the lithologic descriptions and water-level information are used to provide a hydrogeologic interpretation of the site, where appropriate.

Figure 4.2-1 shows the location of the 13 Main Post sites discussed in this subsection.

4.2.1 Background Samples

The background sample locations were selected prior to the initiation of field activities in areas believed to be unaffected by base activities. These locations were as specified in the

Table 4.2-1

Site Investigation Summary — Main Post

Site Number	Site Type	Description	Potential Waste/ Contaminants	Previous Sampling Activities[a]	Investigation Activities
M-2	Landfill	Operated 1964-1968. Currently used for leaf composting and to store wood chips. Debris protrudes from bank of Mill Creek. Was unfenced — covered with soil and gravel from Earle.	Domestic and industrial waste, oil in cans, filters, soot, and building rubble.	NJPDES sampling upstream (SW-1) and downstream (SW-2) on Mill Creek. Detected VOCs, metals, and inorganics.	Installed and sampled 3 monitor wells. Sampled surface water at the NJPDES locations (M2SW-1 and M2SW-2) and a new upstream surface-water location (SS-B1). Analyzed for TCL +30[b]/TAL/CN. Tidal water-level monitoring.
M-3	Landfill	Operated 1959-1964. Was fenced; had skeet shooting range. Burned wood debris. Had tear gas training in tent. Currently grass-covered; no visible debris.	Domestic and industrial waste. Wood and coal ash from stoves, boiler.	NJPDES sampling locations SS-3, SS-4. Detected VOCs, metals, and inorganics.	Sampled surface water at the NJPDES locations (M10SW-1 and M6SW-1) and upstream surface-water sampling location (SS-B2). Used GPR and magnetics to define extent of landfill. Installed and sampled 3 monitor wells. Analyzed for TCL +30/TAL/CN.
M-4	Landfill	Operated 1956 only. Currently grass-covered; no visible debris.	Building rubble.	None.	Installed and sampled 3 monitor wells. Analyzed for TCL +30/TAL/CN.
M-5	Landfill	Operated 1952-1959. Currently grass-covered; no visible debris.	Domestic and industrial waste.	NJPDES sampling locations SS-5, SS-6. Detected VOCs, metals, and inorganics.	Installed and sampled 2 monitor wells. Analyzed for TCL +30/TAL/CN/sulfate.
M-6	Burning area	Located on Landfill M-3. Operated until 1970s. Burned general trash. Currently no visible contamination.	General trash.	None.	See M-3.
M-8	Landfill	Operated 1962-1981. Currently has leaf-composting operation. Was fenced and controlled during operation.	Domestic and industrial waste including pesticide/herbicide cans, batteries, asbestos, sludge from STP, and miscellaneous chemicals.	Four monitor wells, NJPDES sampling location SS-7.	Abandoned existing wells and piezometers; installed 4 new monitor wells. Analyzed for TCL +30/TAL/CN/NH_3/sulfate. Tidal water-level monitoring.
M-12	Landfill	Date of operation unknown. Located across Husky Brook from M-14.	Domestic and industrial waste, automobiles, oil, and building rubble.	NJPDES sampling locations SS-8, SS-9, and SS-10.	Used GPR and magnetics to locate landfill and define boundaries. Installed 3 monitor wells. Analyzed for TCL +30/TAL/CN. Tidal monitoring with M-14.
M-14	Landfill	Operated from 1965-1966. Has NJPDES permit.	Building rubble and dredgings from Husky Brook Lake.	NJPDES sampling upstream and downstream on Husky Brook Creek, SS-8, SS-9, and SS-10.	Used GPR and magnetics in western area. Installed and sampled 3 monitor wells for TCL +30/TAL/CN. Tidal monitoring with M-12. Sampled M14SW-8 and M14SW-9 surface-water locations.

Table 4.2-1

Site Investigation Summary — Main Post (Continued)

Site Number	Site Type	Description	Potential Waste/ Contaminants	Previous Sampling Activities[a]	Investigation Activities
M-15	Water tank	Used for fire-fighting water. Built in 1940s. Paint chips on ground surrounding tank. Stressed vegetation around base of tank.	Lead.	None.	Collected 2 surface soil samples. Analyzed for TCL SVOCs, TAL, and pesticides.
M-16	Former Pesticide Storage Bldg. 498	Misidentified as Bldg. 167 in 1980 report. Building 498 used for pesticide control shop in the 1940s and 1950s: disposal to sink, which discharged to sanitary sewer. No apparent outside disposal.	Pesticides and herbicides.	None.	Collected 4 soil samples from 0 to 6 inches bgs. Installed soil boring and 1 monitor well. Analyzed for TCL +30. Analyzed for TAL in SB-01.
M-18	Former training area	Army Signal School. Diesel and gasoline generators.	Diesel and oil spilled on ground. PAHs, VOCs, TPHs, lead.	None.	Conducted geophysical surveys, completed 9 soil borings, sampled 6 to 12 inches or 12 to 18 inches, stained areas, and/or just above water table. Installed 2 monitor wells in soil borings. Sampled soil for VOCs and TPHs. In addition, sampled for SVOCs and TAL at SB-06 only. Sampled groundwater for TCL +30/TAL/TPHs.
AOC-3	Former sewage treatment plant	Operated 1941-1975. Sludge drying bed located on concrete base. Sludge transported to golf course and landfills. 1935 map shows pistol range on this location.	Heavy metals, cyanide, and pesticides.	Monitor wells installed west of site. Sludge sampled in 1981; no heavy metals detected.	Sampled outfall sediments and 2 soil borings in sludge bed area for TCL + 30/TAL/CN.
New Site, Not Noted in IA Report	Former treatment plant	Operated until 1941. Located approximately where Bldg. 250 is today. Labeled on 1935 map.	Heavy metals.	None.	Sampled outfall sediment for metals.
PCB Trans-formers	Buildings (see Table 4.2-22)	Several transformers in this area were tested for PCBs in 1990. Those with PCBs >500 ppm were removed or remediated.	PCBs	Transformers sampled — several > 500 ppm. See Table 4.2-22.	Sampled PCB transformer locations.

[a]Results of previous investigation were presented on the report titled *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey* (1993).
[b]TCL +30 = Target Compound List; includes volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs).

Table 4.2-2

Differences Between the Proposed and Actual Work at Main Post

Site	Differences
M-15	Soil samples from SS-01 and SS-02 were collected and analyzed for TCL SVOCs; however, TCL SVOC analyses were not proposed in the CDAP.
M-16	Soil samples from SB-01 were collected and analyzed for TAL metals; however, TAL metals analyses were not proposed in the CDAP.
M-18	Installed 9 soil borings instead of 12, and 2 monitor wells instead of 3 because marshy conditions made some of the planned sampling locations inaccessible. Sampled one existing monitor well in addition to the 2 newly installed wells. In eight of nine soil borings, no soil staining was observed so no SVOC analysis was performed as per the CDAP.

Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey, 1993, which was approved by NJDEP. Background characterization data were collected to evaluate soil, groundwater, surface water, and sediment in areas of the base considered to be representative of natural materials or upgradient conditions.

Sediment and surface-water samples were taken upgradient of the Main Post on Lafetra Creek and Mill Creek. Five background soil borings, which were converted into monitor wells, were installed and two discrete soil intervals were sampled from each boring. Two rounds of groundwater samples were collected from each location. Soil and groundwater samples were analyzed for the parameters listed in Section 3, Tables 3.6-1 and 3.8-1. Background monitor wells were labeled as "B" wells, i.e., MW-01B. Main Post background locations are shown in Figure 4.2-2 and labeled B-1, B-2, etc. Monitor well MW-01B was installed at background location B-1 and a similar practice was followed at the other background locations.

4.2.1.1 Hydrogeologic Interpretation

The five monitor wells installed at the Main Post were installed to depths ranging from 14 ft below ground surface (bgs) to 26 ft bgs. Total depths were determined during drilling and were based on the depth at which water was encountered. The lithology and depth to water varied between background locations, as presented on the lithologic logs in Appendix A. Monitor wells were screened across the water table.

4.2.1.2 Soil Sampling Results

As outlined in the CDAP, soil samples were collected from two discrete intervals: 0 to 2 ft bgs and between 2 and 10 ft bgs or to groundwater. Soil-boring depths varied among the background locations, depending on the depth to groundwater. The compounds detected in background soil samples at the specific sampling intervals, with the corresponding sample identifications, are presented in Appendix D. Table 4.1-6 summarizes the maximum concentrations detected in background soil at the Main Post and presents published maximum concentrations for Monmouth County.

VOCs

VOCs were analyzed for but were not detected in Main Post background soil samples.

SVOCs

A total of 19 SVOCs were detected in Main Post background soil samples (Table 4.1-6).

Pesticides/PCBs

Three pesticides (4,4'-DDE, 4,4-DDD, and 4,4'-DDT) were detected above the laboratory quantitation limit in Main Post background soils.

Metals

A total of 19 metals were detected above laboratory quantitation limits in Main Post background soils.

Cyanide

Cyanide was not detected in any of the Main Post background soil samples.

4.2.1.3 Groundwater Sampling Results

Two rounds of groundwater samples were collected at the Main Post. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.1-6 summarizes the maximum background concentrations detected in groundwater at the Main Post.

VOCs

VOCs were not detected in any of the background samples from the Main Post.

SVOCs

Two SVOCs [bis(2-ethylhexyl) phthalate and chrysene] were detected in concentrations above or below the laboratory quantitation limits. However, bis(2-ethylhexyl) phthalate is a common laboratory contaminant.

Pesticides/PCBs

One pesticide (heptachlor epoxide) was detected in the background groundwater samples in a concentration below the laboratory quantitation limit. PCBs were not detected at the background locations.

Metals

As indicated in Table 4.1-6, 22 metals (total) were detected in concentrations above laboratory quantitation limits in background groundwater at the Main Post.

Cyanide

Cyanide was not detected in the background groundwater at the Main Post.

4.2.1.4 Surface-Water Sampling Results

Two surface-water samples collected at locations upgradient from on-site drainage (SS-B1 and SS-B2) were selected as background samples (Figure 4.2-2). The analytes detected in background surface water and corresponding sample identifications are presented in Appendix D.

Table 4.1-8 summarizes the maximum detected concentrations in total and soluble background surface water at the Main Post.

VOCs

VOCs were analyzed for but not detected in background surface water (total) at the Main Post. VOC analysis was not performed for the soluble background surface-water samples.

SVOCs

SVOCs were analyzed for but not detected in background surface water (total) at the Main Post. SVOC analysis was not performed for the soluble background surface-water samples.

Metals

A total of 13 metals were detected above laboratory quantitation limits at the Main Post. Similarly, 11 metals were detected above laboratory quantitation limits in the filtered (soluble) background surface-water samples (Table 4.1-8).

4.2.1.5 Sediment Sampling Results

Two sediment sampling locations at the Main Post, SS-B1 and SS-B2, were selected as background because they are located upgradient of on-site drainage (Figure 4.2-2). Analytes detected in background sediment and corresponding sample identifications are presented in Appendix D. Table 4.1-8 summarizes the maximum detected concentrations in background sediment at the Main Post.

VOCs

Four VOCs (acetone, 2-butanone, 1,2-dichloroethene, and vinyl chloride) were detected above the laboratory quantitation limits in Main Post background sediments. However, acetone and 2-butanone are common laboratory contaminants.

SVOCs

One SVOC, di-n-butyl phthalate, was detected in concentrations above the laboratory quantitation limits in Main Post background sediment. Benzo(a)pyrene was the only polyaromatic hydrocarbon (PAH) compound detected in concentrations above the laboratory quantitation limits in Main Post background sediment.

Pesticides

Pesticides were analyzed for but not detected in background sediments at the Main Post.

Metals

A total of 19 metals in background sediment at the Main Post were detected above laboratory quantitation limits (see Table 4.1-8).

Appendix E

Current Conditions Site Photographs

SITE 80/166 – MAIN POST
FORT MONMOUTH, NEW JERSEY
JUNE 20, 2001



BACKGROUND: BUILDING 166
FOREGROUND: MONITORING WELL 80-MW2



BACKGROUND: BUILDING 173
FOREGROUND: MONITORING WELL 80-MW1

Appendix F

Laboratory Data Sheets for Monitoring Well Samples

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (908)532-6224 FAX: (908)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldgs. 80, 166

LABORATORY ID #	MONITOR WELL #	NJDEP WELL ID #	SAMPLE DATE
2457.03	B. 80/MW-1	2931774	04/16/97
2458.01	B. 166/MW-1	2931777	04/16/97

NJDEP Laboratory Certification # 13461

Report Date: 7 October, 97

Daniel Wright
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3111D
Antimony	3113B
Arsenic	3113B
Barium	3111D
Beryllium	3113B
Cadmium	3111B
Calcium	3111B
Chromium	3111D
Cobalt	3113B
Copper	3111B
Iron	3111B
Lead	3113B
Magnesium	3111B
Manganese	3111B
Mercury	3112B
Nickel	3111B
Potassium	3111B
Selenium	3113B
Silver	3111B
Sodium	3111B
Thallium	3113B
Vanadium	3111D
Zinc	3111B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #:
( )DERA ( )OMA ( )Other:

Project No:
Location: Bldg 80

Samplers Name / Company : Ray Poglist / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	Analysis Parameters: 624 + 15	Pb							Comments / Remarks / Preservation Method
24570 1	Trip Blank	4-16-97	0800	AQ	2	X								624 - HCl Pb - HNO_3
02	Field Blank	↓	1000	↓	3	X	X							All Samples Kept ≤ 4°C
↓ 03	Bldg 80 MW-1		1130		3	X	X							#243774

Relinquished by (signature)	Date/Time	Received by (signature)	Relinquished by (signature)	Date/Time	Received by (signature)
[signature]	4/16/97 1345	[signature]			
Relinquished by (signature)	Date/Time	Received by (signature)	Relinquished by (signature)	Date/Time	Received by (signature)

Report Type: (_)Full, ( )Reduced, ( )Standard, ( )Screen / non-certified
Turnaround time: (_)Standard 4 wks. (_)Rush ___ Days, (_)ASAP Verbal ___ Hrs.

Remarks:

print legibly

Custody xls4/3/97



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer:

Phone #:

( )DERA ( )OMA ( )Other:_____

Project No:

Location: Bldg 166

Samplers Name / Company : Ray Pogwist / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	624 T 15	Pb							Remarks / Preservation Method
2458 01	Bldg 166 MW-1	4/16/97	1015	AQ	3	X	X							#29 31777 Trip blank + Field ave shared w. Th # 2457 624 - HCl Pb - HNO3 All samples kept @ 4°C

Analysis Parameters

Comments:

Relinquished by (signature)	Date/Time	Received by (signature)	Relinquished by (signature)	Date/Time	Received by (signature)
[signature]	4/16/97 1345	[signature]			
Relinquished by (signature)	Date/Time	Received by (signature)	Relinquished by (signature)	Date/Time	Received by (signature)

Report Type. ( )Full, ( )Reduced, ( )Standard, ( )Screen / non-certified

Turnaround time: ( )Standard 4 wks. ( )Rush ____ Days. ( )ASAP Verbal ____ Hrs

Remarks:

print legibly

Custody xls4/3/97

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG: 80
MW# 1
NJDEP ID# 2931774
NJDEP CERT# 13461
SAMPLING CONTRACTOR TVS
SAMPLER: RAY POGWIST

DATE: 04/16/98 WEATHER: SUNNY WINDY 40'S

ELEVATION OF CASING SURVEY MARK 6.91
DTW: 2.60
DEPTH OF WELL: 12.3
HEIGHT OF WATER: 9.70
9.70 X 0.65 X 3 = 18.91
GAL OF H2O TO BE EVACUATED 18.91 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE .02 GPM
Hnu READING 0

PURGE START TIME: 9:45
pH: 9.71 TEMP 56.8 DEG F
DISSOLVED O2 2.5 PPM SPECIFIC CONDUCTIVITY 8.81 us/cm

PURGE END TIME: 11:21
pH: 6.51 TEMP 57.0 DEG F
DISSOLVED O2 2.3 PPM SPECIFIC CONDUCTIVITY 1990 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 3.00 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 19.0 GAL

pH: 6.43 TEMP 57.1 DEG F
DISSOLVED O2 2.2 PPM SPECIFIC CONDUCTIVITY 1990 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG: 166
MW# 1
NJDEP ID# 2931777
NJDEP CERT# 13461
SAMPLING CONTRACTOR TVS
SAMPLER RAY POGWIST

DATE: 04/16/97 WEATHER: SUNNY WINDY 40'S

ELEVATION OF CASING SURVEY MARK 6.96
DTW: 2.51
DEPTH OF WELL: 7.75
HEIGHT OF WATER: 5.24
5.24 X 0.65 X 3 = 10.22
GAL OF H2O TO BE EVACUATED 10.22 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.3 GPM
Hnu READING 0

PURGE START TIME: 9:35
pH: 5.88 TEMP 57.4 DEG F
DISSOLVED O2 2.7 PPM SPECIFIC CONDUCTIVITY 933 us/cm

PURGE END TIME: 10:10
pH: 6.32 TEMP 57.3 DEG F
DISSOLVED O2 2.4 PPM SPECIFIC CONDUCTIVITY 675 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 2.70 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 13.5 GAL

pH: 6.35 TEMP 57.2 DEG F
DISSOLVED O2 2.3 PPM SPECIFIC CONDUCTIVITY 670 us/cm

COMMENTS: _____

Organic Data Qualifiers

Form 1:

This form reports concentrations of Tentatively Identified Compounds. Form 1E is the Volatile report, Form 1F is for Semi-Volatiles.

Qualifiers are:

J	Estimated Value
N	Presumptive evidence of a compound
E	Concentration exceeds calibration range
D	Diluted sample
A	TIC is a suspected aldol condensation product

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	V00663	Sample Name	Daily Blank
	25-Apr-97	Field ID	Daily Blank
Analyst	Skelton	Dilution Factor	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	V00690	Sample Name	Daily Blank
	29-Apr-97	Field ID	Daily Blank
Analyst	Skelton	Dilution Factor	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			3.34 ppb	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **V00676.D**
Operator **Paul Skelton**
Date Acquired **04/25/97 23:38**

Sample Name **2457.01**
Field ID **Trip Blank**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v00677.d**
Operator **Paul Skelton**
Date Acquired **04/26/97 00:27**

Sample Name **2457.02**
Field ID **Field Blank**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v00678.d**
Operator **Paul Skelton**
Date Acquired **04/26/97 01:16**

Sample Name **2457.03**
Field ID **Bldg 80 MW1**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide	13.47	66943	2.31 ug/L	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene	20.69	14129	1.38 ug/L	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene	29.35	7752	2.61 ug/L	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**V00693.D**	Sample Name	**2458.01**
Operator	**Paul Skelton**	Field ID	**Bldg 166 MW1**
Date Acquired	**04/29/97 20:36**	Sample Multiplier	1

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride	13.49	25220	2.40 ug/L	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Daily Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: Location SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Daily Blank

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00663.D

Level: (low/med) LOW Date Received: 04/25/97

% Moisture: not dec. Date Analyzed: 04/25/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Daily Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: Location SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Daily Blank

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00690.D

Level: (low/med) LOW Date Received: 04/29/97

% Moisture: not dec. Date Analyzed: 04/29/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Trip Blank

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2457 Location B.80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2457.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00676.D

Level: (low/med) LOW Date Received: 04/16/97

% Moisture: not dec. Date Analyzed: 04/25/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2457 Location B.80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2457.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00677.D

Level: (low/med) LOW Date Received: 04/16/97

% Moisture: not dec. Date Analyzed: 04/26/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW1**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2457 Location B.80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2457.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00678.D

Level: (low/med) LOW Date Received: 04/16/97

% Moisture: not dec. Date Analyzed: 04/26/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown	13.47	3	J
2.	unknown	31.59	4	J
3.	unknown	32.60	7	J
4.	unknown	35.55	22	J
5.	unknown	35.79	13	J
6.	unknown hydrocarbon	36.06	42	J
7.	unknown	36.15	8	J
8. 000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	36.77	51	JN
9. 004920-99-4	Benzene, 1-ethyl-3-(1-methylethyl	37.02	4	JN
10.	unknown	37.15	34	J
11. 027133-93-3	2,3-Dihydro-1-methylindene	37.38	44	JN
12. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	37.75	71	JN
13.	unknown	38.01	7	J
14.	unknown	38.18	7	J
15.	unknown	38.34	10	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW1**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2458 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2458.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00693.D

Level: (low/med) LOW Date Received: 04/16/97

% Moisture: not dec. Date Analyzed: 04/29/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: NA
Analysis Start: 4/22/97
Analysis Completed: 4/22/97

Site: Ft. Monmouth
Building 80

Matrix: Aqueous

TEST PARAMETER: LEAD

Laboratory ID#	Sample Location Identification	Result (ug/L)	MDL (ug/L)
Method Blank	NA	ND	0.5

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2457.02-.03
Sample Received: 4/16/97
Analysis Start: 4/22/97
Analysis Completed: 4/22/97

Site: Ft. Monmouth
Building 80

Matrix: Aqueous

TEST PARAMETER: LEAD

Laboratory ID#	Sample Location Identification	Result (ug/L)	MDL (ug/L)
2457.02	Field Blank	0.5	0.5
2457.03	Bldg. 80 MW #1	2.5	0.5

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: NA
Analysis Start: 4/22/97
Analysis Completed: 4/22/97

Site: Ft. Monmouth
Building 166

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3113B
Method of Digestion: NA

TEST PARAMETER: LEAD

Laboratory ID#	Sample Location Identification	Result (ug/L)	MDL (ug/L)
Method Blank	NA	ND	0.5

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2458.01
Sample Received: 4/16/97
Analysis Start: 4/22/97
Analysis Completed: 4/22/97

Site: Ft. Monmouth
Building 166

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3113B
Method of Digestion: NA

TEST PARAMETER: LEAD

Laboratory ID#	Sample Location Identification	Result (ug/L)	MDL (ug/L)
2458.01	Bldg.166 MW#1	2.1	0.5

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (908)532-6224 FAX: (908)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL #	NJDEP WELL ID #	SAMPLE DATE
2917.03	166MW-01	29-31777	08/20/97
2918.01	80MW-01	29-31774	08/20/97

NJDEP Laboratory Certification # 13461

Report Date: 2 December, 1997

Daniel Wright
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3111D
Antimony	3113B
Arsenic	3113B
Barium	3111D
Beryllium	3113B
Cadmium	3111B
Calcium	3111B
Chromium	3111D
Cobalt	3113B
Copper	3111B
Iron	3111B
Lead	3113B
Magnesium	3111B
Manganese	3111B
Mercury	3112B
Nickel	3111B
Potassium	3111B
Selenium	3120B
Silver	3111B
Sodium	3111B
Thallium	3113B
Vanadium	3111D
Zinc	3111B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: x26223
(X)DERA ( )OMA ( )Other:
Project No:
Location: Bldg 166
Samplers Name / Company : Roy Pogwist / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	TCL VOA	TCL BNAs	TCL Pest	TAL metals				11hr	Remarks / Preservation Method
2917 1	Trip Blank	8/20/97	0800	AQ	2	X								VOA - HCl
2	Field Blank		1000		5	X	X	X	X					Metals - HNO_3
3	Bldg 166 MW1		1040		5	X	X	X	X				10	#29 31777

Comments: All Samples Kept <4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	8/20/97 1130	[signature] 8/21/97 1130			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, ( )Standard, ( )Screen / non-certified
Turnaround time: ( )Standard 4 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks:

print legibly

Custody.xls7/10/97



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: I Fallon
Phone #: x 26223
(X)DERA ( )OMA ( )Other:
Project No:
Location: Bldg 080
Samplers Name / Company : Ray Pognisz / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	TCL VOA	TCL BNA + 25	TCL Pest	TAL metals				# Min	Comments: Remarks / Preservation Method
2918 1	Bldg 80 mw1	8/6/97	1100	AQ	5	X	X	X	X				5	#231774 VOA's- HCl metals- HNO_3 Blanks are with Bldg 166 for 8/20/97

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Rec. Pognisz	8/7/97 1130	D Doi 8/7/97 1130			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (_)Standard, (_)Screen / non-certified
Turnaround time: (_)Standard 4 wks, (_)Rush ____ Days, (_)ASAP Verbal ____ Hrs.

Remarks:

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG D-80
MW# 1
NJDEP ID# 2931774
NJDEP CERT# 13461
SAMPLING CONTRACTOR TVS
SAMPLER RAY POGWIST

DATE 8/20/97 WEATHER OVERCAST / RAIN 70'S

ELEVATION OF CASING SURVEY MARK 6.91
DTW 3.20
DEPTH OF WELL 12.3
HEIGHT OF WATER 9.10
9.10 X 0.65 X 3 = 17.75
GAL OF H2O TO BE EVACUATED 17.75 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.3 GPM
Hnu 5 PPM

PURGE START TIME 9:55
pH 7.85 TEMP 25.2 DEG °C
DISSOLVED O2 1.9 PPM SPECIFIC CONDUCTIVITY 630 us/cm

PURGE END TIME 10:55
pH 7.21 TEMP 24.1 DEG °C
DISSOLVED O2 1.8 PPM SPECIFIC CONDUCTIVITY 1800 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 3.20 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED 18.0 GAL

pH 7.15 TEMP 24.3 DEG °C
DISSOLVED O2 1.8 PPM SPECIFIC CONDUCTIVITY 1880 us/cm

COMMENTS: _____

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG 166
MW# 1
NJDEP ID# 2931777
NJDEP CERT# 13461
SAMPLING CONTRACTOR TVS
SAMPLER RAY POGWIST

DATE 8/20/97 WEATHER OVERCAST 70'S

ELEVATION OF CASING SURVEY MARK 6.96
DTW 3.20
DEPTH OF WELL 7.75
HEIGHT OF WATER 4.55
4.55 X 0.65 X 3 = 8.87
GAL OF H2O TO BE EVACUATED 8.9 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.2 GPM
Hnu 10 PPM

PURGE START TIME 9:45
pH 6.88 TEMP 23.1 DEG °C
DISSOLVED O2 1.6 PPM SPECIFIC CONDUCTIVITY 590 us/cm

PURGE END TIME 10:30
pH 8.00 TEMP 23.9 DEG °C
DISSOLVED O2 1.9 PPM SPECIFIC CONDUCTIVITY 610 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 3.20 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED 9.0 GAL

pH 7.98 TEMP 23.9 DEG °C
DISSOLVED O2 2.0 PPM SPECIFIC CONDUCTIVITY 600 us/cm

COMMENTS:

Organic Data Qualifiers

Form 1:

This form reports concentrations of Tentatively Identified Compounds. Form 1E is the Volatile report, Form 1F is for Semi-Volatiles.

Qualifiers are:

J	Estimated Value
N	Presumptive evidence of a compound
E	Concentration exceeds calibration range
D	Diluted sample
A	TIC is a suspected aldol condensation product

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v01775.d**
Operator **Skelton**
Date Acquired **08/26/19 -1:5:**

Sample Name **Daily Blank**
Field ID **Daily Blank**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v01782.d**
Operator **Skelton**
Date Acquired **08/26/19 -1:1:**

Sample Name **2917.01**
Field ID **Trip Blank**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v01783.d**
Operator **Skelton**
Date Acquired **08/26/19 -1:2:**

Sample Name **2917.02**
Field ID **Field Blank**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v01785.d**
Operator **Skelton**
Date Acquired **08/27/19 -1:0:**

Sample Name **2918.01**
Field ID **Bldg D80 MW1**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **V01784.D**
Operator **Skelton**
Date Acquired **08/26/19 -1:3:**

Sample Name **2917.03**
Field ID **Bldg 166 MW1**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	1.25 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Daily Blank

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2917 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Daily Blank

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V01775.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: not dec. Date Analyzed: 08/26/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2917 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2917.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V01782.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: not dec. Date Analyzed: 08/26/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2917 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2917.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V01783.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: not dec. Date Analyzed: 08/26/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW1**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2918 Location B.D80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2918.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V01785.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: not dec. Date Analyzed: 08/27/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW1**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2917 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2917.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V01784.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: not dec. Date Analyzed: 08/26/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

Organic Data Qualifiers

Form 1:

This form reports concentrations of Tentatively Identified Compounds. Form 1E is the Volatile report, Form 1F is for Semi-Volatiles.

Qualifiers are:

J	Estimated Value
N	Presumptive evidence of a compound
E	Concentration exceeds calibration range
D	Diluted sample
A	TIC is a suspected aldol condensation product

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bn0456.d	Sample Name	Ext Blank 08/26/97
Operator	Skelton	Field ID	Ext Blank 08/26/97
Date Acquired	09/ 2/97 16:02	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate			not detected	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bn0420.d**	Sample Name	**Extraction Blank**
Operator	**Skelton**	Field ID	**08/25/97**
Date Acquired	**08/28/97 18:36**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate			not detected	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bn0472.d	Sample Name	2917.02
Operator	Skelton	Field ID	Field Blank
Date Acquired	09/ 3/97 05:38	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate			not detected	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	25.33	205777	3.45 ug/L	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bn0474.d	Sample Name	2918.01
Operator	Skelton	Field ID	Bldg D80 MW1
Date Acquired	09/ 3/97 07:15	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.3[illegible] ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene	12.91	419731	7.23 ug/L	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene	15.19	54102	1.12 ug/L	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene	16.37	79725	1.62 ug/L	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene	18.58	33211	0.52 ug/L	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate			not detected	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	25.33	73812	1.40 ug/L	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bn0473.d	Sample Name	2917.03
Operator	Skelton	Field ID	Bldg 166 MW1
Date Acquired	09/ 3/97 06:26	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate			not detected	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

SBLK

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 2918 Location BldgD8 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: Extraction Blan

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0420.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 08/28/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	23.85	11	J
2.	unknown	27.01	23	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

SBLK

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 2917 Location Bldg16 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: Ext Blank 08/26

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0456.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 09/02/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	23.85	13	J
2.	unknown	27.01	26	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

MW1

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 2918 Location BldgD80 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 2918.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0474.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 09/03/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 061141-72-8	Dodecane, 4,6-dimethyl-	17.65	14	JN
2.	unknown	23.87	21	J
3. 000112-92-5	1-Octadecanol	24.87	10	JN
4.	unknown	27.02	62	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

MW1

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 2917 Location Bldg166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 2917.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0473.D

Level: (low/med) LOW Date Received: 08/20/97

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 09/03/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000144-19-4	1,3-Pentanediol, 2,2,4-trimethyl-	10.54	11	JN
2. 010544-50-0	Sulfur, mol. (S8)	21.18	12	JN
3.	unknown hydrocarbon	27.02	17	J

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	Extraction Blank
	DPW, SELFM-PW-EV	**Date Rec'd:**	NA
	Bldg. 173	**Extraction Date:**	8/20/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/27/97
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NA	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NA	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NA	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NA = Not Applicable

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2917.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/20/97
	Bldg. 173	**Extraction Date:**	8/20/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/27/97
Analysis:	EPA Method 608	**Location :**	Bldg. 80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	**ND**
beta-BHC	1		0.20	0.0026	**ND**
gamma-BHC	1		0.20	0.0026	**ND**
delta-BHC	1		NA	0.0029	**ND**
Heptachlor	1		0.40	0.0027	**ND**
Aldrin	1		0.04	0.0028	**ND**
Heptachlor Epoxide	1		0.20	0.0024	**ND**
Endosulfan I	1		0.40	0.0024	**ND**
4,4'-DDE	1		0.10	0.0034	**ND**
Dieldrin	1		0.03	0.0019	**ND**
Endrin	1		2.00	0.0030	**ND**
Endrin Ketone	1		NA	0.0100	**ND**
Endosulfan II	1		0.40	0.0027	**ND**
4,4'-DDD	1		0.10	0.0066	**ND**
4,4'-DDT	1		0.10	0.0015	**ND**
Endosulfan-Sulfate	1		0.40	0.0010	**ND**
Methoxychlor	1		NA	0.0100	**ND**
Alpha-chlordane	1		0.50	0.0140	**ND**
Gamma-chlordane	1		0.50	0.0140	**ND**
Toxaphene	1		3.00	0.0182	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

ND = Not Detected
MDL = Method Detection Limit
NA = Not Applicable

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2918.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/20/97
	Bldg. 173	**Extraction Date:**	8/20/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/27/97
Analysis:	EPA Method 608	**Location :**	Bldg. 80
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	MW-1
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NA	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NA	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NA	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NA = Not Applicable

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2917.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/20/97
	Bldg. 173	**Extraction Date:**	8/20/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/27/97
Analysis:	EPA Method 608	**Location :**	Bldg. 166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	MW-1
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	**ND**
beta-BHC	1		0.20	0.0026	**ND**
gamma-BHC	1		0.20	0.0026	**ND**
delta-BHC	1		NA	0.0029	**ND**
Heptachlor	1		0.40	0.0027	**ND**
Aldrin	1		0.04	0.0028	**ND**
Heptachlor Epoxide	1		0.20	0.0024	**ND**
Endosulfan I	1		0.40	0.0024	**ND**
4,4'-DDE	1		0.10	0.0034	**ND**
Dieldrin	1		0.03	0.0019	**ND**
Endrin	1		2.00	0.0030	**ND**
Endrin Ketone	1		NA	0.0100	**ND**
Endosulfan II	1		0.40	0.0027	**ND**
4,4'-DDD	1		0.10	0.0066	**ND**
4,4'-DDT	1		0.10	0.0015	**ND**
Endosulfan-Sulfate	1		0.40	0.0010	**ND**
Methoxychlor	1		NA	0.0100	**ND**
Alpha-chlordane	1		0.50	0.0140	**ND**
Gamma-chlordane	1		0.50	0.0140	**ND**
Toxaphene	1		3.00	0.0182	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

ND = Not Detected
MDL = Method Detection Limit
NA = Not Applicable

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: NA
Sample Matrix: Aqueous

Site: Bldg. 296
Ft. Monmouth, New Jersey

Field ID#: NA

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	MDL (ug/L)	GW Criteria (ug/L)
Aluminum	08/25/97	ND	0.5	200
Antimony	10/23/97	ND	0.5	20
Arsenic	09/02/97	ND	1.0	8
Barium	12/02/97	ND	30.0	200
Beryllium	08/28/97	ND	0.06	20
Cadmium	10/23/97	ND	2.0	4
Calcium	10/23/97	ND	30.0	NA
Chromium	12/01/97	48.0*	7.0	100
Cobalt	10/23/97	ND	20.0	NA
Copper	09/05/97	ND	3.0	1000
Iron	08/27/97	ND	10.0	300
Lead	08/27/97	ND	0.5	10
Manganese	08/27/97	7.0	5.0	50
Magnesium	12/01/97	ND	50.0	NA
Mercury	09/03/97	ND	0.2	2
Nickel	09/09/97	ND	10.0	100
Potassium	11/13/97	ND	40.0	NA
Selenium	12/09/97	ND	3.0	50
Silver	09/02/97	ND	3.0	20
Sodium	11/14/97	ND	10.0	50000
Thallium	10/24/97	ND	1.0	10
Vanadium	12/02/97	ND	200.0	NA
Zinc	09/05/97	ND	2.0	5000

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable
*=Continuing calibration blank exceeds MDL Level

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: NA
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: NA

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	MDL (ug/L)	GW Criteria (ug/L)
Aluminum	08/25/97	ND	0.5	200
Antimony	11/19/97	ND	0.5	20
Arsenic	09/02/97	ND	1.0	8
Barium	12/02/97	ND	30.0	2000
Beryllium	08/28/97	ND	0.06	20
Cadmium	10/24/97	ND	2.0	4
Calcium	11/14/97	ND	30.0	NA
Chromium	12/01/97	43.0*	7.0	100
Cobalt	10/24/97	ND	20.0	NA
Copper	09/05/97	ND	3.0	1000
Iron	08/27/97	ND	10.0	300
Lead	08/27/97	ND	0.5	10
Manganese	08/27/97	7.0	5.0	50
Magnesium	12/01/97	ND	50.0	NA
Mercury	09/09/97	ND	0.2	2
Nickel	09/09/97	ND	10.0	100
Potassium	11/13/97	ND	40.0	NA
Selenium	12/09/97	ND	3.0	50
Silver	09/02/97	ND	3.0	20
Sodium	11/14/97	ND	10.0	50000
Thallium	11/20/97	ND	1.0	10
Vanadium	12/02/97	ND	200.0	NA
Zinc	09/05/97	ND	2.0	5000

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable
*=Continuing calibration blank exceeds MDL Level

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2917.02
Sample Received: 8/20/97
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	MDL (ug/L)	GW Criteria (ug/L)
Aluminum	08/25/97	121.7	0.5	200
Antimony	11/19/97	ND	0.5	20
Arsenic	09/04/97	ND	1.0	8
Barium	12/02/97	ND	30.0	2000
Beryllium	08/28/97	ND	0.06	20
Cadmium	10/24/97	2.0	2.0	4
Calcium	11/14/97	ND	30.0	NA
Chromium	12/01/97	106.0*	7.0	100
Cobalt	10/24/97	20.0	20.0	NA
Copper	09/05/97	7.0	3.0	1000
Iron	08/27/97	110.0	10.0	300
Lead	08/27/97	ND	0.5	10
Manganese	08/27/97	220.0	5.0	50
Magnesium	12/01/97	140.0	50.0	NA
Mercury	09/09/97	ND	0.2	2
Nickel	09/09/97	ND	10.0	100
Potassium	11/13/97	60.0	40.0	NA
Selenium	12/09/97	ND	3.0	50
Silver	09/02/97	33.0	3.0	20
Sodium	11/14/97	880.0	10.0	50000
Thallium	11/20/97	ND	1.0	10
Vanadium	12/02/97	800.0	200.0	NA
Zinc	09/05/97	ND	2.0	5000

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable
*=Continuing calibration blank exceeds MDL Level

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2918.01
Sample Received: 8/20/97
Sample Matrix: Aqueous

Site: Bldg. D.80
Ft. Monmouth, New Jersey

Field ID#: MW-1

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	MDL (ug/L)	GW Criteria (ug/L)
Aluminum	12/01/97	329.5	0.5	200
Antimony	11/19/97	2.8	05	20
Arsenic	09/04/97	9.0	1.0	8
Barium	12/02/97	70.0	30.0	2000
Beryllium	08/28/97	ND	0.06	20
Cadmium	10/24/97	8.0	2.0	4
Calcium	11/14/97	28750.0	30.0	NA
Chromium	12/01/97	148.0*	7.0	100
Cobalt	10/24/97	50.0	20.0	NA
Copper	09/05/97	15.0	3.0	1000
Iron	08/27/97	7490.0	10.0	300
Lead	08/27/97	4.0	0.5	10
Manganese	08/27/97	136.0	5.0	50
Magnesium	12/01/97	4260.0	50.0	NA
Mercury	09/09/97	ND	0.2	2
Nickel	09/09/97	ND	10.0	100
Potassium	11/13/97	3920.0	40.0	NA
Selenium	12/09/97	ND	3.0	50
Silver	09/02/97	8	3.0	20
Sodium	11/14/97	110750.0	10.0	50000
Thallium	11/20/97	ND	1.0	10
Vanadium	12/02/97	200.0	200.0	NA
Zinc	09/05/97	92.0	2.0	5000

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable
*=Continuing calibration blank exceeds MDL Level

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2917.03
Sample Received: 8/20/97
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: MW-1

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	MDL (ug/L)	GW Criteria (ug/L)
Aluminum	08/25/97	15.1	0.5	200
Antimony	11/19/97	ND	0.5	20
Arsenic	09/04/97	4.0	1.0	8
Barium	12/02/97	100.0	30.0	2000
Beryllium	08/28/97	0.26	0.06	20
Cadmium	10/24/97	5.0	2.0	4
Calcium	11/14/97	72390.0	30.0	NA
Chromium	12/01/97	121.0*	7.0	100
Cobalt	10/24/97	30.0	20.0	NA
Copper	09/05/97	14.0	3.0	1000
Iron	08/27/97	4750.0	10.0	300
Lead	08/27/97	1.6	0.5	10
Manganese	08/27/97	336.0	5.0	50
Magnesium	12/01/97	17250.0	50.0	NA
Mercury	09/09/97	ND	0.2	2
Nickel	09/09/97	ND	10.0	100
Potassium	11/13/97	6350.0	40.0	NA
Selenium	12/09/97	ND	3.0	50
Silver	09/02/97	26.0	3.0	20
Sodium	11/14/97	83750.0	10.0	50000
Thallium	11/20/97	ND	1.0	10
Vanadium	12/02/97	800.0	200.0	NA
Zinc	09/05/97	289.0	2.0	5000

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable
*=Continuing calibration blank exceeds MDL Level

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: **Bldg. 80,166**

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3174.03	80MW-01	29-31774	11/24/97
3175.01	166MW-01	29-31777	11/24/97

NJDEP Laboratory Certification # 13461

Report Date: 8 January,1998

Daniel Wright
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J Fallon
Phone #: x46223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: D-80

Samplers Name / Company : Ray Pogwist / ITS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA TCL	TAL Metals	TCL BNA + 25	TCL Pest PCB					Remarks / Preservation Method
3174 01	Trip Blank	11/24/97	0800	Aq	2	X								All Samples Kept < 4°C
02	Field Blank		1000		5	X	X	X	X					VOA - HCl
03	MW1 #2931774		1135		5									Metals - HNO_3

Comments:

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Ray Pogwist	11/24/97 13:40	J. Vergona			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (_)Standard, (_)Screen / non-certified
Turnaround time: (_)Standard 4 wks, (_)Rush ____ Days, (_)ASAP Verbal ____Hrs.

Remarks:



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J Fallon
Phone #: x26223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: Bldg 166

Samplers Name / Company: RAY POGWIST /TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA +15	TAL metals	Tcl BNA + 25	Tcl Pest /PCB					Remarks / Preservation Method
3175.01	Bldg 166 MW#1 #293777	11/24/97	1040	AQ	5	X	X	X	X					All Samples Kept <4°C VOA-HCl Metals HNO_3
														See Log # For QC Blanks
														[redacted]

Comments:

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	11/24/97 13:40	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (_)Standard, (_)Screen / non-certified
Turnaround time: (_)Standard 4 wks, (_)Rush ____ Days, (_)ASAP Verbal ____ Hrs.

Remarks:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG: 80
MW# 1
NJDEP ID# 2931774
NJDEP CERT# 13461
SAMPLING CONTRACTOR TVS
SAMPLER: RAY POGWIST

DATE: 11/24/97 WEATHER: SUNNY WINDY 30'S

ELEVATION OF CASING SURVEY MARK: 6.91
DTW: 2.40
DEPTH OF WELL: 12.3
HEIGHT OF WATER: 9.90
9.90 X 0.65 X 3 = 19.305
GAL OF H2O TO BE EVACUATED 19.94
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE IN GPM: 0.2
Hnu in PPM: 0

PURGE START TIME: 9:55
pH: 7.19 TEMP IN °C 12.5
DISSOLVED O2 IN PPM: 1.6 SPECIFIC CONDUCTIVITY IN us/cm: 980

PURGE END TIME: 11:32
pH: 6.82 TEMP IN °C 12.8
DISSOLVED O2 IN PPM: 1.5 SPECIFIC CONDUCTIVITY IN us/cm: 550

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING IN FT: 3.30
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED IN GAL: 19.4

pH: 6.84 TEMP IN °C 12.8
DISSOLVED O2 IN PPM: 1.4 SPECIFIC CONDUCTIVITY IN us/cm: 550

COMMENTS:_____
_____
_____

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG: 166
MW#: 1
NJDEP ID#: 2931777
NJDEP CERT#: 13461
SAMPLING CONTRATOR: TVS
SAMPLER: RAY POGWIST

DATE: 11/24/97 WEATHER: PT. CLOUDY 30'S

ELEVATION OF CASING SURVEY MARK: 6.96
DTW: 2.25
DEPTH OF WELL: 7.75
HEIGHT OF WATER: 5.50
5.50 X 0.65 X 3 = 10.725
GAL OF H2O TO BE EVACUATED: 10.8
PURGE METHOD (FLOW OF >0.5 TO <5.0 GPM) : PERISTALTIC
PURGE RATE IN GPM: 0.2
Hnu in PPM: 0

PURGE START TIME: 9:45
pH: 7.79 TEMP IN ° C: 8.6
DISSOLVED O_2 IN PPM: 1.9 SPECIFIC CONDUCTIVITY IN us/cm: 640

PURGE END TIME: 10:39
pH: 7.18 TEMP IN °C: 10.4
DISSOLVED O_2 IN PPM: 2.0 SPECIFIC CONDUCTIVITY IN us/cm: 450

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING IN FT: 2.50
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED IN GAL.: 10.8

pH: 7.15 TEMP IN °C: 10.4
DISSOLVED O_2 IN PPM: 1.8 SPECIFIC CONDUCTIVITY IN us/cm: 450

COMMENTS:_____
_____
_____

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound identified below detection limit
B : Compound in both sample and blank
D : Results from dilution of sample
U : Compound searched for but not detected

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v02469.d**	Sample Name	**VBLK02**
Operator	**Skelton**	Field ID	**VBLK02**
Date Acquired	**12/ 2/19 -1:1:**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	Qualifiers	GW Criteria
107028	Acrolein			not detected	6.25 ug/L		na
107131	Acrylonitrile			not detected	6.25 ug/L		na
75650	tert-Butyl alcohol			not detected	12.50 ug/L		na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L		na
108203	Di-isopropyl ether			not detected	1.25 ug/L		na
	Dichlorodifluoromethane			not detected	3.63 ug/L		na
74-87-3	Chloromethane			not detected	0.79 ug/L		30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L		5
74-83-9	Bromomethane			not detected	1.45 ug/L		10
75-00-3	Chloroethane			not detected	2.20 ug/L		na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L		na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L		2
67-64-1	Acetone			not detected	1.57 ug/L		700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L		na
75-09-2	Methylene Chloride			not detected	1.66 ug/L		2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L		100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L		70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L		na
78-93-3	2-Butanone			not detected	2.06 ug/L		300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L		10
67-66-3	Chloroform			not detected	0.43 ug/L		6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L		30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L		2
71-43-2	Benzene			not detected	0.51 ug/L		1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L		2
79-01-6	Trichloroethene			not detected	0.94 ug/L		1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L		1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L		1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L		na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L		na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L		400
108-88-3	Toluene			not detected	0.73 ug/L		1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L		na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L		3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L		1
591-78-6	2-Hexanone			not detected	1.12 ug/L		na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L		10
108-90-7	Chlorobenzene			not detected	0.66 ug/L		4
100-41-4	Ethylbenzene			not detected	1.14 ug/L		700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L		na
1330-20-7	o-Xylene			not detected	1.92 ug/L		na
100-42-5	Styrene			not detected	1.57 ug/L		100
75-25-2	Bromoform			not detected	1.68 ug/L		4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L		2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L		600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L		74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L		600

Qualifiers

B = Compound found in related blank
E = Value above linier range
D = Value from dilution

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v02470.d**	Sample Name	**3174.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**12/ 2/19 -1:1:**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	Qualifiers	GW Criteria
107028	Acrolein			not detected	6.25 ug/L		na
107131	Acrylonitrile			not detected	6.25 ug/L		na
75650	tert-Butyl alcohol			not detected	12.50 ug/L		na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L		na
108203	Di-isopropyl ether			not detected	1.25 ug/L		na
	Dichlorodifluoromethane			not detected	3.63 ug/L		na
74-87-3	Chloromethane			not detected	0.79 ug/L		30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L		5
74-83-9	Bromomethane			not detected	1.45 ug/L		10
75-00-3	Chloroethane			not detected	2.20 ug/L		na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L		na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L		2
67-64-1	Acetone			not detected	1.57 ug/L		700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L		na
75-09-2	Methylene Chloride			not detected	1.66 ug/L		2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L		100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L		70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L		na
78-93-3	2-Butanone			not detected	2.06 ug/L		300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L		10
67-66-3	Chloroform			not detected	0.43 ug/L		6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L		30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L		2
71-43-2	Benzene			not detected	0.51 ug/L		1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L		2
79-01-6	Trichloroethene			not detected	0.94 ug/L		1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L		1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L		1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L		na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L		na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L		400
108-88-3	Toluene			not detected	0.73 ug/L		1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L		na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L		3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L		1
591-78-6	2-Hexanone			not detected	1.12 ug/L		na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L		10
108-90-7	Chlorobenzene			not detected	0.66 ug/L		4
100-41-4	Ethylbenzene			not detected	1.14 ug/L		700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L		na
1330-20-7	o-Xylene			not detected	1.92 ug/L		na
100-42-5	Styrene			not detected	1.57 ug/L		100
75-25-2	Bromoform			not detected	1.68 ug/L		4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L		2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L		600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L		74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L		600

Qualifiers

B = Compound found in related blank

E = Value above linier range

D = Value from dilution

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v02471.d**	Sample Name	**3174.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**12/ 2/19 -1:2:**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	Qualifiers	GW Criteria
107028	Acrolein			not detected	6.25 ug/L		na
107131	Acrylonitrile			not detected	6.25 ug/L		na
75650	tert-Butyl alcohol			not detected	12.50 ug/L		na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L		na
108203	Di-isopropyl ether			not detected	1.25 ug/L		na
	Dichlorodifluoromethane			not detected	3.63 ug/L		na
74-87-3	Chloromethane			not detected	0.79 ug/L		30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L		5
74-83-9	Bromomethane			not detected	1.45 ug/L		10
75-00-3	Chloroethane			not detected	2.20 ug/L		na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L		na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L		2
67-64-1	Acetone			not detected	1.57 ug/L		700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L		na
75-09-2	Methylene Chloride			not detected	1.66 ug/L		2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L		100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L		70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L		na
78-93-3	2-Butanone			not detected	2.06 ug/L		300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L		10
67-66-3	Chloroform			not detected	0.43 ug/L		6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L		30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L		2
71-43-2	Benzene			not detected	0.51 ug/L		1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L		2
79-01-6	Trichloroethene			not detected	0.94 ug/L		1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L		1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L		1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L		na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L		na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L		400
108-88-3	Toluene			not detected	0.73 ug/L		1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L		na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L		3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L		1
591-78-6	2-Hexanone			not detected	1.12 ug/L		na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L		10
108-90-7	Chlorobenzene			not detected	0.66 ug/L		4
100-41-4	Ethylbenzene			not detected	1.14 ug/L		700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L		na
1330-20-7	o-Xylene			not detected	1.92 ug/L		na
100-42-5	Styrene			not detected	1.57 ug/L		100
75-25-2	Bromoform			not detected	1.68 ug/L		4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L		2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L		600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L		74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L		600

Qualifiers

B = Compound found in related blank
E = Value above linier range
D = Value from dilution

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	v02480.d	Sample Name	3174.03
Operator	Skelton	Field ID	30MW1
Date Acquired	12/ 2/19 -1:0:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	Qualifiers	GW Criteria
107028	Acrolein			not detected	6.25 ug/L		na
107131	Acrylonitrile			not detected	6.25 ug/L		na
75650	tert-Butyl alcohol			not detected	12.50 ug/L		na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L		na
108203	Di-isopropyl ether			not detected	1.25 ug/L		na
	Dichlorodifluoromethane			not detected	3.63 ug/L		na
74-87-3	Chloromethane			not detected	0.79 ug/L		30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L		5
74-83-9	Bromomethane			not detected	1.45 ug/L		10
75-00-3	Chloroethane			not detected	2.20 ug/L		na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L		na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L		2
67-64-1	Acetone			not detected	1.57 ug/L		700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L		na
75-09-2	Methylene Chloride			not detected	1.66 ug/L		2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L		100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L		70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L		na
78-93-3	2-Butanone			not detected	2.06 ug/L		300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L		10
67-66-3	Chloroform			not detected	0.43 ug/L		6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L		30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L		2
71-43-2	Benzene			not detected	0.51 ug/L		1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L		2
79-01-6	Trichloroethene			not detected	0.94 ug/L		1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L		1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L		1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L		na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L		na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L		400
108-88-3	Toluene			not detected	0.73 ug/L		1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L		na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L		3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L		1
591-78-6	2-Hexanone			not detected	1.12 ug/L		na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L		10
108-90-7	Chlorobenzene	29.30	17354	2.26 ug/L	0.66 ug/L		4
100-41-4	Ethylbenzene			not detected	1.14 ug/L		700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L		na
1330-20-7	o-Xylene			not detected	1.92 ug/L		na
100-42-5	Styrene			not detected	1.57 ug/L		100
75-25-2	Bromoform			not detected	1.68 ug/L		4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L		2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L		600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L		74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L		600

Qualifiers

B = Compound found in related blank

E = Value above linier range

D = Value from dilution

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	v02481.d	Sample Name	3175.01
Operator	Skelton	Field ID	166MW1
Date Acquired	12/ 2/19 -1:0:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	Qualifiers	GW Criteria
107028	Acrolein			not detected	6.25 ug/L		na
107131	Acrylonitrile			not detected	6.25 ug/L		na
75650	tert-Butyl alcohol			not detected	12.50 ug/L		na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L		na
108203	Di-isopropyl ether			not detected	1.25 ug/L		na
	Dichlorodifluoromethane			not detected	3.63 ug/L		na
74-87-3	Chloromethane			not detected	0.79 ug/L		30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L		5
74-83-9	Bromomethane			not detected	1.45 ug/L		10
75-00-3	Chloroethane			not detected	2.20 ug/L		na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L		na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L		2
67-64-1	Acetone			not detected	1.57 ug/L		700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L		na
75-09-2	Methylene Chloride			not detected	1.66 ug/L		2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L		100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L		70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L		na
78-93-3	2-Butanone			not detected	2.06 ug/L		300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L		10
67-66-3	Chloroform			not detected	0.43 ug/L		6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L		30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L		2
71-43-2	Benzene			not detected	0.51 ug/L		1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L		2
79-01-6	Trichloroethene			not detected	0.94 ug/L		1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L		1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L		1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L		na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L		na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L		400
108-88-3	Toluene			not detected	0.73 ug/L		1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L		na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L		3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L		1
591-78-6	2-Hexanone			not detected	1.12 ug/L		na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L		10
108-90-7	Chlorobenzene			not detected	0.66 ug/L		4
100-41-4	Ethylbenzene			not detected	1.14 ug/L		700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L		na
1330-20-7	o-Xylene			not detected	1.92 ug/L		na
100-42-5	Styrene			not detected	1.57 ug/L		100
75-25-2	Bromoform			not detected	1.68 ug/L		4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L		2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L		600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L		74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L		600

Qualifiers

B = Compound found in related blank
E = Value above linier range
D = Value from dilution

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **VBLK02**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 3175 Location Bldg16 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V02469.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: not dec. Date Analyzed: 12/02/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Trip Blank

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 3174 Location D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3174.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V02470.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: not dec. Date Analyzed: 12/02/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 3174 Location D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3174.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V02471.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: not dec. Date Analyzed: 12/02/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 80 MW1

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 3174 Location D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3174.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V02480.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: not dec. Date Analyzed: 12/02/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001066-40-6	Silanol, trimethyl-	13.85	10	JN

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 16GMW1

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 3175 Location Bldg16 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3175.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V02481.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: not dec. Date Analyzed: 12/02/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**BN0743.D**	Sample Name	**Sblk06**
Operator	**Skelton**	Field ID	**11/26/97**
Date Acquired	**12/ 3/97 16:18**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate	20.25	582479	4.05 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**BN0744.D**	Sample Name	**Sblk07**
Operator	**Skelton**	Field ID	**11/28/97**
Date Acquired	**12/ 3/97 17:01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate	20.25	193255	1.33 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bn0752.d**	Sample Name	**3174.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**12/ 3/97 22:40**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate	20.25	1021769	9.05 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **bn0753.d**
Operator **Skelton**
Date Acquired **12/ 3/97 23:22**

Sample Name **3174.03**
Field ID **MW1**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene	8.56	83885	1.79 ug/L	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene	12.84	226132	3.00 ug/L	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene	15.11	65689	1.10 ug/L	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene	16.29	81253	1.27 ug/L	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate	20.25	324955	2.54 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	25.25	86784	1.17 ug/L	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **BN0754.D**
Operator **Skelton**
Date Acquired **12/ 4/97 00:04**

Sample Name **3175.01**
Field ID **GGMW1**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate	20.26	1997897	16.28 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	25.25	144468	2.22 ug/L	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

SBLK06

Lab Name: FMETL Lab Code 13461

Project Case No.: 3175 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0743.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: decanted: (Y/N) N Date Analyzed: 12/03/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	5.04	44	JN
2. 000301-02-0	9-Octadecenamide, (Z)-	26.93	14	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

SBLK07

Lab Name: FMETL Lab Code 13461

Project Case No.: 3174 Location D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk07

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0744.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: decanted: (Y/N) N Date Analyzed: 12/03/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown hydrocarbon	5.03	45	J
2.	unknown hydrocarbon	23.77	8	J
3. 000301-02-0	9-Octadecenamide, (Z)-	26.93	17	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Field Blank

Lab Name: FMETL Lab Code 13461

Project Case No.: 3174 Location D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3174.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0752.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: decanted: (Y/N) N Date Analyzed: 12/03/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	5.02	40	JN
2.	unknown hydrocarbon	16.41	9	J
3. 000301-02-0	9-Octadecenamide, (Z)-	26.93	15	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

80 MW1

Lab Name: FMETL Lab Code 13461

Project Case No.: 3174 Location D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3174.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0753.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: decanted: (Y/N) N Date Analyzed: 12/03/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 040379-24-6	Acetic acid, isononyl ester	4.91	17	JN
2.	unknown hydrocarbon	5.02	35	J
3. 002847-72-5	Decane, 4-methyl-	8.19	12	JN
4. 000057-11-4	Octadecanoic acid	22.05	8	JN
5.	unknown hydrocarbon	23.78	15	J
6. 000301-02-0	9-Octadecenamide, (Z)-	26.94	32	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

166 MW1

Lab Name: FMETL Lab Code 13461

Project Case No.: 3175 Location B.166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3175.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN0754.D

Level: (low/med) LOW Date Received: 11/24/97

% Moisture: decanted: (Y/N) N Date Analyzed: 12/04/97

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 040379-24-6	Acetic acid, isononyl ester	4.94	13	JN
2.	unknown hydrocarbon	5.04	46	J
3.	unknown hydrocarbon	23.80	10	J
4.	unknown hydrocarbon	26.94	20	J

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	Extraction Blank
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	11/28/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/6/98
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3174.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/24/97
	Bldg. 173	**Extraction Date:**	11/28/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/6/98

Analysis:	EPA Method 608	**Location :**	Bldgs. 80,166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3174.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/24/97
	Bldg. 173	**Extraction Date:**	11/28/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/6/98

Analysis:	EPA Method 608	**Location :**	Bldg. 80
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	MW-1
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3175.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/24/97
	Bldg. 173	**Extraction Date:**	11/28/97
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/6/98
Analysis:	EPA Method 608	**Location :**	Bldg.166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	MW-1
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: NA
Sample Matrix: Aqueous

Site: D-80
Ft. Monmouth, New Jersey

Field ID#: NA

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	01/28/98	ND	200	10.0
Antimony	01/28/98	ND	20	2.0
Arsenic	01/28/98	ND	8	2.0
Barium	01/28/98	ND	2000	0.5
Beryllium	01/28/98	ND	20	0.5
Cadmium	01/28/98	ND	4	0.5
Calcium	01/28/98	ND	NLE	10.0
Chromium	01/28/98	ND	100	0.5
Cobalt	01/28/98	ND	NLE	0.5
Copper	01/28/98	ND	1000	3.0
Iron	01/28/98	ND	300	5.0
Lead	01/28/98	ND	10	2.0
Magnesium	01/28/98	ND	NLE	10.0
Manganese	01/28/98	ND	50	0.5
Mercury	12/16/97	0.2	2	0.2
Nickel	01/28/98	ND	100	0.5
Potassium	01/28/98	ND	NLE	10.0
Selenium	01/28/98	ND	50	3.0
Silver	01/28/98	ND	20	3.0
Sodium	01/28/98	ND	50000	10.0
Thallium	01/28/98	ND	10	3.0
Vanadium	01/28/98	ND	NLE	1.0
Zinc	01/28/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established,
NA = Not Applicable

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: NA
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: NA

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	01/28/98	ND	200	10.0
Antimony	01/28/98	ND	20	2.0
Arsenic	01/28/98	ND	8	2.0
Barium	01/28/98	ND	2000	0.5
Beryllium	01/28/98	ND	20	0.5
Cadmium	01/28/98	ND	4	0.5
Calcium	01/28/98	ND	NLE	10.0
Chromium	01/28/98	ND	100	0.5
Cobalt	01/28/98	ND	NLE	0.5
Copper	01/28/98	ND	1000	3.0
Iron	01/28/98	ND	300	5.0
Lead	01/28/98	ND	10	2.0
Magnesium	01/28/98	ND	NLE	10.0
Manganese	01/28/98	ND	50	0.5
Mercury	12/03/97	ND	2	0.2
Nickel	01/28/98	ND	100	0.5
Potassium	01/28/98	ND	NLE	10.0
Selenium	01/28/98	ND	50	3.0
Silver	01/28/98	ND	20	3.0
Sodium	01/28/98	ND	50000	10.0
Thallium	01/28/98	ND	10	3.0
Vanadium	01/28/98	ND	NLE	1.0
Zinc	01/28/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established,
NA = Not Applicable

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3174.02
Sample Received: 11/24/97
Sample Matrix: Aqueous

Site: D-80, 166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	01/28/98	112.0	200	20.0
Antimony	01/28/98	ND	20	4.0
Arsenic	01/28/98	ND	8	4.0
Barium	01/28/98	3.1	2000	1.0
Beryllium	01/28/98	ND	20	1.0
Cadmium	01/28/98	3.3	4	1.0
Calcium	01/28/98	830.0	NLE	20.0
Chromium	01/28/98	ND	100	1.0
Cobalt	01/28/98	ND	NLE	1.0
Copper	01/28/98	10.0	1000	6.0
Iron	01/28/98	89.0	300	10.0
Lead	01/28/98	19.0	10	4.0
Magnesium	01/28/98	150.0	NLE	20.0
Manganese	01/28/98	2.5	50	1.0
Mercury	12/16/97	ND	2	0.2
Nickel	01/28/98	1.7	100	1.0
Potassium	01/28/98	ND	NLE	20.0
Selenium	01/28/98	ND	50	6.0
Silver	01/28/98	ND	20	6.0
Sodium	01/28/98	1190.0	50000	20.0
Thallium	01/28/98	ND	10	6.0
Vanadium	01/28/98	ND	NLE	2.0
Zinc	01/28/98	58.0	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3174.03
Sample Received: 11/24/97
Sample Matrix: Aqueous

Site: D-80
Ft. Monmouth, New Jersey

Field ID#: MW 1

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	01/28/98	121.0	200	20.0
Antimony	01/28/98	ND	20	4.0
Arsenic	01/28/98	ND	8	4.0
Barium	01/28/98	24.5	2000	1.0
Beryllium	01/28/98	ND	20	1.0
Cadmium	01/28/98	ND	4	1.0
Calcium	01/28/98	81220.0	NLE	20.0
Chromium	01/28/98	1.2	100	1.0
Cobalt	01/28/98	ND	NLE	1.0
Copper	01/28/98	17.0	1000	6.0
Iron	01/28/98	9062.0	300	10.0
Lead	01/28/98	14.0	10	4.0
Magnesium	01/28/98	18780.0	NLE	20.0
Manganese	01/28/98	552.7	50	1.0
Mercury	12/16/97	0.3	2	0.2
Nickel	01/28/98	2.3	100	1.0
Potassium	01/28/98	6010.0	NLE	20.0
Selenium	01/28/98	ND	50	6.0
Silver	01/28/98	ND	20	6.0
Sodium	01/28/98	97380.0	50000	20.0
Thallium	01/28/98	ND	10	6.0
Vanadium	01/28/98	ND	NLE	2.0
Zinc	01/28/98	60.0	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3175.01
Sample Received: 11/24/97
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: MW-1

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	01/28/98	408.0	200	20.0
Antimony	01/28/98	ND	20	4.0
Arsenic	01/28/98	23.0	8	4.0
Barium	01/28/98	65.5	2000	1.0
Beryllium	01/28/98	ND	20	1.0
Cadmium	01/28/98	1.6	4	1.0
Calcium	01/28/98	46940.0	NLE	20.0
Chromium	01/28/98	3.0	100	1.0
Cobalt	01/28/98	ND	NLE	1.0
Copper	01/28/98	14.0	1000	6.0
Iron	01/28/98	31700.0	300	10.0
Lead	01/28/98	15.0	10	4.0
Magnesium	01/28/98	9730.0	NLE	20.0
Manganese	01/28/98	286.6	50	1.0
Mercury	12/03/97	ND	2	0.2
Nickel	01/28/98	4.5	100	1.0
Potassium	01/28/98	6850.0	NLE	20.0
Selenium	01/28/98	ND	50	6.0
Silver	01/28/98	ND	20	6.0
Sodium	01/28/98	200200.0	50000	20.0
Thallium	01/28/98	ND	10	6.0
Vanadium	01/28/98	ND	NLE	2.0
Zinc	01/28/98	147.0	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3376.01	80MW-01	29-31774	02/27/98
3375.01	166MW-01	29-31773	02/27/98

NJDEP Laboratory Certification # 13461

Report Date: 18 February, 1998

Daniel Wright
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608

Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: x26223
(X)DERA ( )OMA ( )Other:
Project No:
Location: Bldg D-81
Samplers Name / Company: Ray P. Dave D. / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA + 15	TAL metals	BNA + 25	Pest / PCB					Comments: Remarks / Preservation Method
3376-01	MW1 #2931774	2-27-98	1305	GW	5	X	X	X	X					All Samples Kept @ 4°C HCl - VOA HNO_3 - Metals

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	2/27/98 1500	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (_)Standard, (_)Screen / non-certified
Turnaround time: (_)Standard 4 wks, (_)Rush ____ Days, (_)ASAP Verbal ____Hrs.

Remarks:

print legibly

~me1a23.xls2/20/98



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon	Project No:			Analysis Parameters								**Comments:**			
Phone #: x 46223	Location: Bldg 166			VOA TCL	TAL metals	BNA TCL	Pest PCB								
( )DERA ( )OMA ( )Other:															
Samplers Name / Company : Ray P. Dave D TUS				Sample Type	# bottles										
Lab Sample I.D.	Sample Location	Date	Time									Remarks / Preservation Method			
3375.01	MW1 #+931777	2/27/98	1425	AQ	5	X	X	X	X					All Samples kept cool	
														HCl - VOA	
														HNO_3 - Metals	

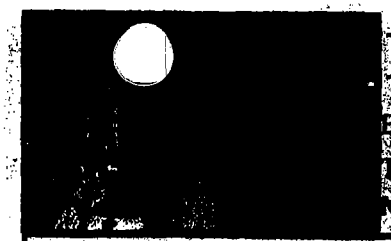
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	2/27/98 1500	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: (_)Full, (_)Reduced, (_)Standard, (_)Screen / non-certified
Turnaround time: (_)Standard 4 wks, (_)Rush ___ Days, (_)ASAP Verbal ___ Hrs.

Remarks:

print legibly

~ma1a23 vle2/20/98



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: Z Fallon
Phone #: X 26223
(Y)DERA ( )OMA ( )Other:_____

Project No:
Location: Bldg 296

Samplers Name / Company: Ray P. Dave D. / TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA + TS	TAL metals	BNA + 35	PEST PCB					Comments: Remarks / Preservation Method
3373.01	Trip Blank	2/27/98	800	AQ	2	X								All Samples Kept <4oc
02	Field Blank		1130		5	X	X	X	X					VOA - HCl <dpH
03	MW1 #2930979		1235											Metals HNO3 <dpH
04	MW2 #2930980		1114											
05	MW8 #2930974		1050											
06	Field Dup		—											

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
	2/27/98 1415				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (_)Standard, (_)Screen / non-certified
Turnaround time: (_)Standard 4 wks, (_)Rush ____ Days, (_)ASAP Verbal ____ Hrs.

Remarks:

print legibly

~me1a23.xls2/20/98

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG: 80
MW# 1
NJDEP ID# 2931774
NJDEP CERT# 13461
SAMPLING CONTRATOR TVS
SAMPLER: RAY POGWIST

DATE: 02/27/98 WEATHER: SUNNY 50'S

ELEVATION OF CASING SURVEY MARK
DTW: 1.40
DEPTH OF WELL: 12.3
HEIGHT OF WATER: 10.9
10.9 X 0.65 X 3 = 21.255
GAL OF H2O TO BE EVACUATED 21 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE .222 GPM
Hnu READING N/A

PURGE START TIME: 13:28
pH: 6.38 TEMP 12.7 DEG °C
DISSOLVED O2 3.4 PPM SPECIFIC CONDUCTIVITY 200 us/cm

PURGE END TIME: 13:03
pH: 7.11 TEMP 13.1 DEG °C
DISSOLVED O2 3.2 PPM SPECIFIC CONDUCTIVITY 160 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 2.40 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 21.534 GAL

pH: 7.18 TEMP 13.2 DEG °C
DISSOLVED O2 3.1 PPM SPECIFIC CONDUCTIVITY 170 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG: 166
MW# 1
NJDEP ID# 2931773
NJDEP CERT# 13461
SAMPLING CONTRACTOR TVS
SAMPLER DAVE DEINHARDT/MARK LAURA

DATE: 02/27/98 WEATHER: SUNNY WINDY 50'S

ELEVATION OF CASING SURVEY MARK
DTW: 1.00
DEPTH OF WELL: 7.75
HEIGHT OF WATER: 6.75
6.75 X 0.65 X 3 = 13.1625
GAL OF H2O TO BE EVACUATED 13.328 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE .19 GPM
Hnu READING N/A

PURGE START TIME: 13:15
pH: 6.95 TEMP 11.5 DEG °C
DISSOLVED O2 4.1 PPM SPECIFIC CONDUCTIVITY 140 us/cm

PURGE END TIME: 14:25
pH: 698 TEMP 10.4 DEG °C
DISSOLVED O2 3.8 PPM SPECIFIC CONDUCTIVITY 130 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 1.2 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 13.328 GAL

pH: 7.02 TEMP 10.4 DEG °C
DISSOLVED O2 3.7 PPM SPECIFIC CONDUCTIVITY 130 us/cm

COMMENTS: _____

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	v03037.d	Sample Name	VBLK27
Operator	Skelton	Field ID	VBLK27
Date Acquired	2 Mar 1998 9:35	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v03063.d**	Sample Name	**VBLK28**
Operator	**Skelton**	Field ID	**VBLK28**
Date Acquired	**3 Mar 1998 11:52**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	v03071.d	Sample Name	3373.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	3 Mar 1998 18:46	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v03072.d**	Sample Name	**3373.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**3 Mar 1998 19:33**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	v03077.d	Sample Name	3376.01
Operator	Skelton	Field ID	MW1
Date Acquired	3 Mar 1998 23:30	Sample Multiplier	1

80mw-01

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene	29.27	18198	3.26 ug/L	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	v03059.d	Sample Name	3375.01
Operator	Skelton	Field ID	MW1 166mw-01
Date Acquired	3 Mar 1998 7:54	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

VBLK27

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3375 Location: B.166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: VBLK27

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V03037.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: not dec. _____ Date Analyzed: 03/02/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

VBLK28

Lab Name: FMETL NJDEP # 13461

Project: Case No.: 3376 Location: D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK28

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V03063.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: not dec. Date Analyzed: 03/03/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Trip Blank

Lab Name: FMETL NJDEP # 13461

Project: Case No.: 3373 Location: B.296 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3373.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V03071.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: not dec. Date Analyzed: 03/03/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Field Blank

Lab Name: FMETL NJDEP # 13461

Project: Case No.: 3373 Location: B.296 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3373.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V03072.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: not dec. Date Analyzed: 03/03/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

MW1

Lab Name: FMETL NJDEP # 13461

Project: Case No.: 3376 Location: D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3376.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V03077.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: not dec. Date Analyzed: 03/03/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	13.84	10	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

MW1

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3375 Location: B.166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 3375.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V03059.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: not dec. _____ Date Analyzed: 03/03/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**BN1068.D**	Sample Name	**SBLK 31**
Operator	**FITZPATRICK**	Misc Info	**SBLK 31 3-2-98**
Date Acquired	**03/ 3/98 13:16**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN1068.D**	Sample Name	**SBLK 31**
Operator	**FITZPATRICK**	Misc Info	**SBLK 31 3-2-98**
Date Acquired	**03/ 3/98 13:16**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	25.16	57591	1.46 ug/L	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	BN1091.D	Sample Name	3373.02
Operator	FITZPATRICK	Misc Info	FIELD BLANK
Date Acquired	03/ 4/98 21:32	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BN1091.D	Sample Name	3373.02
Operator	FITZPATRICK	Misc Info	FIELD BLANK
Date Acquired	03/ 4/98 21:32	Sample Multiplier	1

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	BN1088.D	Sample Name	3376.01	
Operator	FITZPATRICK	Misc Info	MW 1	80 MW-01
Date Acquired	03/ 4/98 19:12	Sample Multiplier	1	

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene	8.49	34960	1.05 ug/L	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene	12.77	677951	8.85 ug/L	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene	15.03	70292	1.39 ug/L	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN1088.D**	Sample Name	**3376.01**
Operator	**FITZPATRICK**	Misc Info	**MW 1** 80 mw-01
Date Acquired	**03/ 4/98 19:12**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene	16.22	88182	1.56 ug/L	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	25.17	48165	1.07 ug/L	30	0.51	ug/L	B
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	BN1087.D	Sample Name	3375.01
Operator	FITZPATRICK	Misc Info	MW 1
Date Acquired	03/ 4/98 18:25	Sample Multiplier	1

166 MW-01

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BN1087.D	Sample Name	3375.01
Operator	FITZPATRICK	Misc Info	MW 1 166 MW-01
Date Acquired	03/ 4/98 18:25	Sample Multiplier	1

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

SBLK 31

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 3375 Location B.166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: SBLK 31

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN1068.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 03/03/98

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	4.94	11	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 3373 Location B.296 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 3373.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN1091.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 03/04/98

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	4.95	10	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

MW 1

Lab Name: FMETL Lab Code 13461

Project Case No.: 3376 Location B.D-80 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3376.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN1088.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: decanted: (Y/N) N Date Analyzed: 03/04/98

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 7 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	4.96	12	JN
2. 000624-57-7	1-Iodo-2,3-epoxypropane	5.51	35	JN
3. 027133-93-3	2,3-Dihydro-1-methylindene	10.39	9	JN
4. 017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	17.01	13	JN
5. 036653-82-4	1-Hexadecanol	19.33	16	JN
6. 000057-10-3	Hexadecanoic acid	20.15	11	JN
7. 000112-92-5	1-Octadecanol	21.28	9	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

MW 1

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 3375 Location B.166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 3375.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN1087.D

Level: (low/med) LOW Date Received: 02/27/98

% Moisture: _____ decanted: (Y/N) N Date Analyzed: 03/04/98

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	4.95	16	JN
2. 000057-10-3	Hexadecanoic acid	20.15	12	JN

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	Extraction Blank
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	3/3/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/20/98
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3373.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/27/98
	Bldg. 173	**Extraction Date:**	3/3/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/20/98

Analysis:	EPA Method 608	**Location :**	Bldg. 166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3376.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/27/98
	Bldg. 173	**Extraction Date:**	3/3/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/21/98

Analysis:	EPA Method 608	**Location :**	Bldg. D-80
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	MW-1
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3375.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/27/98
	Bldg. 173	**Extraction Date:**	3/3/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/21/98
Analysis:	EPA Method 608	**Location :**	Bldg. 166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	MW-1
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0023	ND
beta-BHC	1		0.20	0.0026	ND
gamma-BHC	1		0.20	0.0026	ND
delta-BHC	1		NLE	0.0029	ND
Heptachlor	1		0.40	0.0027	ND
Aldrin	1		0.04	0.0028	ND
Heptachlor Epoxide	1		0.20	0.0024	ND
Endosulfan I	1		0.40	0.0024	ND
4,4'-DDE	1		0.10	0.0034	ND
Dieldrin	1		0.03	0.0019	ND
Endrin	1		2.00	0.0030	ND
Endrin Ketone	1		NLE	0.0100	ND
Endosulfan II	1		0.40	0.0027	ND
4,4'-DDD	1		0.10	0.0066	ND
4,4'-DDT	1		0.10	0.0015	ND
Endosulfan-Sulfate	1		0.40	0.0010	ND
Methoxychlor	1		NLE	0.0100	ND
Alpha-chlordane	1		0.50	0.0140	ND
Gamma-chlordane	1		0.50	0.0140	ND
Toxaphene	1		3.00	0.0182	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-5 30m/.32mmID/.25um
Column-Confirmation: Rtx-1701 30m/.32mmID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: 02/27/98
Sample Matrix: Aqueous

Site: Bldg. D-80
Ft. Monmouth, New Jersey

Field ID#: NA

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	03/17/98	ND	200	20.0
Antimony	03/17/98	ND	20	4.0
Arsenic	03/17/98	ND	8	4.0
Barium	03/17/98	ND	2000	1.0
Beryllium	03/17/98	ND	20	1.0
Cadmium	03/17/98	ND	4	1.0
Calcium	03/17/98	ND	NLE	20.0
Chromium	03/17/98	ND	100	1.0
Cobalt	03/17/98	ND	NLE	1.0
Copper	03/17/98	ND	1000	6.0
Iron	03/17/98	ND	300	10.0
Lead	03/17/98	ND	10	4.0
Magnesium	03/17/98	ND	NLE	20.0
Manganese	03/17/98	ND	50	1.0
Mercury	03/03/98	ND	2	0.2
Nickel	03/17/98	ND	100	1.0
Potassium	03/17/98	ND	NLE	20.0
Selenium	03/17/98	ND	50	6.0
Silver	03/17/98	ND	20	6.0
Sodium	03/17/98	ND	50000	20.0
Thallium	03/17/98	ND	10	6.0
Vanadium	03/17/98	ND	NLE	2.0
Zinc	03/17/98	ND	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: Method Blank
Sample Received: 02/27/98
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: NA

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	03/17/98	ND	200	20.0
Antimony	03/17/98	ND	20	4.0
Arsenic	03/17/98	ND	8	4.0
Barium	03/17/98	ND	2000	1.0
Beryllium	03/17/98	ND	20	1.0
Cadmium	03/17/98	ND	4	1.0
Calcium	03/17/98	ND	NLE	20.0
Chromium	03/17/98	ND	100	1.0
Cobalt	03/17/98	ND	NLE	1.0
Copper	03/17/98	ND	1000	6.0
Iron	03/17/98	ND	300	10.0
Lead	03/17/98	ND	10	4.0
Magnesium	03/17/98	ND	NLE	20.0
Manganese	03/17/98	ND	50	1.0
Mercury	03/03/98	ND	2	0.2
Nickel	03/17/98	ND	100	1.0
Potassium	03/17/98	ND	NLE	20.0
Selenium	03/17/98	ND	50	6.0
Silver	03/17/98	ND	20	6.0
Sodium	03/17/98	ND	50000	20.0
Thallium	03/17/98	ND	10	6.0
Vanadium	03/17/98	ND	NLE	2.0
Zinc	03/17/98	ND	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3373.02
Sample Received: 02/27/98
Sample Matrix: Aqueous

Site: Bldg. 296
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	03/17/98	300	200	20.0
Antimony	03/17/98	ND	20	4.0
Arsenic	03/17/98	ND	8	4.0
Barium	03/17/98	4.5	2000	1.0
Beryllium	03/17/98	ND	20	1.0
Cadmium	03/17/98	ND	4	1.0
Calcium	03/17/98	1510	NLE	20.0
Chromium	03/17/98	ND	100	1.0
Cobalt	03/17/98	ND	NLE	1.0
Copper	03/17/98	14	1000	6.0
Iron	03/17/98	40	300	10.0
Lead	03/17/98	ND	10	4.0
Magnesium	03/17/98	170	NLE	20.0
Manganese	03/17/98	2.7	50	1.0
Mercury	03/03/98	ND	2	0.2
Nickel	03/17/98	2.4	100	1.0
Potassium	03/17/98	ND	NLE	20.0
Selenium	03/17/98	ND	50	6.0
Silver	03/17/98	ND	20	6.0
Sodium	03/17/98	450	50000	20.0
Thallium	03/17/98	ND	10	6.0
Vanadium	03/17/98	ND	NLE	2.0
Zinc	03/17/98	50	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3376.01
Sample Received: 02/27/98
Sample Matrix: Aqueous

Site: Bldg. D-80
Ft. Monmouth, New Jersey

Field ID#: MW-1

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	03/17/98	306	200	20.0
Antimony	03/17/98	ND	20	4.0
Arsenic	03/17/98	24	8	4.0
Barium	03/17/98	86.2	2000	1.0
Beryllium	03/17/98	ND	20	1.0
Cadmium	03/17/98	8.0	4	1.0
Calcium	03/17/98	51010	NLE	20.0
Chromium	03/17/98	1.3	100	1.0
Cobalt	03/17/98	2.0	NLE	1.0
Copper	03/17/98	16	1000	6.0
Iron	03/17/98	70680	300	10.0
Lead	03/17/98	6.0	10	4.0
Magnesium	03/17/98	16030	NLE	20.0
Manganese	03/17/98	456.2	50	1.0
Mercury	03/03/98	ND	2	0.2
Nickel	03/17/98	2.7	100	1.0
Potassium	03/17/98	8470	NLE	20.0
Selenium	03/17/98	ND	50	6.0
Silver	03/17/98	ND	20	6.0
Sodium	03/17/98	279400	50000	20.0
Thallium	03/17/98	ND	10	6.0
Vanadium	03/17/98	ND	NLE	2.0
Zinc	03/17/98	117	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3375.01
Sample Received: 02/27/98
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: MW-1

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	03/17/98	291	200	20.0
Antimony	03/17/98	ND	20	4.0
Arsenic	03/17/98	ND	8	4.0
Barium	03/17/98	16	2000	1.0
Beryllium	03/17/98	ND	20	1.0
Cadmium	03/17/98	1.4	4	1.0
Calcium	03/17/98	46400	NLE	20.0
Chromium	03/17/98	1.5	100	1.0
Cobalt	03/17/98	1.0	NLE	1.0
Copper	03/17/98	15	1000	6.0
Iron	03/17/98	5976	300	10.0
Lead	03/17/98	ND	10	4.0
Magnesium	03/17/98	13030	NLE	20.0
Manganese	03/17/98	245.6	50	1.0
Mercury	03/03/98	0.3	2	0.2
Nickel	03/17/98	1.7	100	1.0
Potassium	03/17/98	4610	NLE	20.0
Selenium	03/17/98	ND	50	6.0
Silver	03/17/98	ND	20	6.0
Sodium	03/17/98	29310	50000	20.0
Thallium	03/17/98	ND	10	6.0
Vanadium	03/17/98	ND	NLE	2.0
Zinc	03/17/98	144	5000	2.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3614.01	80MW-01	29-31774	06/02/98
3614.02	166MW-01	29-31773	06/02/98

NJDEP Laboratory Certification # 13461

Report Date: 31 July, 1998

7/20/98

Daniel Wright Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: Joe Fallon
Phone #: X26223
( )DERA ( )OMA ( )Other:_____
Project No:
Location: 80/166 mw
Samplers Name / Company : Casey McCormack

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	BNA+25	Pest/PCB	TAL Metals				Hex Reading	Remarks / Preservation Method
36 14 .01	80 mw-01	6/2/98	1602	Ag	5	✓	✓	✓	✓					0.1 ppm Well Pad 29-31774
.02	166 mw-01	↓	1438	↓	9	✓	✓	✓	✓					0.0 ppm 29-31773

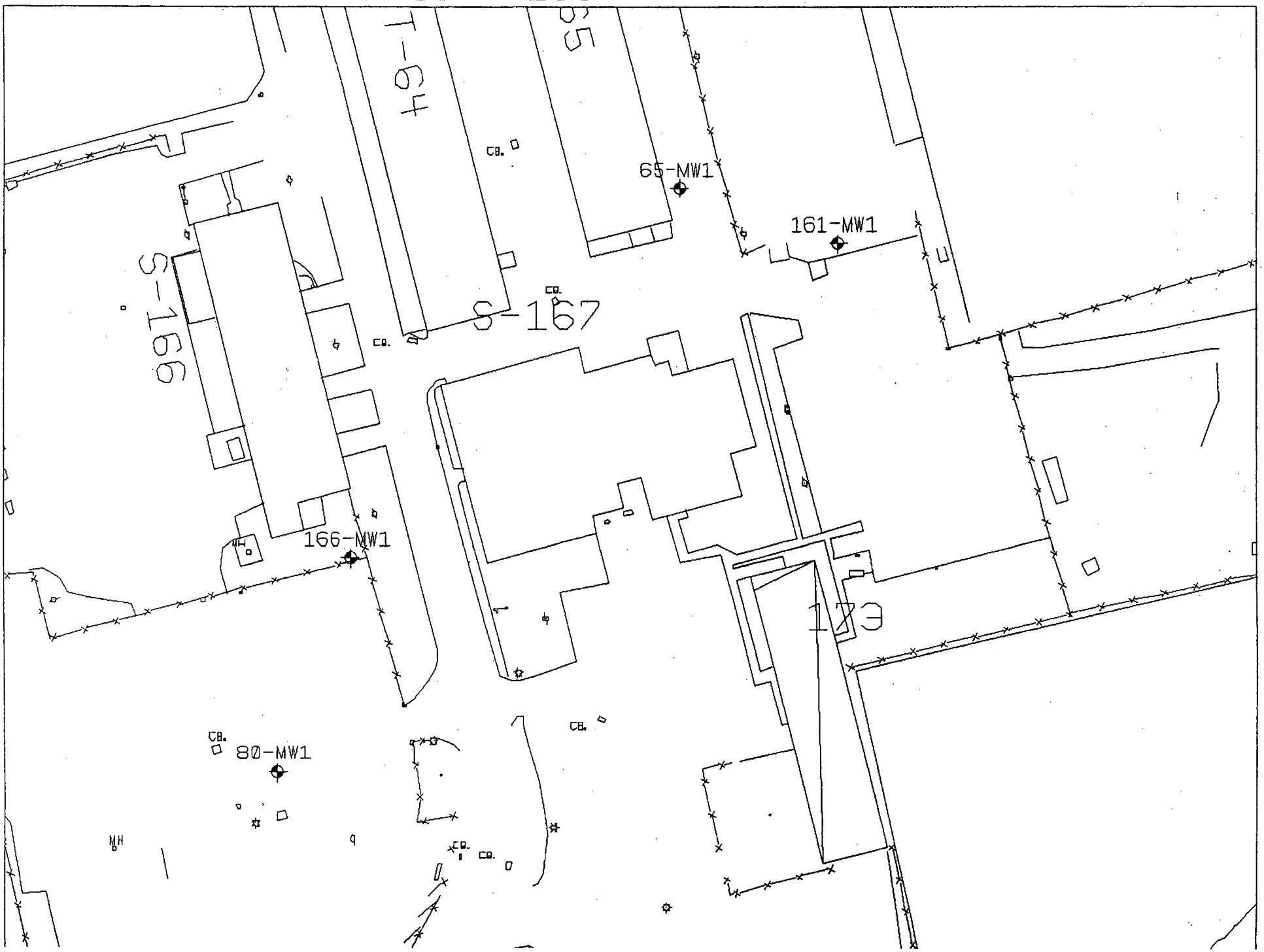
Comments: 4°C/HCl/HNO3

Addt'l Depth of Waters @ DI61-MW1 : 6.41 ft

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Casey McCormack	6/2/98 1605	J. Wright			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (✓)Standard, ( )Screen / non-certified
Turnaround time: (✓)Standard 4 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks: # QC MS
Shows Trip/Field Blank w/290/M-18


BLDG. S D161, D65, D80 166
S-167
S-166
65-MW1
161-MW1
166-MW1
80-MW1
173
CB.
MH

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 1
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 6 / 2 / 98
WEATHER: Sunny, warm, breezy

ELEV. OF CASING SURVEY MARK: 6.91 ft
DEPTH TO WATER: 2.09 ft
DEPTH OF WELL: 12.26 ft
HEIGHT OF WATER: 10.16 ft
(10.16) X .65 X 3 = 19.83
GALLONS OF H2O TO BE PURGED: 20 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.12 gpm
Hnu READING: 0.1 ppm

PURGE START TIME: 1315
pH 5.75 su TEMP 19.3 °C
DISSOLVED O2 1.9 ppm SPECIFIC CONDUCTIVITY 80 us/cm

PURGE END TIME: 1602
pH 5.96 su TEMP 19.2 °C
DISSOLVED O2 1.3 ppm SPECIFIC CONDUCTIVITY 90 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.42 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER

TOTAL VOLUME PURGED: 20 gal

pH 5.85 su TEMP 19.4 °C
DISSOLVED O2 1.2 ppm SPECIFIC CONDUCTIVITY 80 us/cm

COMMENTS: Appeared to have an oily sheen on surface.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 1
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 6 / 02 / 98
WEATHER: warm, breezy, sunny

ELEV. OF CASING SURVEY MARK: 6.96 ft
DEPTH TO WATER: 1.97 ft
DEPTH OF WELL: 7.75 ft
HEIGHT OF WATER: 5.78 ft
(5.78) X .65 X 3 = 11.27
GALLONS OF H2O TO BE PURGED: 11 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.19 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 1340
pH 7.01 su TEMP 20.2 °C
DISSOLVED O2 1.4 ppm SPECIFIC CONDUCTIVITY 80 us/cm

PURGE END TIME: 1438
pH 6.91 su TEMP 20.3 °C
DISSOLVED O2 1.8 ppm SPECIFIC CONDUCTIVITY 90 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.30 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER

TOTAL VOLUME PURGED: 11 gal

pH 6.91 su TEMP 20.2 °C
DISSOLVED O2 1.5 ppm SPECIFIC CONDUCTIVITY 90 us/cm

COMMENTS: QC MS here.

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb00560.d	Sample Name	VBLK14
Operator	Skelton	Field ID	VBLK14
Date Acquired	11 Jun 1998 9:42 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb00544.d**	Sample Name	**3610.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**9 Jun 1998 11:18 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb00545.d**	Sample Name	**3610.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**10 Jun 1998 12:05 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb00570.d	Sample Name	3614.01
Operator	Skelton	Field ID	80MW01
Date Acquired	11 Jun 1998 6:17 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene	20.02	116914	1.71 ug/L	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene	28.72	272941	5.14 ug/L	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	VB00571.D	Sample Name	3614.02
Operator	Skelton	Field ID	166MW01
Date Acquired	11 Jun 1998 7:05 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	6.25 ug/L	
107131	Acrylonitrile			not detected	nle	6.25 ug/L	
75650	tert-Butyl alcohol			not detected	nle	12.50 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	2.50 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	3.63 ug/L	
74-87-3	Chloromethane			not detected	30	0.79 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.61 ug/L	
74-83-9	Bromomethane			not detected	10	1.45 ug/L	
75-00-3	Chloroethane			not detected	nle	2.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.31 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.74 ug/L	
67-64-1	Acetone			not detected	700	1.57 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.54 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.66 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.83 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	2.07 ug/L	
78-93-3	2-Butanone			not detected	300	2.06 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.65 ug/L	
67-66-3	Chloroform			not detected	6	0.43 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.81 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	1.20 ug/L	
71-43-2	Benzene			not detected	1	0.51 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	1.27 ug/L	
79-01-6	Trichloroethene			not detected	1	0.94 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.78 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.77 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.05 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.60 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.33 ug/L	
108-88-3	Toluene			not detected	1000	0.73 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.43 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	1.49 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.92 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.12 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.36 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.66 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.14 ug/L	
136-90-7	m+p-Xylenes			not detected	nle	2.53 ug/L	
136-90-7	o-Xylene			not detected	nle	1.92 ug/L	
100-42-5	Styrene			not detected	100	1.57 ug/L	
75-25-2	Bromoform			not detected	4	1.68 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	1.71 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.51 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	3.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.75 ug/L	

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **VBLK14**

Lab Name: FMETL Project

NJDEP# 13461 Case No.: 3614 SDG No Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: VBLK14

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB00560.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: not dec. Date Analyzed: 06/11/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL Project

NJDEP# 13461 Case No.: 3610 SDG No Location M18

Matrix: (soil/water) WATER Lab Sample ID: 3610.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB00544.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: not dec. Date Analyzed: 06/09/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project

NJDEP# 13461 Case No.: 3610 SDG No Location M18

Matrix: (soil/water) WATER Lab Sample ID: 3610.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB00545.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: not dec. Date Analyzed: 06/10/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

80MW01

Lab Name: FMETL Project

NJDEP# 13461 Case No.: 3614 SDG No Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3614.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB00570.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: not dec. Date Analyzed: 06/11/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000103-65-1	Benzene, propyl-	31.98	4	JN
2. 000135-01-3	Benzene, 1,2-diethyl-	34.96	5	JN
3. 000496-11-7	Indane	35.43	21	JN

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 166MW01

Lab Name: FMETL Project

NJDEP# 13461 Case No.: 3614 SDG No Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3614.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB00571.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: not dec. Date Analyzed: 06/11/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 2

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000768-00-3	Benzene, (1-methyl-1-propenyl)-,	23.98	10	JN
2. 017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	29.54	8	JN

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bna00168.d**	Sample Name	**SBLK 82**
Operator	**FITZPATRICK**	Misc Info	**SBLK 82**
Date Acquired	**06/11/19 -1:2:**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**bna00168.d**	Sample Name	**SBLK 82**
Operator	**FITZPATRICK**	Misc Info	**SBLK 82**
Date Acquired	**06/11/19 -1:2:**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate	21.21	411491	2.96 ug/L	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bna00170.d**	Sample Name	**3610.02**
Operator	**FITZPATRICK**	Misc Info	**FIELD BLANK**
Date Acquired	**11 Jun 1998 4:31 am**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**bna00170.d**	Sample Name	**3610.02**
Operator	**FITZPATRICK**	Misc Info	**FIELD BLANK**
Date Acquired	**11 Jun 1998 4:31 am**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate	21.21	476604	3.04 ug/L	900	0.23	ug/L	B
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bna00178.d**	Sample Name	**3614.01**
Operator	**FITZPATRICK**	Misc Info	**80**
Date Acquired	**11 Jun 1998 10:33 am**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene	9.40	66466	1.20 ug/L	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene	16.06	207591	2.28 ug/L	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran	16.43	211751	2.03 ug/L	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**bna00178.d**	Sample Name	**3614.01**
Operator	**FITZPATRICK**	Misc Info	**80**
Date Acquired	**11 Jun 1998 10:33 am**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene	17.25	345037	3.44 ug/L	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene	19.50	326278	2.56 ug/L	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate	21.22	542216	3.94 ug/L	900	0.23	ug/L	B
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**BNA00179.D**	Sample Name	**3614.02**
Operator	**FITZPATRICK**	Misc Info	**166**
Date Acquired	**11 Jun 1998 11:19 am**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	GW Criteria	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA00179.D**	Sample Name	**3614.02**
Operator	**FITZPATRICK**	Misc Info	**166**
Date Acquired	**11 Jun 1998 11:19 am**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate	21.22	546203	3.96 ug/L	900	0.23	ug/L	B
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

SBLK 82

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 3614 Location 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: SBLK 82

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00168.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: _____ decanted: (Y/N) N Date Extracted: 06/03/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK

Lab Name: FMETL Lab Code 13461

Project Case No.: 3610 Location M-18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3610.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00170.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: decanted: (Y/N) N Date Extracted: 06/03/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

80

Lab Name: FMETL Lab Code 13461

Project _____ Case No.: 3614 Location 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 3614.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00178.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: _____ decanted: (Y/N) N Date Extracted: 06/03/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000767-58-8	Indan, 1-methyl-	11.33	20	JN
2. 017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	12.06	8	JN
3.	unknown	13.47	12	J
4. 000091-57-6	Naphthalene, 2-methyl-	13.76	48	JN
5. 000581-40-8	Naphthalene, 2,3-dimethyl-	15.20	24	JN
6. 000581-40-8	Naphthalene, 2,3-dimethyl-	15.46	9	JN
7. 010544-50-0	Sulfur, mol. (S8)	22.18	14	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

166

Lab Name: FMETL Lab Code 13461

Project Case No.: 3614 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3614.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00179.D

Level: (low/med) LOW Date Received: 06/02/98

% Moisture: decanted: (Y/N) N Date Extracted: 06/03/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK109
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	6/4/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/23/98
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		NLE	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3610.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	6/2/98
	Bldg. 173	**Extraction Date:**	6/4/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/23/98
Analysis:	EPA Method 608	**Location :**	M-18
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		NLE	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3614.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	6/2/98
	Bldg. 173	**Extraction Date:**	6/4/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/23/98
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	80MW-01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1	19.48	0.10	0.0022	**0.099**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		NLE	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3614.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	6/2/98
	Bldg. 173	**Extraction Date:**	6/4/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/23/98
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	166MW-01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	GW Criteria	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		NLE	0.0038	**ND**
Alpha-chlordane	1	17.89	0.50	0.0011	**0.027**
Gamma-chlordane	1	17.57	0.50	0.0009	**0.022**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3614
Sample Received: 06/02/98
Sample Preparation: 06/18/98
Sample Matrix: Aqueous

Site: Bldg. 80/166
Ft. Monmouth, New Jersey

METHOD BLANK SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	06/22/98	ND	200	10.0
Antimony	06/22/98	2.6	20	2.0
Arsenic	06/22/98	ND	8	2.0
Barium	06/22/98	ND	2000	0.5
Beryllium	06/22/98	ND	20	0.5
Cadmium	06/22/98	ND	4	0.5
Calcium	06/22/98	ND	NLE	20.0
Chromium	06/22/98	ND	100	0.5
Cobalt	06/22/98	ND	NLE	0.5
Copper	06/22/98	ND	1000	3.0
Iron	06/22/98	ND	300	10.0
Lead	06/22/98	ND	10	2.0
Magnesium	06/22/98	ND	NLE	20.0
Manganese	06/22/98	ND	50	0.5
Mercury	06/03/98	ND	2	0.2
Nickel	06/22/98	2.5	100	0.5
Potassium	06/22/98	ND	NLE	20.0
Selenium	06/22/98	ND	50	3.0
Silver	06/22/98	ND	20	3.0
Sodium	06/22/98	ND	50000	20.0
Thallium	06/22/98	ND	10	3.0
Vanadium	06/22/98	ND	NLE	1.0
Zinc	06/22/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3610.02
Sample Received: 06/02/98
Sample Matrix: Aqueous

Site: M-18
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	06/22/98	ND	200	10.0
Antimony	06/22/98	ND	20	2.0
Arsenic	06/22/98	ND	8	2.0
Barium	06/22/98	ND	2000	0.5
Beryllium	06/22/98	ND	20	0.5
Cadmium	06/22/98	ND	4	0.5
Calcium	06/22/98	240	NLE	20.0
Chromium	06/22/98	ND	100	0.5
Cobalt	06/22/98	ND	NLE	0.5
Copper	06/22/98	ND	1000	3.0
Iron	06/22/98	39	300	10.0
Lead	06/22/98	ND	10	2.0
Magnesium	06/22/98	34	NLE	20.0
Manganese	06/22/98	ND	50	0.5
Mercury	06/03/98	1.2	2	0.2
Nickel	06/22/98	3.3	100	0.5
Potassium	06/22/98	ND	NLE	20.0
Selenium	06/22/98	ND	50	3.0
Silver	06/22/98	ND	20	3.0
Sodium	06/22/98	ND	50000	20.0
Thallium	06/22/98	ND	10	3.0
Vanadium	06/22/98	ND	NLE	1.0
Zinc	06/22/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3614.01
Sample Received: 06/02/98
Sample Matrix: Aqueous

Site: 80/166 MW
Ft. Monmouth, New Jersey

Field ID#: 80 MW-01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	06/22/98	195	200	10.0
Antimony	06/22/98	ND	20	2.0
Arsenic	06/22/98	11.9	8	2.0
Barium	06/22/98	40.2	2000	0.5
Beryllium	06/22/98	ND	20	0.5
Cadmium	06/22/98	3.9	4	0.5
Calcium	06/22/98	39700	NLE	20.0
Chromium	06/22/98	ND	100	0.5
Cobalt	06/22/98	ND	NLE	0.5
Copper	06/22/98	6.6	1000	3.0
Iron	06/22/98	8409	300	10.0
Lead	06/22/98	3.3	10	2.0
Magnesium	06/22/98	4236	NLE	20.0
Manganese	06/22/98	117	50	0.5
Mercury	06/03/98	ND	2	0.2
Nickel	06/22/98	2.4	100	0.5
Potassium	06/22/98	8833	NLE	20.0
Selenium	06/22/98	ND	50	3.0
Silver	06/22/98	ND	20	3.0
Sodium	06/22/98	147200	50000	20.0
Thallium	06/22/98	ND	10	3.0
Vanadium	06/22/98	3.1	NLE	1.0
Zinc	06/22/98	65	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3614.02
Sample Received: 06/02/98
Sample Matrix: Aqueous

Site: 80/166 MW
Ft. Monmouth, New Jersey

Field ID#: 166 MW-01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	06/22/98	266	200	10.0
Antimony	06/22/98	ND	20	2.0
Arsenic	06/22/98	2.3	8	2.0
Barium	06/22/98	14.6	2000	0.5
Beryllium	06/22/98	ND	20	0.5
Cadmium	06/22/98	1.4	4	0.5
Calcium	06/22/98	52700	NLE	20.0
Chromium	06/22/98	ND	100	0.5
Cobalt	06/22/98	ND	NLE	0.5
Copper	06/22/98	8.0	1000	3.0
Iron	06/22/98	6776	300	10.0
Lead	06/22/98	2.3	10	2.0
Magnesium	06/22/98	14350	NLE	20.0
Manganese	06/22/98	235	50	0.5
Mercury	06/03/98	ND	2	0.2
Nickel	06/22/98	2.6	100	0.5
Potassium	06/22/98	7118	NLE	20.0
Selenium	06/22/98	ND	50	3.0
Silver	06/22/98	ND	20	3.0
Sodium	06/22/98	27800	50000	20.0
Thallium	06/22/98	ND	10	3.0
Vanadium	06/22/98	4.2	NLE	1.0
Zinc	06/22/98	104	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

	Lab	Carbon Disulfide	Benzene	Chloro benzene	Unknown	Cadmium	Chromium	Iron	Mang anese	Silver	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	NLE	1	4	-	4	100	300	50	20	-
04/16/97	FMETL	2.31	1.38	2.61	115	-	-	-	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	8.0	148	7490	136	8.0	V,S,P,M
11/24/97	FMETL	ND	ND	2.26	ND	ND	1.2	9062	553	ND	V,S,P,M
02/27/98	FMETL	ND	ND	3.26	10	8.0	1.3	70680	456	ND	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	3.9	ND	8409	117	ND	V,S,P,M

SOURCE: MW-1

Sampling Dates:
04/16/97 - 06/02/98

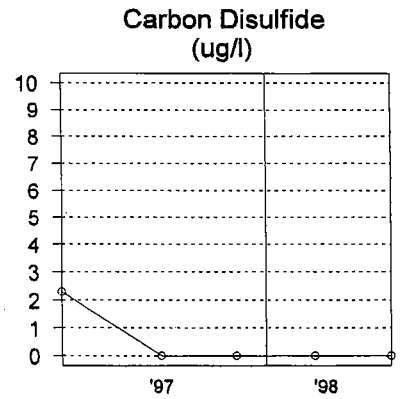
NOTES:

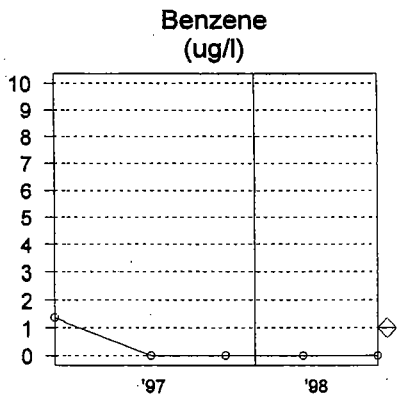
FORT MONMOUTH

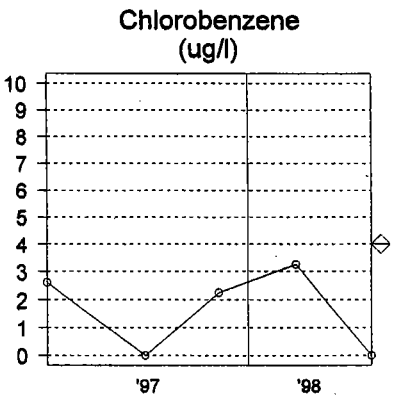
GW MONITORING
Bldg. 80

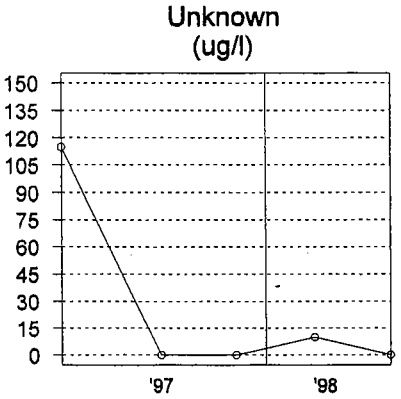
Well 1 of 1

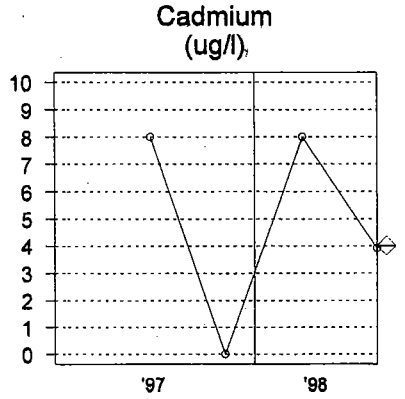
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

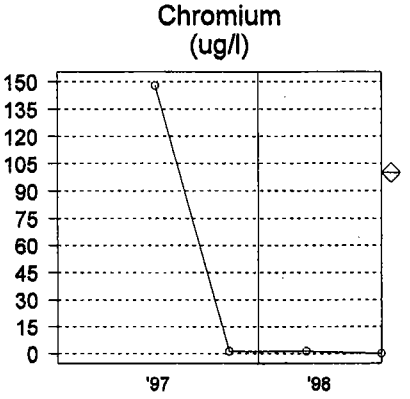


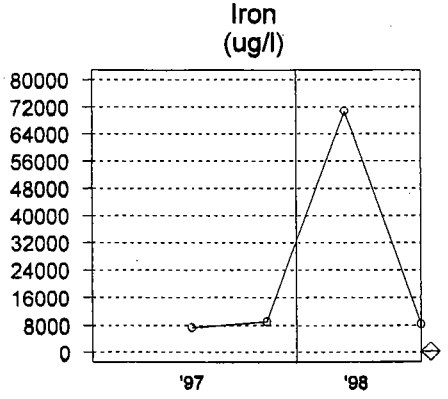


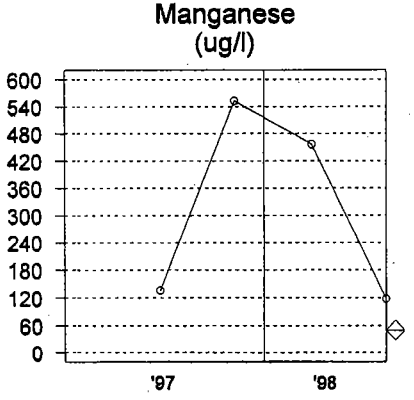


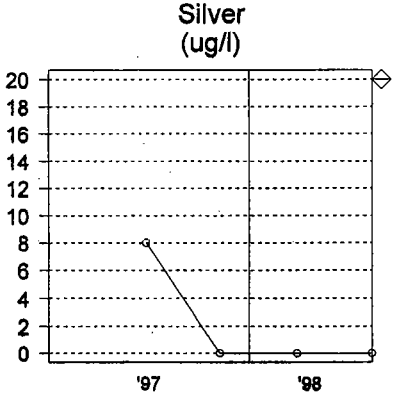












SOURCE: MW-1

Sampling Dates:
04/16/97 - 06/02/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

08-12-1998 c:\mtech46\fm\80\gw\80.wsf

	Lab	Sodium	Lead	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:	-	50000	10	-							-
04/16/97	FMETL	-	2.5	2.60							V,Pb
08/20/97	FMETL	110750	4.0	3.20							V,S,P,M
11/24/97	FMETL	97380	14	2.40							V,S,P,M
02/27/98	FMETL	279400	6.0	1.40							V,S,P,M
06/02/98	FMETL	147200	3.3	2.09							V,S,P,M

SOURCE: MW-1

Sampling Dates:
04/16/97 - 06/02/98

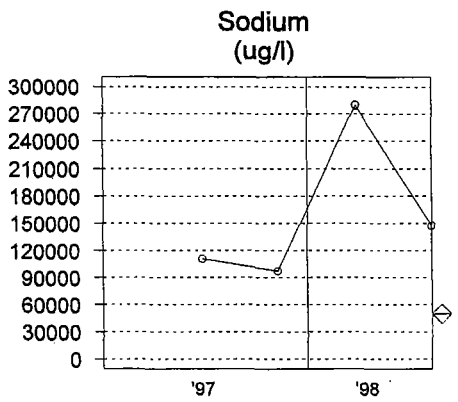
NOTES:

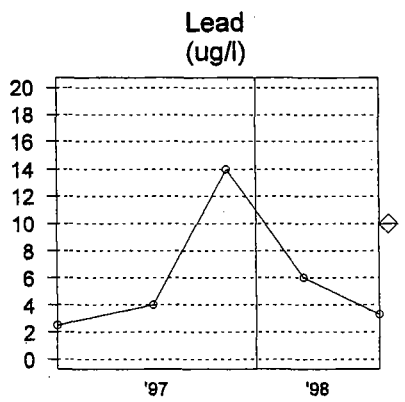
FORT MONMOUTH

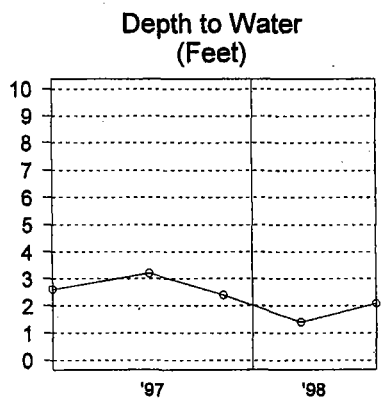
GW MONITORING
Bldg. 80

Well 1 of 1

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV







SOURCE: MW-1

Sampling Dates:
04/16/97 - 06/02/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

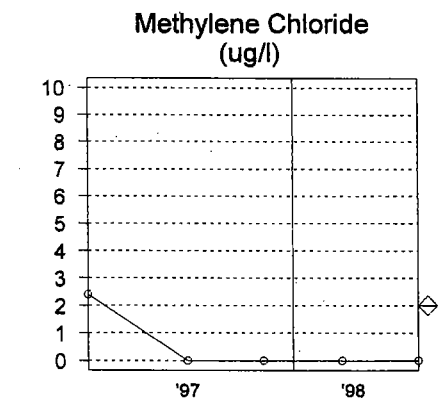
FORT MONMOUTH

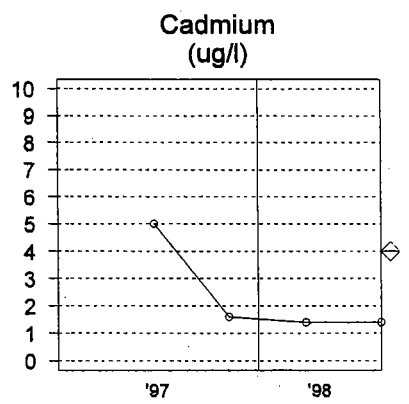
GW MONITORING
Bldg. 80

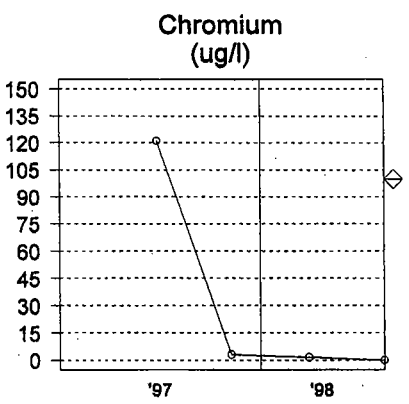
Well 1 of 1, Graph

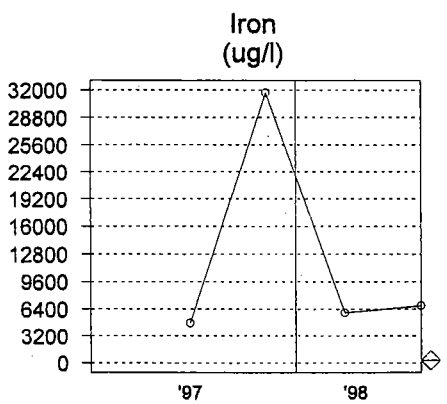
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

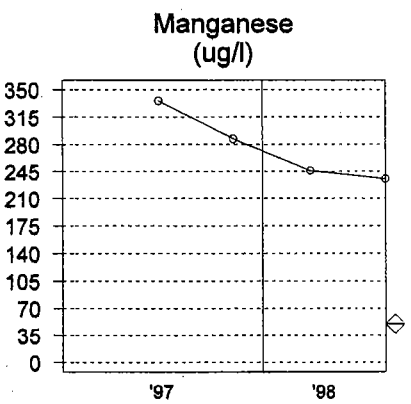
08-12-1998 c:\mtech46\fm\80\gw\80.wsf

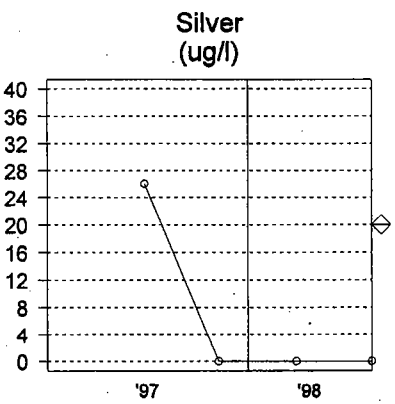


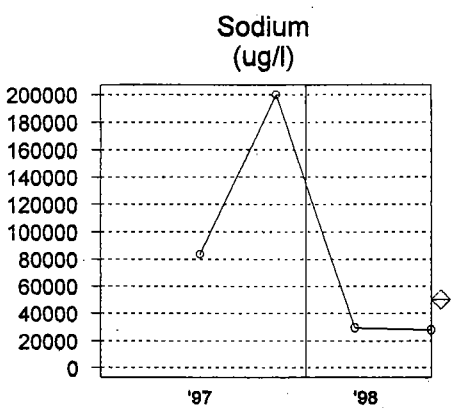


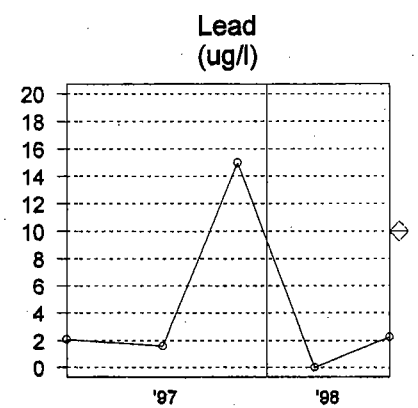


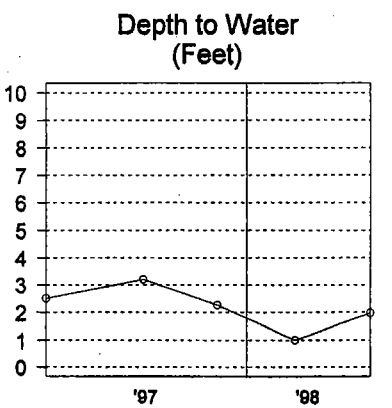












SOURCE: MW1

Sampling Dates:
04/16/97 - 06/02/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

08-12-1998 c:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3823.04	80MW-01	29-31774	08/24/98
3823.05	166MW-01	29-31773	08/24/98

NJDEP Laboratory Certification # 13461

11/10/98

Daniel Wright. Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer:

Phone #:

(✓)DERA ( )OMA ( )Other:_____

Project No:

Location: Bldg 80/166 mw's

Samplers Name / Company : Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	BNA TCL	Pest/PCB	TAL Mtls				HNO3 Analy	Comments: Remarks / Preservation Method
														HCl/HNO3/4°C
3823 .01	Trip	8/24/98	1035	AQ	2	✓								
.02	Field		1250		5	✓	✓	✓	✓					
.03	Dupe		—		5	✓	✓	✓	✓					well IO#'s
.04	80 mw 01		1314		5	✓	✓	✓	✓				✓	1.4 ppm 29-31774
.05	166 mw 01		1304		5	✓	✓	✓	✓				✓	1.2 ppm 29-31773
														Depth of wtrs
														Bldg 108 :
														mw 01 : 7.77 ft
										IO#	29-33758	→		492 mw 02 : 8.73 ft
										IO#	29-31775	D		161 mw 02 : 7.80 ft

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/24/98 1430				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (✓)Standard, (_)Screen / non-certified

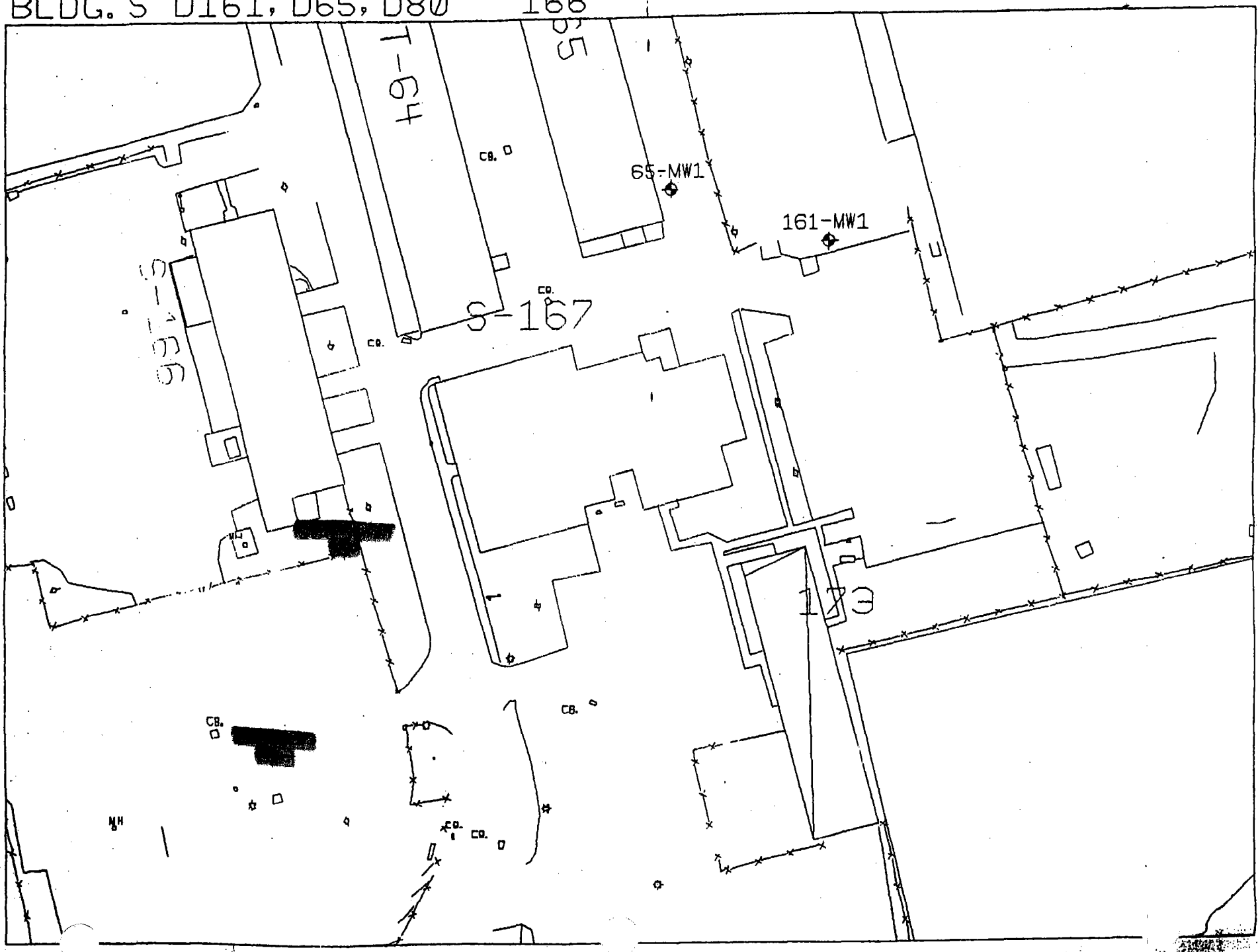
Turnaround time: (✓)Standard 4 wks, (_)Rush ____ Days, (_)ASAP Verbal ____Hrs.

Remarks: ~~Stats Trip, Dupe of 108~~ cpm 8/24/98

Oil, sheen, particles, odor both wells. Rust color at purge but end well #1

print legibly

Custody.xls6/29/98


BLDG. S D161, D65, D80
166
65-MW1
161-MW1
S-167
173
CB.
MH

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 8 / 24 / 98
WEATHER: CLEAR, SUNNY, HUMID, HOT

ELEV. OF CASING SURVEY MARK: 6.91 ft
DEPTH TO WATER: 3.43 ft
DEPTH OF WELL: 12.26 ft
HEIGHT OF WATER: 8.83 ft
(8.83) X .65 X 3 = 17.21
GALLONS OF H2O TO BE PURGED: 17 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 1.4 ppm

PURGE START TIME: 1201
pH 6.18 su TEMP 26.5 °C
DISSOLVED O2 4.60 ppm SPECIFIC CONDUCTIVITY 544 us/cm

PURGE END TIME: 1314
pH 6.07 su TEMP 25.4 °C
DISSOLVED O2 4.18 ppm SPECIFIC CONDUCTIVITY 412 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.06 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 17 gal

pH 6.10 su TEMP 25.2 °C
DISSOLVED O2 4.16 ppm SPECIFIC CONDUCTIVITY 357 us/cm

COMMENTS: RUSTY COLOR AROUND EDGE OF PURGE DISCHARGE HOSE. OILY SHEEN, AND ODOR. FLOATING PARTICLES.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 8 / 24 / 98
WEATHER: SUNNY, LIGHT CLOUDS, HUMID

ELEV. OF CASING SURVEY MARK: 6.96 ft
DEPTH TO WATER: 3.42 ft
DEPTH OF WELL: 7.75 ft
HEIGHT OF WATER: 4.33 ft
(4.33) X .65 X 3 = 8.44
GALLONS OF H2O TO BE PURGED: 8 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 1.2 ppm

PURGE START TIME: 1230
pH 6.60 su TEMP 24.2 °C
DISSOLVED O2 4.72 ppm SPECIFIC CONDUCTIVITY 899 us/cm

PURGE END TIME: 1304
pH 6.73 su TEMP 27.3 °C
DISSOLVED O2 4.08 ppm SPECIFIC CONDUCTIVITY 835 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.45 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 8 gal

pH 6.73 su TEMP 26.2 °C
DISSOLVED O2 3.71 ppm SPECIFIC CONDUCTIVITY 804 us/cm

COMMENTS: DUPE HERE. OILY SHEEN, ODOR. FLOATING PARTICLES.

CASE NARRATIVE

Site: Bldg. 80 and 166
Lab ID: 3823

The duplicate analysis was performed on 166 MW-01 (3823.05).

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound identified below detection limit
B : Compound in both sample and blank
D : Results from dilution of sample
U : Compound searched for but not detected

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	VB01340.D	Sample Name	VBLK40
Operator	Skelton	Field ID	VBLK40
Date Acquired	27 Aug 1998 11:40 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb01362.d**	Sample Name	**3823.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**28 Aug 98 6:34 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	10.51	61651	6.64 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	17.68	98017	1.72 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb01363.d**	Sample Name	**3823.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**28 Aug 98 7:21 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	10.51	78907	8.70 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	16.71	48100	3.40 ug/L	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	17.68	69340	1.25 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb01364.d**	Sample Name	**3823.03**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**28 Aug 98 8:09 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	10.51	147339	16.42 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb01365.d	Sample Name	3823.04
Operator	Skelton	Field ID	80 MW01
Date Acquired	28 Aug 98 8:55 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	10.50	90283	10.27 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	16.71	45635	3.32 ug/L	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.72	454652	5.20 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb01366.d	Sample Name	3823.05
Operator	Skelton	Field ID	166 MW 01
Date Acquired	28 Aug 98 9:42 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	10.49	117308	13.03 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	16.71	44910	3.19 ug/L	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **VBLK40**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 3823 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: VBLK40

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01340.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: not dec. _____ Date Analyzed: 08/27/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 3823 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3823.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01362.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: not dec. _____ Date Analyzed: 08/28/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 3823 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3823.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01363.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: not dec. _____ Date Analyzed: 08/28/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: Dupe

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 3823 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3823.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01364.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: not dec. _____ Date Analyzed: 08/28/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80 MW-01**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 3823 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3823.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01365.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: not dec. _____ Date Analyzed: 08/28/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000873-49-4	Benzene, cyclopropyl-	35.44	10	JN

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 166 MW-01

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 3823 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 3823.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01366.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: not dec. _____ Date Analyzed: 08/28/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bna00578.d	Sample Name	Sblk119
Operator	Skelton	Misc Info	Sblk119 A 980825
Date Acquired	12 Sep 1998 1:11 am	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	bna00578.d	Sample Name	Sblk119
Operator	Skelton	Misc Info	Sblk119 A 980825
Date Acquired	12 Sep 1998 1:11 am	Sample Multiplier	1

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bna00579.d	Sample Name	3823.02
Operator	Skelton	Misc Info	Field Blank
Date Acquired	12 Sep 1998 1:52 am	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)[A]	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**bna00579.d**	Sample Name	**3823.02**
Operator	**Skelton**	Misc Info	**Field Blank**
Date Acquired	**12 Sep 1998 1:52 am**	Sample Multiplier	**1**

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bna00580.d**	Sample Name	**3823.03**
Operator	**Skelton**	Misc Info	**Field Dup**
Date Acquired	**12 Sep 1998 2:34 am**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	bna00580.d	Sample Name	3823.03
Operator	Skelton	Misc Info	Field Dup
Date Acquired	12 Sep 1998 2:34 am	Sample Multiplier	1

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bna00581.d	Sample Name	3823.04
Operator	Skelton	Misc Info	80 MW01
Date Acquired	12 Sep 1998 3:15 am	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	bna00581.d	Sample Name	3823.04
Operator	Skelton	Misc Info	80 MW01
Date Acquired	12 Sep 1998 3:15 am	Sample Multiplier	1

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	BNA00582.D	Sample Name	3823.05
Operator	Skelton	Misc Info	166 MW01
Date Acquired	12 Sep 1998 3:57 am	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BNA00582.D	Sample Name	3823.05
Operator	Skelton	Misc Info	166 MW01
Date Acquired	12 Sep 1998 3:57 am	Sample Multiplier	1

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Sblk119

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 3823 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk119

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00578.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: decanted: (Y/N) N Date Extracted: 08/25/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/12/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000301-02-0	9-Octadecenamide, (Z)-	26.39	10	JN

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Field Blank

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 3823 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3823.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00579.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: decanted: (Y/N) N Date Extracted: 08/25/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/12/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Field Dupe

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 3823 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3823.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00580.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: decanted: (Y/N) N Date Extracted: 08/25/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/12/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

80 MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 3823 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3823.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00581.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: decanted: (Y/N) N Date Extracted: 08/25/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/12/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

166 MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 3823 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3823.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00582.D

Level: (low/med) LOW Date Received: 08/24/98

% Moisture: decanted: (Y/N) N Date Extracted: 08/25/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/12/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK177
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	8/25/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/98
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3823.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/24/98
	Bldg. 173	**Extraction Date:**	8/25/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/98
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:.**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3823.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/24/98
	Bldg. 173	**Extraction Date:**	8/25/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/98
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1	17.09	0.50	0.0011	**0.049**
Gamma-chlordane	1	16.77	0.50	0.0009	**0.043**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3823.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/24/98
	Bldg. 173	**Extraction Date:**	8/25/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/98
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	80 MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1	18.67	0.10	0.0022	**0.059**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	3823.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/24/98
	Bldg. 173	**Extraction Date:**	8/25/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/98
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1	17.09	0.50	0.0011	**0.052**
Gamma-chlordane	1	16.77	0.50	0.0009	**0.050**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3823
Sample Received: 08/24/98
Sample Preparation: 09/08/98
Sample Matrix: Aqueous

Site: Bldg. 80/166
Ft. Monmouth, New Jersey

METHOD BLANK SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	09/08/98	39.8	200	10.0
Antimony	09/08/98	6.29	20	2.0
Arsenic	09/08/98	ND	8	2.0
Barium	09/08/98	ND	2000	0.5
Beryllium	09/08/98	ND	20	0.5
Cadmium	09/08/98	ND	4	0.5
Calcium	09/08/98	61.9	NLE	20.0
Chromium	09/08/98	ND	100	0.5
Cobalt	09/08/98	ND	NLE	0.5
Copper	09/08/98	ND	1000	3.0
Iron	09/08/98	32.7	300	10.0
Lead	09/08/98	ND	10	2.0
Magnesium	09/08/98	27.1	NLE	20.0
Manganese	09/08/98	ND	50	0.5
Mercury	09/10/98	ND	2	0.2
Nickel	09/08/98	ND	100	0.5
Potassium	09/08/98	ND	NLE	20.0
Selenium	09/08/98	ND	50	3.0
Silver	09/08/98	ND	20	3.0
Sodium	09/08/98	ND	50000	20.0
Thallium	09/08/98	ND	10	3.0
Vanadium	09/08/98	ND	NLE	1.0
Zinc	09/08/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3823.02
Sample Received: 08/24/98
Sample Matrix: Aqueous

Site: 80/166 MW
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	09/08/98	36.2	200	10.0
Antimony	09/08/98	3.6	20	2.0
Arsenic	09/08/98	ND	8	2.0
Barium	09/08/98	0.948	2000	0.5
Beryllium	09/08/98	ND	20	0.5
Cadmium	09/08/98	ND	4	0.5
Calcium	09/08/98	ND	NLE	20.0
Chromium	09/08/98	ND	100	0.5
Cobalt	09/08/98	ND	NLE	0.5
Copper	09/08/98	ND	1000	3.0
Iron	09/08/98	20.5	300	10.0
Lead	09/08/98	ND	10	2.0
Magnesium	09/08/98	ND	NLE	20.0
Manganese	09/08/98	12.9	50	0.5
Mercury	09/10/98	0.14	2	0.2
Nickel	09/08/98	ND	100	0.5
Potassium	09/08/98	ND	NLE	20.0
Selenium	09/08/98	ND	50	3.0
Silver	09/08/98	ND	20	3.0
Sodium	09/08/98	595	50000	20.0
Thallium	09/08/98	ND	10	3.0
Vanadium	09/08/98	ND	NLE	1.0
Zinc	09/08/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3823.03
Sample Received: 08/24/98
Sample Matrix: Aqueous

Site: 80/166 MW
Ft. Monmouth, New Jersey

Field ID#: Field Dup

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	09/08/98	871	200	10.0
Antimony	09/08/98	2.32	20	2.0
Arsenic	09/08/98	2.70	8	2.0
Barium	09/08/98	21.1	2000	0.5
Beryllium	09/08/98	ND	20	0.5
Cadmium	09/08/98	3.59	4	0.5
Calcium	09/08/98	70700	NLE	20.0
Chromium	09/08/98	5.10	100	0.5
Cobalt	09/08/98	ND	NLE	0.5
Copper	09/08/98	10.5	1000	3.0
Iron	09/08/98	10300	300	10.0
Lead	09/08/98	9.24	10	2.0
Magnesium	09/08/98	17100	NLE	20.0
Manganese	09/08/98	404	50	0.5
Mercury	09/10/98	0.21	2	0.2
Nickel	09/08/98	ND	100	0.5
Potassium	09/08/98	9940	NLE	20.0
Selenium	09/08/98	4.55	50	3.0
Silver	09/08/98	ND	20	3.0
Sodium	09/08/98	61000	50000	20.0
Thallium	09/08/98	ND	10	3.0
Vanadium	09/08/98	5.12	NLE	1.0
Zinc	09/08/98	242	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3823.04
Sample Received: 08/24/98
Sample Matrix: Aqueous

Site: 80/166 MW
Ft. Monmouth, New Jersey

Field ID#: 80 MW-01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	09/08/98	545	200	10.0
Antimony	09/08/98	3.95	20	2.0
Arsenic	09/08/98	41.5	8	2.0
Barium	09/08/98	108	2000	0.5
Beryllium	09/08/98	ND	20	0.5
Cadmium	09/08/98	4.49	4	0.5
Calcium	09/08/98	75000	NLE	20.0
Chromium	09/08/98	3.12	100	0.5
Cobalt	09/08/98	2.05	NLE	0.5
Copper	09/08/98	17.5	1000	3.0
Iron	09/08/98	67400	300	10.0
Lead	09/08/98	10.4	10	2.0
Magnesium	09/08/98	18700	NLE	20.0
Manganese	09/08/98	605	50	0.5
Mercury	09/10/98	0.21	2	0.2
Nickel	09/08/98	ND	100	0.5
Potassium	09/08/98	17400	NLE	20.0
Selenium	09/08/98	ND	50	3.0
Silver	09/08/98	ND	20	3.0
Sodium	09/08/98	533000	50000	20.0
Thallium	09/08/98	ND	10	3.0
Vanadium	09/08/98	4.11	NLE	1.0
Zinc	09/08/98	72.9	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 3823.05
Sample Received: 08/24/98
Sample Matrix: Aqueous

Site: 80/166 MW
Ft. Monmouth, New Jersey

Field ID#: 166 MW-01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Aluminum	09/08/98	1620	200	10.0
Antimony	09/08/98	3.70	20	2.0
Arsenic	09/08/98	3.21	8	2.0
Barium	09/08/98	23.0	2000	0.5
Beryllium	09/08/98	ND	20	0.5
Cadmium	09/08/98	4.35	4	0.5
Calcium	09/08/98	69600	NLE	20.0
Chromium	09/08/98	9.58	100	0.5
Cobalt	09/08/98	0.782	NLE	0.5
Copper	09/08/98	22.2	1000	3.0
Iron	09/08/98	11500	300	10.0
Lead	09/08/98	12.4	10	2.0
Magnesium	09/08/98	17000	NLE	20.0
Manganese	09/08/98	397	50	0.5
Mercury	09/10/98	0.12	2	0.2
Nickel	09/08/98	1.50	100	0.5
Potassium	09/08/98	10000	NLE	20.0
Selenium	09/08/98	3.87	50	3.0
Silver	09/08/98	ND	20	3.0
Sodium	09/08/98	58200	50000	20.0
Thallium	09/08/98	ND	10	3.0
Vanadium	09/08/98	7.90	NLE	1.0
Zinc	09/08/98	285	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

	Lab	Acetone	2-Butanone	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Manganese	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	2	0.5	0.5	4.0	100	300	50	-
04/16/97	FMETL	ND	ND	2.40	ND	ND	-	-	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	5.0	121	4750	336	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	ND	1.6	3.0	31700	287	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	ND	1.4	1.5	5976	246	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	1.4	ND	6776	235	V,S,P,M
08/24/98	FMETL	13.03	3.19	ND	0.052	0.05	4.35	9.58	11500	397	V,S,P,M

SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

NOTES:

Page 1 of 2.

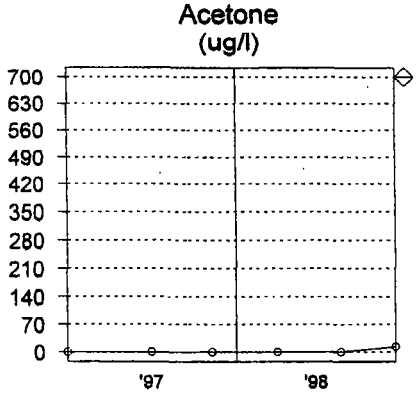
FORT MONMOUTH

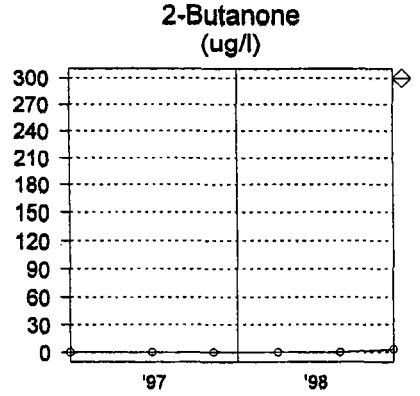
GW MONITORING
Bldg. 166

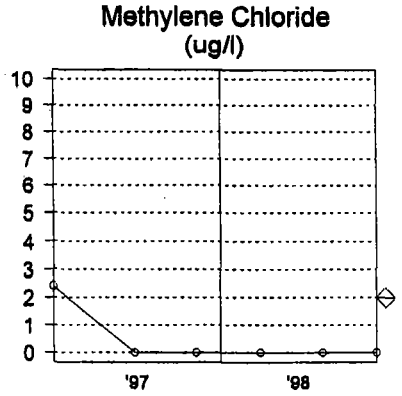
Well 1 of 1

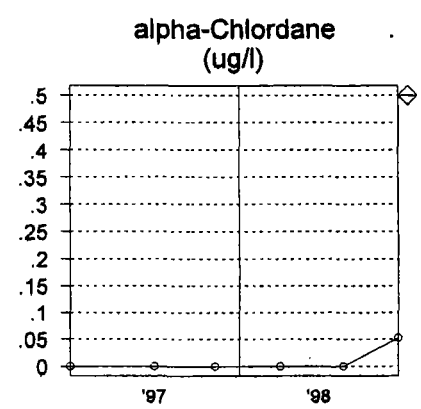
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

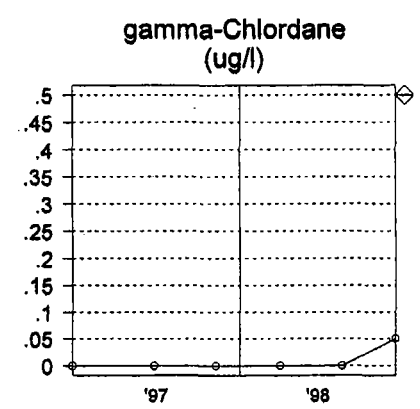
11-09-1998 c:\mtech46\fm\166\gw\166.wsf

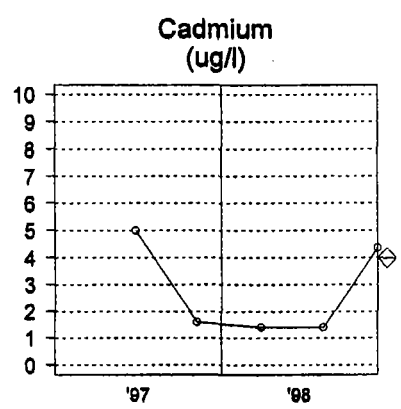


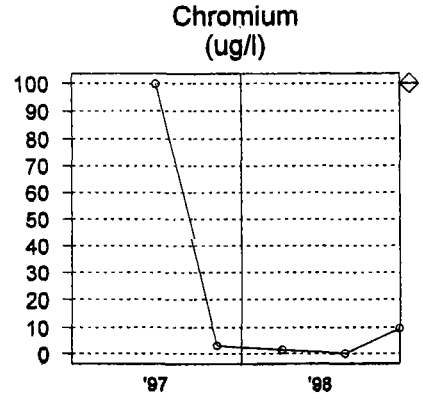


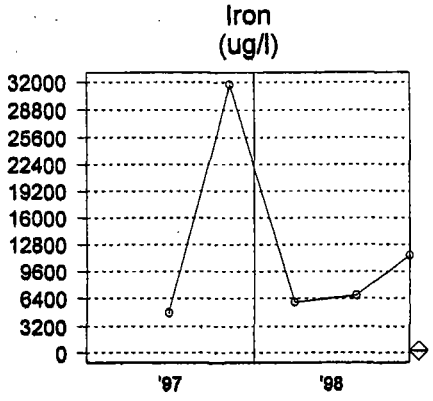


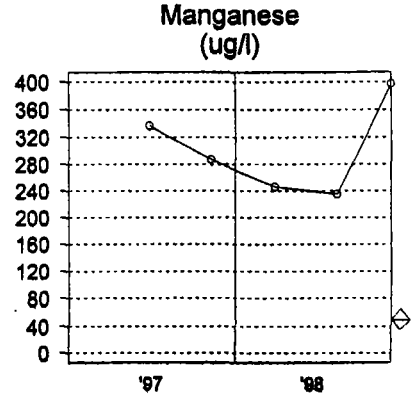












SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

11-09-1998 c:\mtech46\fm\166\gw\166.wsf

	Lab	Silver	Sodium	Lead	Depth to Water						Notes
Units:	-	ug/l	ug/l	ug/l	Feet						-
NJDEP Criteria:	-	20	50000	10	-						-
04/16/97	FMETL	-	-	2.10	2.51						V,Pb
08/20/97	FMETL	26	83750	1.6	3.20						V,S,P,M
11/24/97	FMETL	ND	200200	15.0	2.25						V,S,P,M
02/27/98	FMETL	ND	29310	ND	1.00						V,S,P,M
06/02/98	FMETL	ND	27800	2.3	1.97						V,S,P,M
08/24/98	FMETL	ND	58200	12.4	3.42						V,S,P,M

SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

NOTES:

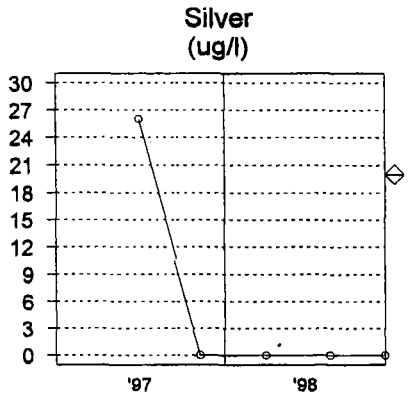
Page 2 of 2.

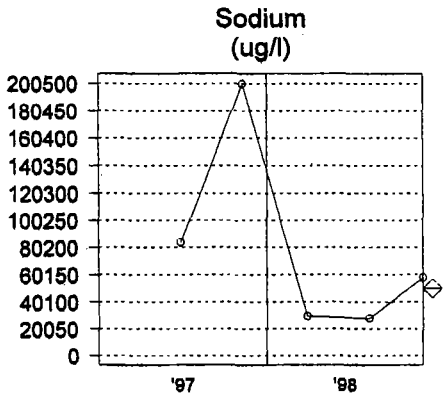
FORT MONMOUTH

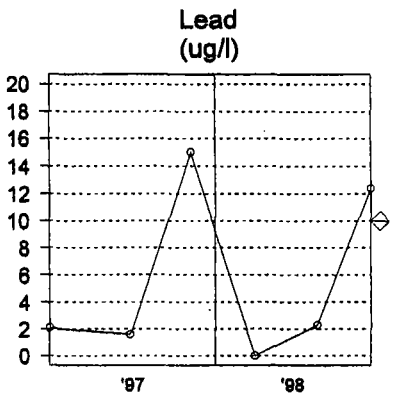
GW MONITORING
Bldg. 166

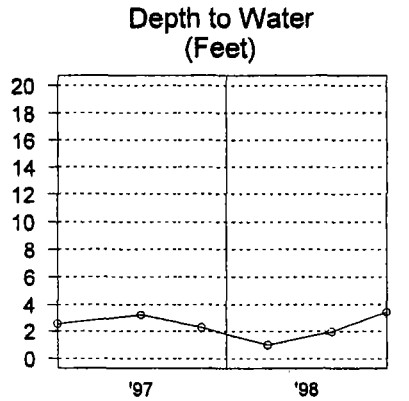
Well 1 of 1

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV









SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

11-09-1998 c:\mtech46\fm\166\gw\166.waf

	Lab	Acetone	2-Butanone	Carbon Disulfide	Benzene	Chloro benzene	4,4'-DDD	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	NLE	1	4	0.1	4	100	300	-
04/16/97	FMETL	ND	ND	2.31	1.38	2.61	ND	-	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	8.0	148	7490	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	2.26	ND	ND	1.2	9062	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	3.26	ND	8.0	1.3	70680	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	3.9	ND	8409	V,S,P,M
08/24/98	FMETL	10.27	3.32	ND	ND	5.20	0.059	4.49	3.12	67400	V,S,P,M

SOURCE: MW-1

Sampling Dates:
04/16/97 - 08/24/98

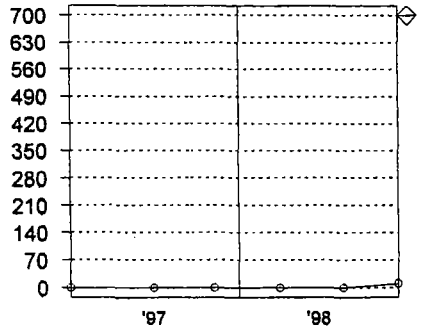
NOTES:

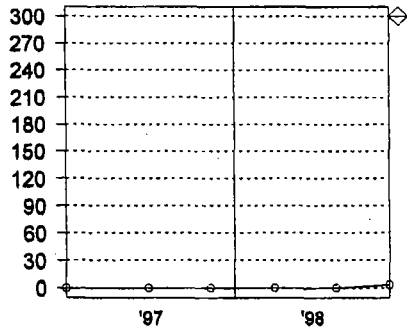
FORT MONMOUTH

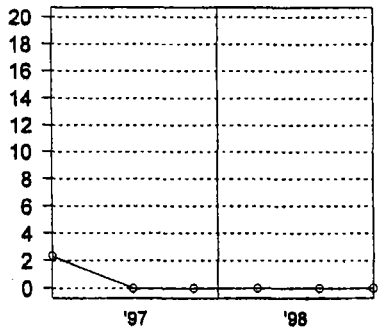
GW MONITORING
Bldg. 80

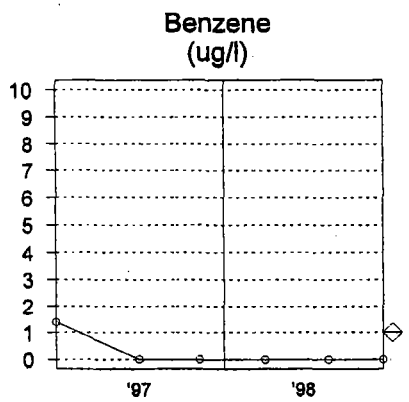
Well 1 of 1

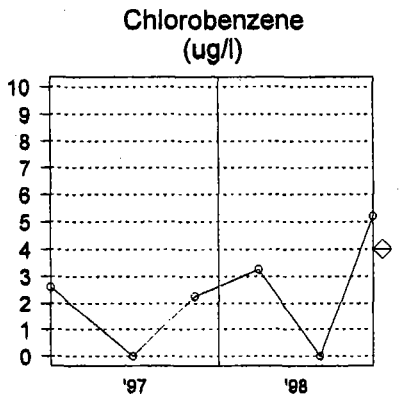
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

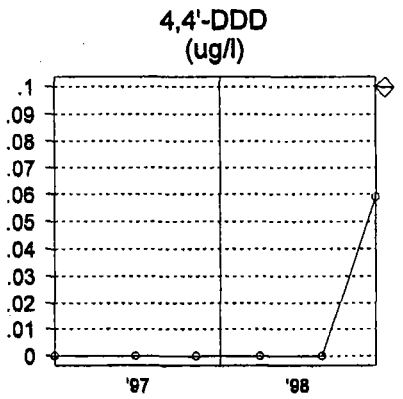


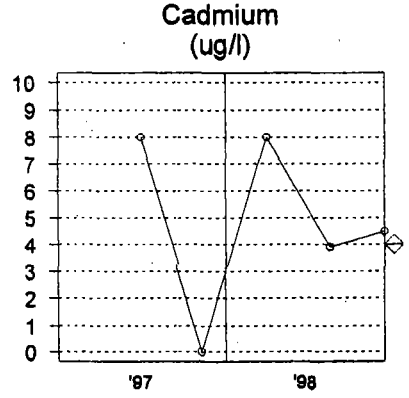


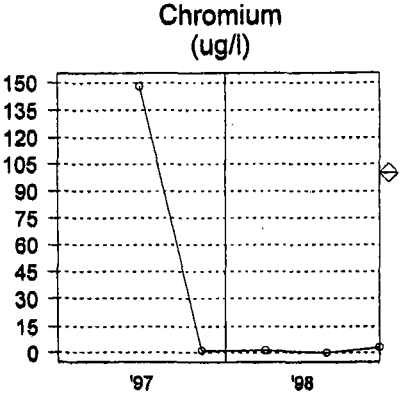


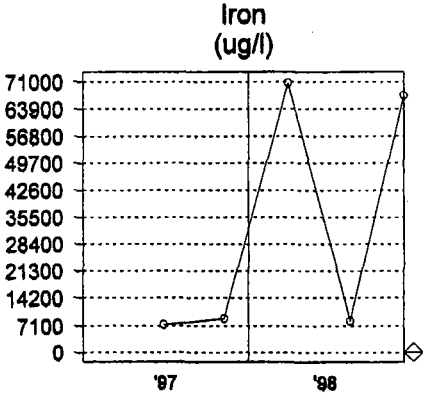












SOURCE: MW-1

Sampling Dates:
04/16/97 - 08/24/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

11-09-1998 c:\mtech46\fm\80\gw\80.wsf

	Lab	Mang anese	silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	0.5	-					-
04/16/97	FMETL	-	-	-	2.5	2.60					V,Pb
08/20/97	FMETL	136	8.0	110750	4.0	3.20					V,S,P,M
11/24/97	FMETL	553	ND	97380	14	2.40					V,S,P,M
02/27/98	FMETL	456	ND	279400	6.0	1.40					V,S,P,M
06/02/98	FMETL	117	ND	147200	3.3	2.09					V,S,P,M
08/24/98	FMETL	605	ND	533000	10.4	3.43					V,S,P,M

SOURCE: MW-1

Sampling Dates:
04/16/97 - 08/24/98

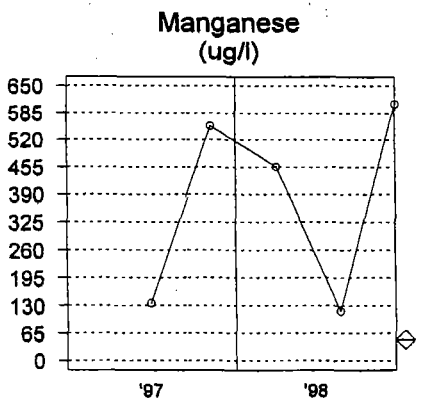
NOTES:

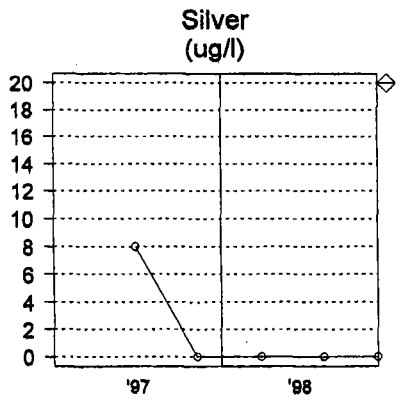
Page 2 of 2.

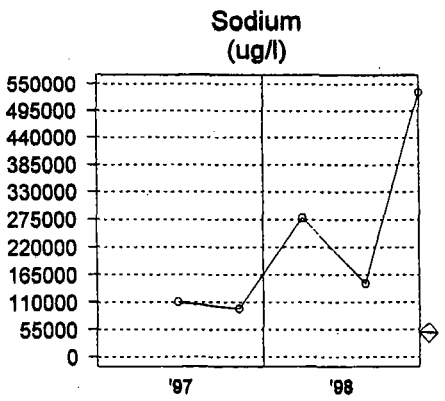
FORT MONMOUTH

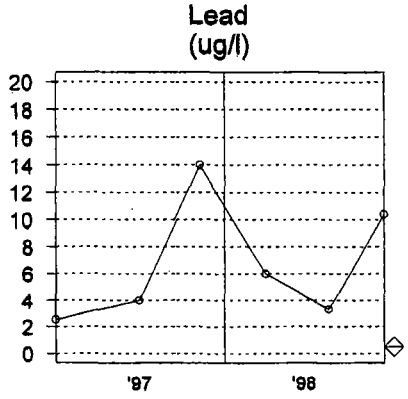
GW MONITORING
Bldg. 80

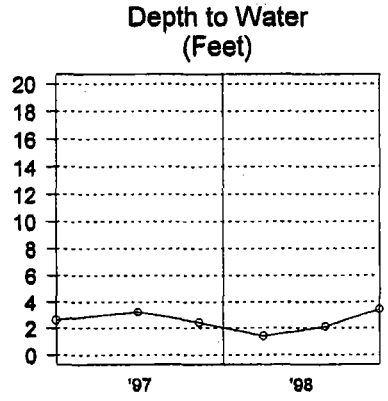
Well 1 of 1











SOURCE: MW-1

Sampling Dates:
04/16/97 - 08/24/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

11-09-1998 c:\mtech46\fm\80\gw\80.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
4076.03	80MW-01	29-31774	11/20/98
4076.04	166MW-01	29-31773	11/20/98

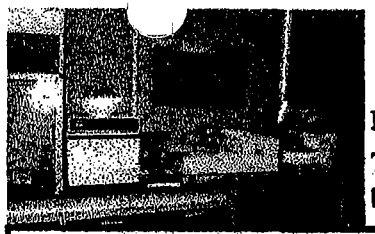
NJDEP Laboratory Certification # 13461

1-5-99
Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: Joe Fallon
Phone #: X216223
(✓)DERA ( )OMA ( )Other:_____
Project No:
Location: 80/166 mw's, 4th Qtr 98
Samplers Name / Company: Corey McCormack, TVS

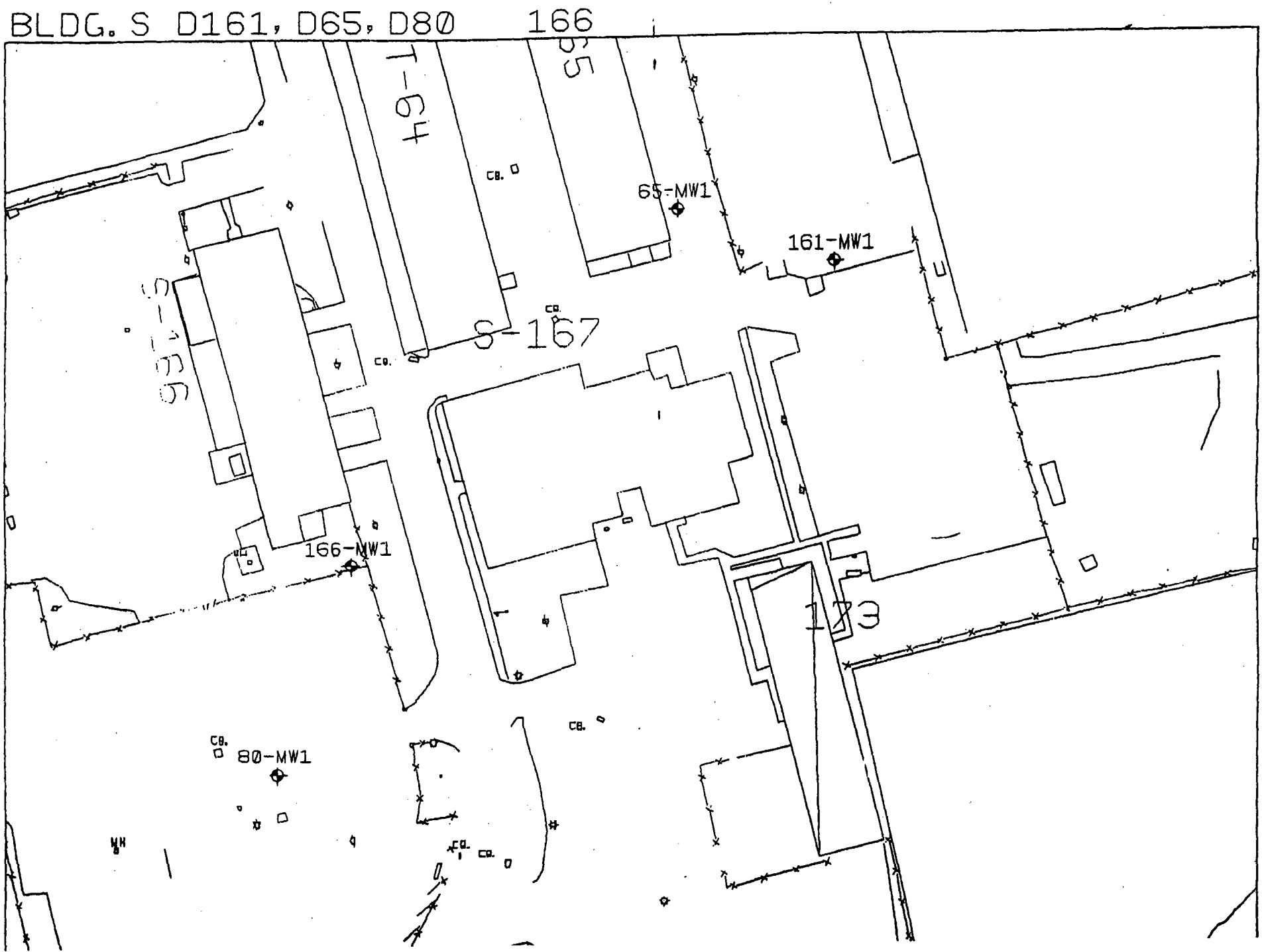
Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VO +15	BNA +25	Pest/PCB	TAL Metals				Hex Cr	Comments: Remarks / Preservation Method
														HCL/HNO3/4°c
4076.01	Trip	11/20/98	0700	AQ	2	✓								
.02	Field Blank		0900		5	✓	✓	✓	✓					
.03	80mw01 *		1007		9	✓	✓	✓	✓				✓	7.8 ppm (293174)
.04	166 mw 01		0944		5	✓	✓	✓	✓				✓	5.2 ppm (293173)
.05	Dupe	↓	—	↓	5	✓	✓	✓	✓					

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	11/20/98 1430	J. Clayton			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (✓)Standard, (_)Screen / non-certified
Turnaround time: (✓)Standard 4 wks, (_)Rush ___ Days, (_)ASAP Verbal ___ Hrs.

Remarks: MS/MSD's Here. Shows Dupe/Trip/Blank w/ 290
Tide: High - outgoing

coc.XLS11/16/98


BLDG. S D161, D65, D80 166
T-69
65-MW1
161-MW1
S-167
166-MW1
173
80-MW1
CB.
MH

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 11 / 20 / 98
WEATHER: Overcast, cool
Tide: H-O

ELEV. OF CASING SURVEY MARK: 6.91 ft
DEPTH TO WATER: 4.04 ft
DEPTH OF WELL: 12.26 ft
HEIGHT OF WATER: 8.22 ft
(8.22) X .65 X 3 = 16.02
GALLONS OF H2O TO BE PURGED: 16 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 7.8 ppm

PURGE START TIME: 0859
pH 6.59 su TEMP 17.1 °C
DISSOLVED O2 7.12 ppm SPECIFIC CONDUCTIVITY 398 us/cm

PURGE END TIME: 1007
pH 6.35 su TEMP 16.8 °C
DISSOLVED O2 5.83 ppm SPECIFIC CONDUCTIVITY 337 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.61 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 16 gal

pH 6.37 su TEMP 16.7 °C
DISSOLVED O2 5.74 ppm SPECIFIC CONDUCTIVITY 334 us/cm

COMMENTS: OILY SHEEN, AND FUEL ODOR. DUPE HERE. MS/MSDS HERE.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 11 / 20 / 98
WEATHER: OVERCAST, COOL
TIDE: H-O

ELEV. OF CASING SURVEY MARK: 6.96 ft
DEPTH TO WATER: 3.99 ft
DEPTH OF WELL: 7.75 ft
HEIGHT OF WATER: 3.76 ft
(3.76) X .65 X 3 = 7.33
GALLONS OF H2O TO BE PURGED: 7 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 5.2 ppm

PURGE START TIME: 0914
pH 7.23 su TEMP 17.1 °C
DISSOLVED O2 8.31 ppm SPECIFIC CONDUCTIVITY 251 us/cm

PURGE END TIME: 0944
pH 7.13 su TEMP 16.9 °C
DISSOLVED O2 7.12 ppm SPECIFIC CONDUCTIVITY 243 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.03 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 7 gal

pH 7.11 su TEMP 16.6 °C
DISSOLVED O2 7.09 ppm SPECIFIC CONDUCTIVITY 242 us/cm

COMMENTS: LIGHT OILY SHEEN, FUEL ODOR.

CASE NARRATIVE

Site: Bldg. 80, 166

Lab ID: 4076

The duplicate analysis was performed on 80MW-01 (4076.03).

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound identified below detection limit
B : Compound in both sample and blank
D : Results from dilution of sample
U : Compound searched for but not detected

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb02196.d	Sample Name	Vblk66
Operator	Skelton	Field ID	Vblk66
Date Acquired	24 Nov 98 2:05 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk66**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4076 SDG No _____ Location M-80/166

Matrix: (soil/water) WATER Lab Sample ID: Vblk66

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02196.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: not dec. _____ Date Analyzed: 11/24/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb02199.d**	Sample Name	**4076.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**24 Nov 98 4:37 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Trip Blank

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4076 SDG No _____ Location M-80/166

Matrix: (soil/water) WATER Lab Sample ID: 4076.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02199.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: not dec. _____ Date Analyzed: 11/24/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam **vb02200.d**
Operator **Skelton**
Date Acquired **24 Nov 98 5:23 pm**

Sample Name **4076.02**
Field ID **Field Blank**
Sample Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4076 SDG No _____ Location M-80/166

Matrix: (soil/water) WATER Lab Sample ID: 4076.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02200.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: not dec. _____ Date Analyzed: 11/24/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	**vb02201.d**	Sample Name	**4076.03**
Operator	**Skelton**	Field ID	**80MW01**
Date Acquired	**24 Nov 98 6:09 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.72	572677	4.88 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	35.67	166528	1.79 ug/L	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80MW01**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4076 SDG No _____ Location M-80/166

Matrix: (soil/water) WATER Lab Sample ID: 4076.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02201.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: not dec. _____ Date Analyzed: 11/24/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	35.44	6	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb02202.d	Sample Name	4076.04
Operator	Skelton	Field ID	166MW01
Date Acquired	24 Nov 98 6:54 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.72	229237	1.88 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

166MW01

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4076 SDG No _____ Location M-80/166

Matrix: (soil/water) WATER Lab Sample ID: 4076.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02202.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: not dec. _____ Date Analyzed: 11/24/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Nam	vb02203.d	Sample Name	4076.05
Operator	Skelton	Field ID	Dupe
Date Acquired	24 Nov 98 7:39 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.72	869513	7.21 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene	34.72	154708	1.49 ug/L	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	35.67	256102	2.68 ug/L	600	0.64 ug/L	

* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Dupe

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4076 SDG No _____ Location M-80/166

Matrix: (soil/water) WATER Lab Sample ID: 4076.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02203.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: not dec. _____ Date Analyzed: 11/24/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bna01357.d	Sample Name	Sblk170
Operator	Skelton	Misc Info	Sblk170 A 981123
Date Acquired	23 Nov 1998 8:11 pm	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**bna01357.d**	Sample Name	**Sblk170**
Operator	**Skelton**	Misc Info	**Sblk170 A 981123**
Date Acquired	**23 Nov 1998 8:11 pm**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Sblk170

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4076 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk170

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01357.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: decanted: (Y/N) N Date Extracted: 11/12/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/23/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**bna01435.d**	Sample Name	**4076.02**
Operator	**Skelton**	Misc Info	**Field Blank**
Date Acquired	**30 Nov 1998 9:25 pm**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	bna01435.d	Sample Name	4076.02
Operator	Skelton	Misc Info	Field Blank
Date Acquired	30 Nov 1998 9:25 pm	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

Field Blank

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4076 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4076.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01435.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: decanted: (Y/N) N Date Extracted: 11/12/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/30/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	23.05	11	J
2.	unknown	25.62	13	J
3.	unknown	26.21	44	J
4.	unknown	26.59	11	J

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	bna01436.d	Sample Name	4076.03
Operator	Skelton	Misc Info	80MW01
Date Acquired	30 Nov 1998 10:08 pm	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	bna01436.d	Sample Name	4076.03
Operator	Skelton	Misc Info	80MW01
Date Acquired	30 Nov 1998 10:08 pm	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

80MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4076 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4076.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01436.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: decanted: (Y/N) N Date Extracted: 11/12/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/30/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	23.08	14	J
2.	unknown	26.22	59	J

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**BNA01437.D**	Sample Name	**4076.04**
Operator	**Skelton**	Misc Info	**166MW01**
Date Acquired	**30 Nov 1998 10:50 pm**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.52	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	ug/L	
62-53-3	Aniline			not detected	NLE	2.90	ug/L	
108-95-2	Phenol			not detected	4000	1.11	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.92	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	2.09	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	ug/L	
	2-Methylphenol			not detected	NLE	2.09	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	ug/L	
	4-Methylphenol			not detected	NLE	1.72	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	ug/L	
67-72-1	Hexachloroethane			not detected	10	2.59	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.45	ug/L	
78-59-1	Isophorone			not detected	100	2.31	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.72	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.42	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.79	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.71	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	ug/L	
91-20-3	Naphthalene			not detected	NLE	3.03	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	2.55	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.64	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.46	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.66	ug/L	
	2,4,5-Trichlorophenol			not detected	700	1.63	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.62	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.74	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	2.35	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.62	ug/L	
83-32-9	Acenaphthene			not detected	400	1.98	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.65	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.31	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BNA01437.D	Sample Name	4076.04
Operator	Skelton	Misc Info	166MW01
Date Acquired	30 Nov 1998 10:50 pm	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.58	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.92	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.88	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.55	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.67	ug/L	
120-12-7	Anthracene			not detected	2000	1.79	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.83	ug/L	
206-44-0	Fluoranthene			not detected	300	1.85	ug/L	
92-87-5	Benzidine			not detected	50	4.11	ug/L	
129-00-0	Pyrene			not detected	200	1.02	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L	
218-01-9	Chrysene			not detected	20	2.32	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVELY IDENTIFIED COMPOUNDS

166MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4076 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4076.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01437.D

Level: (low/med) LOW Date Received: 11/20/98

% Moisture: decanted: (Y/N) N Date Extracted: 11/12/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/30/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	13.58	10	J
2. 000301-02-0	9-Octadecenamide, (Z)-	26.23	29	JN

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK252
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	11/24/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/2/98
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4076.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/20/98
	Bldg. 173	**Extraction Date:**	11/24/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/2/98
Analysis:	EPA Method 608	**Location :**	MW-80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4076.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/20/98
	Bldg. 173	**Extraction Date:**	11/24/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/2/98
Analysis:	EPA Method 608	**Location :**	MW-80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	80 MW-01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1	18.32	0.10	0.0022	**0.093**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4076.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/20/98
	Bldg. 173	**Extraction Date:**	11/24/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/2/98
Analysis:	EPA Method 608	**Location :**	MW-80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	166 MW-01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1		0.10	0.0022	**ND**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4076.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	11/20/98
	Bldg. 173	**Extraction Date:**	11/24/98
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/2/98
Analysis:	EPA Method 608	**Location :**	MW-80/166
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1	18.32	0.10	0.0022	**0.073**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25

Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4076
Sample Prepared: 12/01/98

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/01/98	46.3	200	10.0
Antimony	12/01/98	2.50	20	2.0
Arsenic	12/01/98	ND	8	2.0
Barium	12/01/98	1.61	2000	0.5
Beryllium	12/01/98	ND	20	0.5
Cadmium	12/01/98	ND	4	0.5
Calcium	12/01/98	110	NLE	20.0
Chromium	12/01/98	ND	100	0.5
Cobalt	12/01/98	ND	NLE	0.5
Copper	12/01/98	ND	1000	3.0
Iron	12/01/98	84.3	300	10.0
Lead	12/01/98	ND	10	2.0
Magnesium	12/01/98	87.1	NLE	20.0
Manganese	12/01/98	ND	50	0.5
Mercury	12/15/98	ND	2	0.1
Nickel	12/01/98	1.10	100	0.5
Potassium	12/01/98	31.3	NLE	20.0
Selenium	12/01/98	ND	50	3.0
Silver	12/01/98	ND	20	3.0
Sodium	12/01/98	1020	50000	20.0
Thallium	12/01/98	ND	10	3.0
Vanadium	12/01/98	ND	NLE	1.0
Zinc	12/01/98	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4076.02
Sample Received: 11/20/98
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/01/98	ND	200	10.0
Antimony	12/01/98	ND	20	2.0
Arsenic	12/01/98	ND	8	2.0
Barium	12/01/98	0.761	2000	0.5
Beryllium	12/01/98	ND	20	0.5
Cadmium	12/01/98	3.31	4	0.5
Calcium	12/01/98	3230	NLE	20.0
Chromium	12/01/98	2.41	100	0.5
Cobalt	12/01/98	ND	NLE	0.5
Copper	12/01/98	13.8	1000	3.0
Iron	12/01/98	29.1	300	10.0
Lead	12/01/98	3.05	10	2.0
Magnesium	12/01/98	9230	NLE	20.0
Manganese	12/01/98	7.47	50	0.5
Mercury	12/15/98	0.17	2	0.1
Nickel	12/01/98	4.19	100	0.5
Potassium	12/01/98	3500	NLE	20.0
Selenium	12/01/98	ND	50	3.0
Silver	12/01/98	ND	20	3.0
Sodium	12/01/98	89700	50000	20.0
Thallium	12/01/98	ND	10	3.0
Vanadium	12/01/98	ND	NLE	1.0
Zinc	12/01/98	32.7	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4076.03
Sample Received: 11/20/98
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 80 MW#01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/01/98	422	200	10.0
Antimony	12/01/98	ND	20	2.0
Arsenic	12/01/98	34.3	8	2.0
Barium	12/01/98	86.1	2000	0.5
Beryllium	12/01/98	ND	20	0.5
Cadmium	12/01/98	1.96	4	0.5
Calcium	12/01/98	58600	NLE	20.0
Chromium	12/01/98	9.77	100	0.5
Cobalt	12/01/98	2.81	NLE	0.5
Copper	12/01/98	ND	1000	3.0
Iron	12/01/98	68800	300	10.0
Lead	12/01/98	2.86	10	2.0
Magnesium	12/01/98	16900	NLE	20.0
Manganese	12/01/98	647	50	0.5
Mercury	12/15/98	0.38	2	0.1
Nickel	12/01/98	2.23	100	0.5
Potassium	12/01/98	5340	NLE	20.0
Selenium	12/01/98	8.20	50	3.0
Silver	12/01/98	ND	20	3.0
Sodium	12/01/98	530000	50000	20.0
Thallium	12/01/98	ND	10	3.0
Vanadium	12/01/98	3.18	NLE	1.0
Zinc	12/01/98	44.2	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4076.04
Sample Received: 11/20/98
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 166 MW#01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/01/98	662	200	10.0
Antimony	12/01/98	ND	20	2.0
Arsenic	12/01/98	ND	8	2.0
Barium	12/01/98	28.3	2000	0.5
Beryllium	12/01/98	ND	20	0.5
Cadmium	12/01/98	2.31	4	0.5
Calcium	12/01/98	79700	NLE	20.0
Chromium	12/01/98	9.49	100	0.5
Cobalt	12/01/98	ND	NLE	0.5
Copper	12/01/98	ND	1000	3.0
Iron	12/01/98	13300	300	10.0
Lead	12/01/98	4.23	10	2.0
Magnesium	12/01/98	19800	NLE	20.0
Manganese	12/01/98	669	50	0.5
Mercury	12/15/98	0.29	2	0.1
Nickel	12/01/98	2.06	100	0.5
Potassium	12/01/98	4800	NLE	20.0
Selenium	12/01/98	4.09	50	3.0
Silver	12/01/98	ND	20	3.0
Sodium	12/01/98	114000	50000	20.0
Thallium	12/01/98	ND	10	3.0
Vanadium	12/01/98	3.87	NLE	1.0
Zinc	12/01/98	99.6	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4076.05
Sample Received: 11/20/98
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/01/98	298	200	10.0
Antimony	12/01/98	ND	20	2.0
Arsenic	12/01/98	33.8	8	2.0
Barium	12/01/98	85.9	2000	0.5
Beryllium	12/01/98	ND	20	0.5
Cadmium	12/01/98	1.83	4	0.5
Calcium	12/01/98	58300	NLE	20.0
Chromium	12/01/98	9.52	100	0.5
Cobalt	12/01/98	2.87	NLE	0.5
Copper	12/01/98	ND	1000	3.0
Iron	12/01/98	70400	300	10.0
Lead	12/01/98	3.26	10	2.0
Magnesium	12/01/98	17100	NLE	20.0
Manganese	12/01/98	675	50	0.5
Mercury	12/15/98	0.26	2	0.1
Nickel	12/01/98	1.97	100	0.5
Potassium	12/01/98	4990	NLE	20.0
Selenium	12/01/98	8.44	50	3.0
Silver	12/01/98	ND	20	3.0
Sodium	12/01/98	536000	50000	20.0
Thallium	12/01/98	ND	10	3.0
Vanadium	12/01/98	2.87	NLE	1.0
Zinc	12/01/98	32.6	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

	Lab	Acetone	2-Butanone	Carbon Disulfide	Benzene	Chloro benzene	Unknown	4,4'-DDD	Cadmium	Chromium	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	NLE	1	4	-	0.1	4	100	-
04/16/97	FMETL	ND	ND	2.31	1.38	2.61	115	ND	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	ND	8.0	148	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	2.26	ND	ND	ND	1.2	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	3.26	10	ND	8.0	1.3	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	ND	3.9	ND	V,S,P,M
08/24/98	FMETL	10.27	3.32	ND	ND	5.20	ND	0.059	4.49	3.12	V,S,P,M
11/20/98	FMETL	ND	ND	ND	ND	4.88	73	0.093	1.96	9.77	V,S,P,M

SOURCE: MW-1

Sampling Dates:
04/16/97 - 11/20/98

NOTES:

Page 1 of 2.

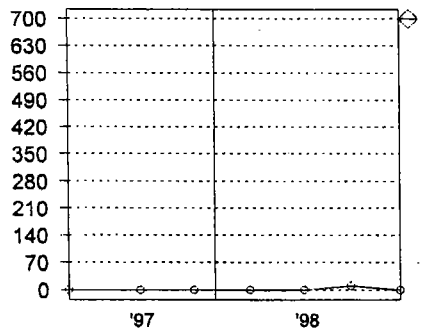
FORT MONMOUTH

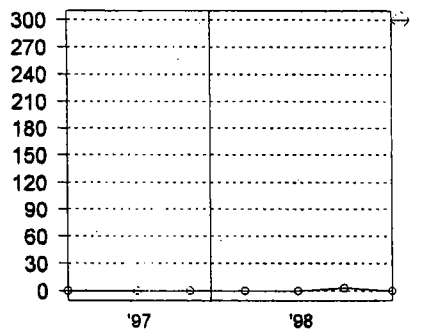
GW MONITORING
Bldg. 80

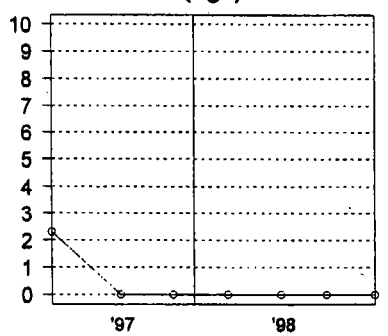
Well 1 of 1

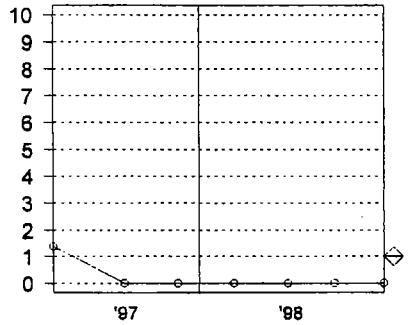


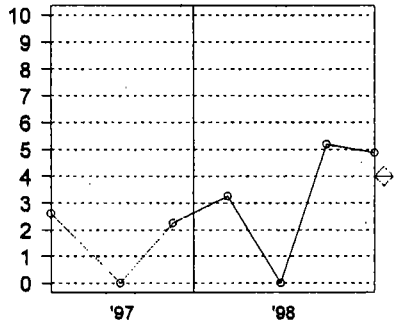
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

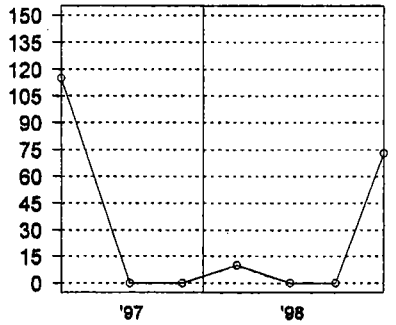


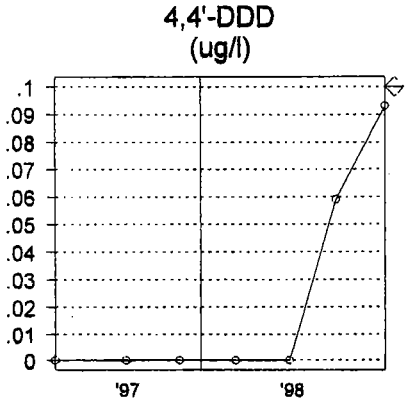


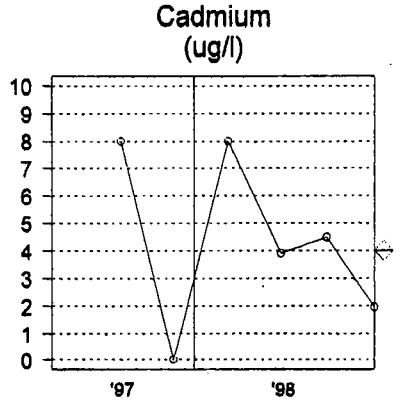


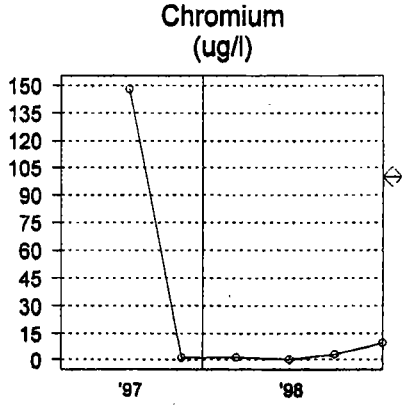












SOURCE: MW-1

Sampling Dates:
04/16/97 - 11/20/98

LEGEND:

PARAMETER

○ = Date Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

12-29-1998 c:\mtech46\fm\80\gw\80.wsf

	Lab	Iron	Manganese	silver	Sodium	Lead	Depth to Water				Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	300	50	20	50000	10	-				-
04/16/97	FMETL	-	-	-	-	2.5	2.60				V,Pb
08/20/97	FMETL	7490	136	8.0	110750	4.0	3.20				V,S,P,M
11/24/97	FMETL	9062	553	ND	97380	14	2.40				V,S,P,M
02/27/98	FMETL	70680	456	ND	279400	6.0	1.40				V,S,P,M
06/02/98	FMETL	8409	117	ND	147200	3.3	2.09				V,S,P,M
08/24/98	FMETL	67400	605	ND	533000	10.4	3.43				V,S,P,M
11/20/98	FMETL	68800	647	ND	530000	2.86	4.04				V,S,P,M

SOURCE: MW-1

Sampling Dates:
04/16/97 - 11/20/98

NOTES:

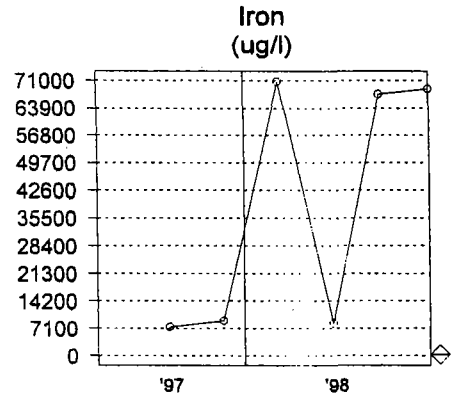
Page 2 of 2.

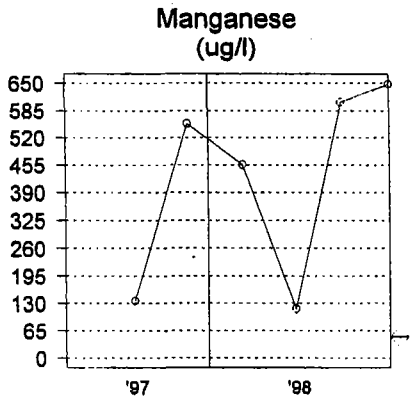
FORT MONMOUTH

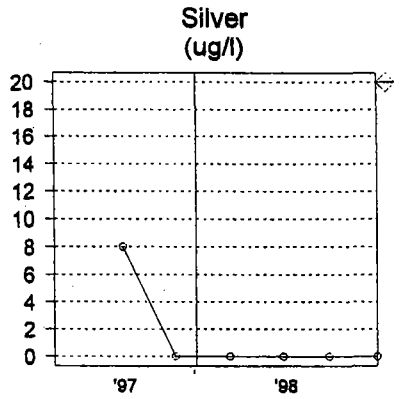
GW MONITORING
Bldg. 80

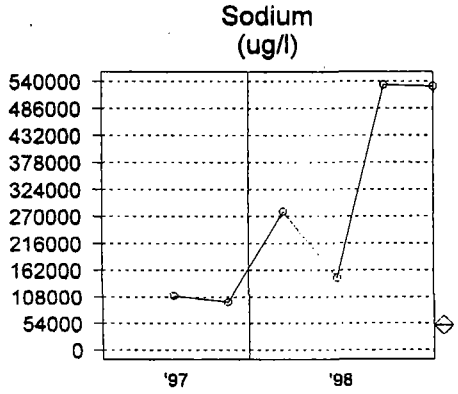
Well 1 of 1

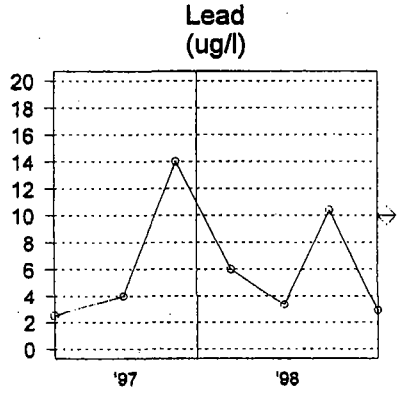
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

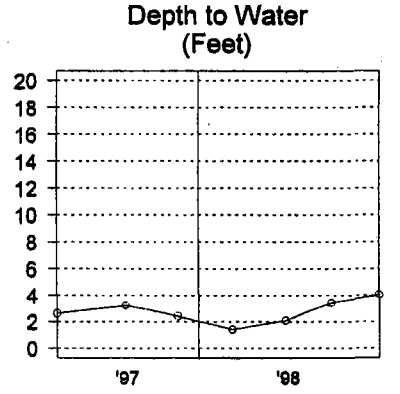












SOURCE: MW-1

Sampling Dates:
04/16/97 - 11/20/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

12-29-1998 c:\mtech48\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Manganese	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	2	0.5	0.5	4.0	100	300	50	-
04/16/97	FMETL	ND	ND	2.40	ND	ND	-	-	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	5.0	121	4750	336	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	ND	1.6	3.0	31700	287	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	ND	1.4	1.5	5976	246	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	1.4	ND	6776	235	V,S,P,M
08/24/98	FMETL	13.03	3.19	ND	0.052	0.05	4.35	9.58	11500	397	V,S,P,M

SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

NOTES:

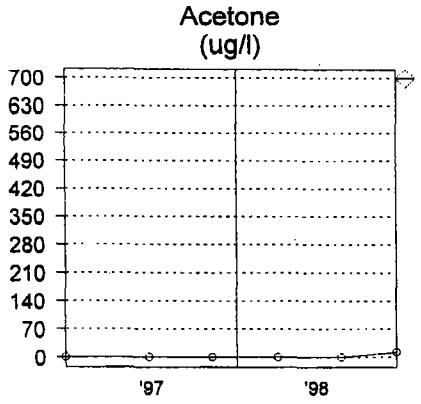
Page 1 of 2.

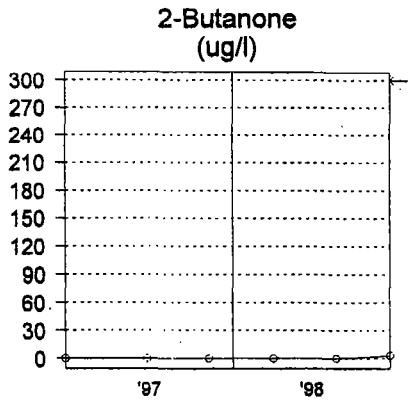
FORT MONMOUTH

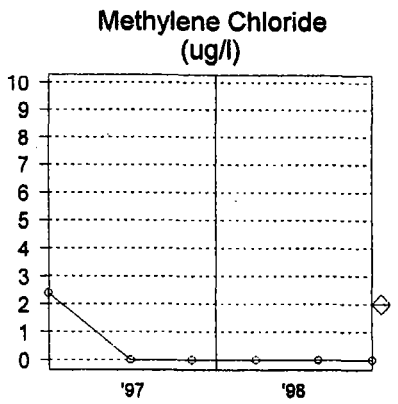
GW MONITORING
Bldg. 166

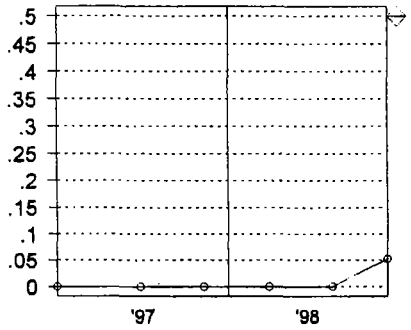
Well 1 of 1

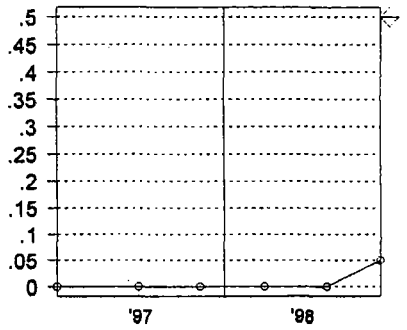
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

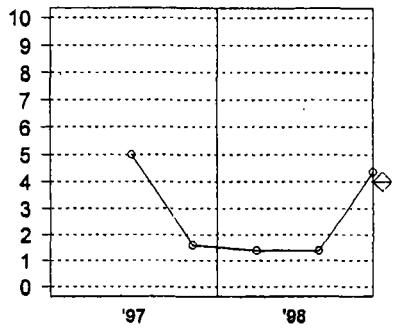


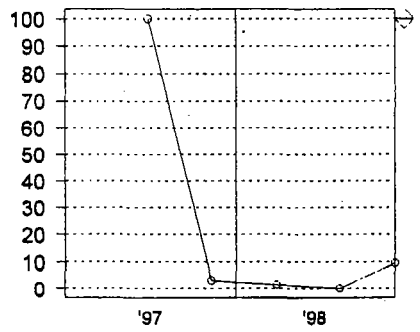


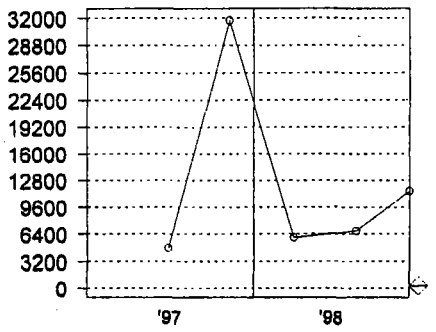


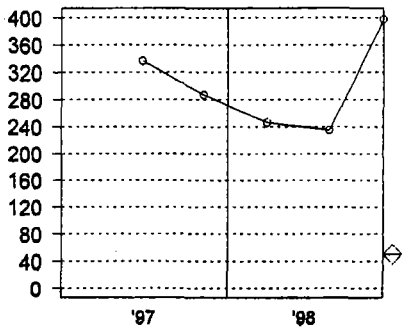












SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

12-29-1998 c:\mtech46\fm\166\gw\166.wsf

	Lab	Silver	Sodium	Lead	Depth to Water						Notes
Units:	-	ug/l	ug/l	ug/l	Feet						-
NJDEP Criteria:	-	20	50000	10	-						-
04/16/97	FMETL	-	-	2.10	2.51						V,Pb
08/20/97	FMETL	26	83750	1.6	3.20						V,S,P,M
11/24/97	FMETL	ND	200200	15.0	2.25						V,S,P,M
02/27/98	FMETL	ND	29310	ND	1.00						V,S,P,M
06/02/98	FMETL	ND	27800	2.3	1.97						V,S,P,M
08/24/98	FMETL	ND	58200	12.4	3.42						V,S,P,M

SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

NOTES:

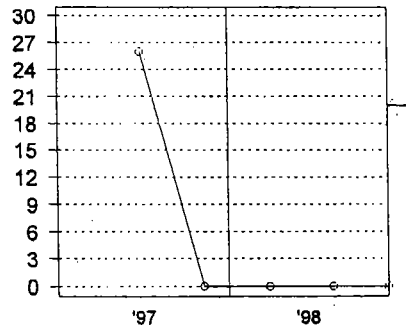
Page 2 of 2.

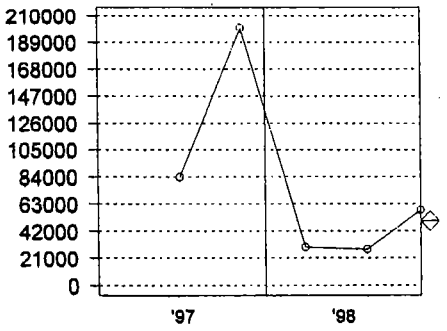
FORT MONMOUTH

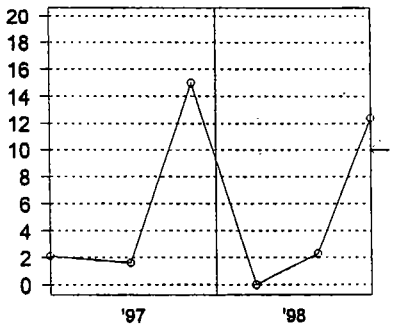
GW MONITORING
Bldg. 166

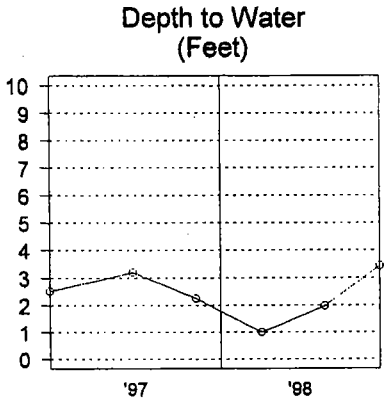
Well 1 of 1

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV









SOURCE: MW1

Sampling Dates:
04/16/97 - 08/24/98

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

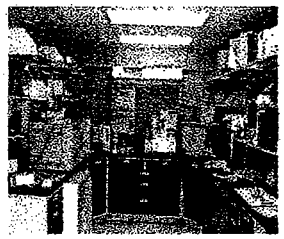
Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

12-29-1998 c:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
4262.03	0080MW01	29-31774	02/09/99
4262.04	0166MW01	29-31773	02/09/99

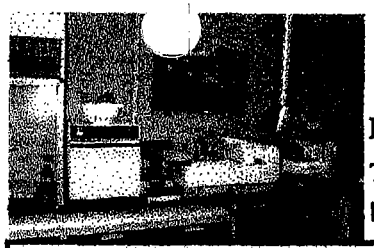
NJDEP Laboratory Certification # 13461

4-29-99
Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: Joe Fallon
Phone #: X26223
(✓)DERA ( )OMA ( )Other:_____

Project No:
Location: 80/166 mw's 1st Qtr '99

Samplers Name / Company : Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	BNA's	Pest/PCB	TAL MTLS				Hnu Read	Comments: HCl/HNO_3/4°C Remarks / Preservation Method
42662 .01	Trip	2/9/99	0730	AQ	2	✓								
.02	Field Blank		1300		5	✓	✓	✓	✓					
.03	80 mw-01		1429		9	✓	✓	✓	✓				✓	10.0 29-31774
.04	166 mw-01*		1411		5	✓	✓	✓	✓				✓	4.3 29-31773
.05	Dupe	↓	—	↓	5	✓	✓	✓	✓					

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	2/9/99 1500				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (✓)Standard, ( )Screen / non-certified
Turnaround time: (✓)Standard 4 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Shows Trip/Blank/Dupe w/2562 sum date.
Tide: H → O
MS/MSDS here.


T-485
281
T-159
T-64
T-65
OCEANPORT
CREEK
65-MW1
161-MW1
S-166
S-167
166-MW1
173
30-MW1
OCEANPORT
CREEK

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 2 / 9 / 99
WEATHER: Sunny, light clouds. cold
Tide: High - outgoing

ELEV. OF CASING SURVEY MARK: 6.91 ft
DEPTH TO WATER: 3.84 ft
DEPTH OF WELL: 12.26 ft
HEIGHT OF WATER: 8.42 ft
(8.42) X .65 X 3 = 16.41
GALLONS OF H2O TO BE PURGED: 16 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 10.0 ppm

PURGE START TIME: 1319
pH 6.46 su TEMP 14.1 °C
DISSOLVED O2 7.21 ppm SPECIFIC CONDUCTIVITY 380 us/cm

PURGE END TIME: 1429
pH 6.31 su TEMP 12.8 °C
DISSOLVED O2 5.97 ppm SPECIFIC CONDUCTIVITY 376 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.14 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 16 gal

pH 6.28 su TEMP 12.7 °C
DISSOLVED O2 5.91 ppm SPECIFIC CONDUCTIVITY 374 us/cm

COMMENTS: OILY SHEEN, AND FUEL ODOR. MS / MSDS HERE.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 2 / 09 / 99
WEATHER: Sunny, light clouds. Cool.
Tide: High - outgoing

ELEV. OF CASING SURVEY MARK: 6.96 ft
DEPTH TO WATER: 2.73 ft
DEPTH OF WELL: 7.75 ft
HEIGHT OF WATER: 5.02 ft
(5.02) X .65 X 3 = 9.789
GALLONS OF H2O TO BE PURGED: 10 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 4.3 ppm
Tide: High - outgoing

PURGE START TIME: 1346
pH 6.69 su TEMP 14.3 °C
DISSOLVED O2 5.71 ppm SPECIFIC CONDUCTIVITY 801 us/cm

PURGE END TIME: 1411
pH 6.74 su TEMP 12.6 °C
DISSOLVED O2 5.08 ppm SPECIFIC CONDUCTIVITY 799 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.13 ft
(SAMPLING METHOD: DEDICATED(LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 10 gal

pH 6.75 su TEMP 12.3 °C
DISSOLVED O2 4.71 ppm SPECIFIC CONDUCTIVITY 798 us/cm

COMMENTS: DUPE HERE. OILY SHEEN, ODOR. FLOATING PARTICLES.

CASE NARRATIVE

Site: Bldg. 80, 166
Lab ID: 4262

The duplicate analysis was performed on 0166MW01 (Lab ID 4262.04).

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound identified below detection limit
B : Compound in both sample and blank
D : Results from dilution of sample
U : Compound searched for but not detected

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB02646.D**	Sample Name	**Vblk82**
Operator	**Skelton**	Field ID	**Vblk82**
Date Acquired	**17-Feb-99**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/19/99 9:00 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk82**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4262 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: Vblk82

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02646.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: not dec. _____ Date Analyzed: 2/17/99

GC Column: Rtx5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB02655.D**	Sample Name	**4262.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**17-Feb-99**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/19/99 8:46 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4262 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 4262.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02655.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: not dec. _____ Date Analyzed: 2/17/99

GC Column: Rtx5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB02656.D**	Sample Name	**4262.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**17-Feb-99**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/19/99 8:46 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4262 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 4262.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02656.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: not dec. _____ Date Analyzed: 2/17/99

GC Column: Rtx5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB02657.D**	Sample Name	**4262.03**
Operator	**Skelton**	Field ID	**0080MW01**
Date Acquired	**17-Feb-99**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene	19.85	128394	1.26 ug/L	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.54	424149	5.71 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	35.49	100354	2.00 ug/L	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/9/99 11:43 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0080MW01

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4262 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 4262.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02657.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: not dec. _____ Date Analyzed: 2/17/99

GC Column: Rtx5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 4

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	35.25	21	JN
2.	unknown	36.00	7	J
3. 027133-93-3	2,3-Dihydro-1-methylindene	36.59	8	JN
4.	unknown	36.97	6	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB02658.D	Sample Name	4262.04
Operator	Skelton	Field ID	0166MW01
Date Acquired	17-Feb-99	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/9/99 11:43 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0166MW01

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4262 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 4262.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02658.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: not dec. _____ Date Analyzed: 2/17/99

GC Column: Rtx5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB02659.D**	Sample Name	**4262.05**
Operator	**Skelton**	Field ID	**Field Dupe**
Date Acquired	**17-Feb-99**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/19/99 8:46 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL Project LTM

NJDEP# 13461 Case No.: 4262 SDG No _____ Location 80/166

Matrix: (soil/water) WATER Lab Sample ID: 4262.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02659.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: not dec. _____ Date Analyzed: 2/17/99

GC Column: Rtx5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BN02811.D	Sample Name	Sblk205
Operator	Bhaskar	Misc Info	Sblk205 A 990211
Date Acquired	16-Feb-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BN02811.D	Sample Name	Sblk205
Operator	Bhaskar	Misc Info	Sblk205 A 990211
Date Acquired	16-Feb-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Sblk205**

Lab Name: FMETL Lab Cod 13461

Project: LTM Case No.: 4262 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: Sblk205

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02811.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN02813.D**	Sample Name	**4262.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN02813.D**	Sample Name	**4262.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Cod 13461

Project: LTM Case No.: 4262 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4262.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02813.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN02814.D**	Sample Name	**4262.03**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene	12.12	177805	3.95 ug/L	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN02814.D**	Sample Name	**4262.03**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0080MW01**

Lab Name: FMETL Lab Cod 13461

Project: LTM Case No.: 4262 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4262.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02814.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000057-10-3	Hexadecanoic acid	19.49	10	JN
2.	unknown	23.29	11	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN02817.D**	Sample Name	**4262.04**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN02817.D**	Sample Name	**4262.04**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0166MW01**

Lab Name: FMETL Lab Cod 13461

Project: LTM Case No.: 4262 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4262.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02817.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000057-10-3	Hexadecanoic acid	19.51	10	JN
2. 000057-11-4	Octadecanoic acid	21.34	9	JN
3. 000103-23-1	Hexanedioic acid, bis(2-ethylhexy	23.29	12	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BN02818.D	Sample Name	4262.05
Operator	Bhaskar	Misc Info	Dupe
Date Acquired	16-Feb-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN02818.D**	Sample Name	**4262.05**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**16-Feb-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	24.51	2849214	94.59 ug/L	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate	25.85	259856	4.72 ug/L	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Dupe**

Lab Name: FMETL Lab Cod 13461

Project: LTM Case No.: 4262 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4262.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02818.D

Level: (low/med) LOW Date Received: 2/9/99

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000057-10-3	Hexadecanoic acid	19.51	10	JN
2. 000103-23-1	Hexanedioic acid, bis(2-ethylhexy	23.30	12	JN

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK286
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	2/10/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/27/99
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25 um
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25 u

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4262.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/9/99
	Bldg. 173	**Extraction Date:**	2/10/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/27/99
Analysis:	EPA Method 608	**Location :**	880/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25 u
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4262.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/9/99
	Bldg. 173	**Extraction Date:**	2/10/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/27/99
Analysis:	EPA Method 608	**Location :**	880/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1	16.50	0.10	0.0022	0.090
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25 u
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4262.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/9/99
	Bldg. 173	**Extraction Date:**	2/10/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/27/99
Analysis:	EPA Method 608	**Location :**	880/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	0166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25 u
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4262.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	2/9/99
	Bldg. 173	**Extraction Date:**	2/10/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/27/99
Analysis:	EPA Method 608	**Location :**	880/166 MWs
Matrix:	Aqueous		
Analyst:	D. Wright	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32 mm ID/.25 u
Column-Confirmation: Rtx-CLPesticides2 30m/.32 mm ID/.25

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4262
Sample Prepared: 02/19/99

Site: Bldg. 80, 166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/22/99	ND	200	10.0
Antimony	02/22/99	3.96	20	2.0
Arsenic	02/22/99	ND	8	2.0
Barium	02/22/99	2.10	2000	0.5
Beryllium	02/22/99	ND	20	0.5
Cadmium	02/22/99	ND	4	0.5
Calcium	02/22/99	67.0	NLE	20.0
Chromium	02/22/99	ND	100	0.5
Cobalt	02/22/99	0.7	NLE	0.5
Copper	02/22/99	49.0	1000	3.0
Iron	02/22/99	60.0	300	10.0
Lead	02/22/99	ND	10	2.0
Magnesium	02/22/99	93.0	NLE	20.0
Manganese	02/22/99	0.6	50	0.5
Mercury	02/19/99	ND	2	0.1
Nickel	02/22/99	4.0	100	0.5
Potassium	02/22/99	ND	NLE	20.0
Selenium	02/22/99	ND	50	3.0
Silver	02/22/99	ND	20	3.0
Sodium	02/22/99	ND	50000	20.0
Thallium	02/22/99	ND	10	3.0
Vanadium	02/22/99	ND	NLE	1.0
Zinc	02/22/99	7.00	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4262.02
Sample Received: 02/04/99
Sample Matrix: Aqueous

Site: Bldg. 80,166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/22/99	ND	200	10.0
Antimony	02/22/99	ND	20	2.0
Arsenic	02/22/99	ND	8	2.0
Barium	02/22/99	0.932	2000	0.5
Beryllium	02/22/99	ND	20	0.5
Cadmium	02/22/99	ND	4	0.5
Calcium	02/22/99	123	NLE	20.0
Chromium	02/22/99	ND	100	0.5
Cobalt	02/22/99	ND	NLE	0.5
Copper	02/22/99	ND	1000	3.0
Iron	02/22/99	145	300	10.0
Lead	02/22/99	ND	10	2.0
Magnesium	02/22/99	42.9	NLE	20.0
Manganese	02/22/99	6.42	50	0.5
Mercury	02/19/99	ND	2	0.1
Nickel	02/22/99	5.56	100	0.5
Potassium	02/22/99	ND	NLE	20.0
Selenium	02/22/99	ND	50	3.0
Silver	02/22/99	ND	20	3.0
Sodium	02/22/99	486	50000	20.0
Thallium	02/22/99	ND	10	3.0
Vanadium	02/22/99	ND	NLE	1.0
Zinc	02/22/99	41.7	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4262.03
Sample Received: 02/04/99
Sample Matrix: Aqueous

Site: Bldg. 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/22/99	975	200	10.0
Antimony	02/22/99	ND	20	2.0
Arsenic	02/22/99	8.49	8	2.0
Barium	02/22/99	81.2	2000	0.5
Beryllium	02/22/99	ND	20	0.5
Cadmium	02/22/99	24.6	4	0.5
Calcium	02/22/99	86000	NLE	20.0
Chromium	02/22/99	8.00	100	0.5
Cobalt	02/22/99	0.704	NLE	0.5
Copper	02/22/99	8.75	1000	3.0
Iron	02/22/99	17600	300	10.0
Lead	02/22/99	ND	10	2.0
Magnesium	02/22/99	10100	NLE	20.0
Manganese	02/22/99	407	50	0.5
Mercury	02/19/99	0.17	2	0.1
Nickel	02/22/99	4.85	100	0.5
Potassium	02/22/99	5080	NLE	20.0
Selenium	02/22/99	7.53	50	3.0
Silver	02/22/99	ND	20	3.0
Sodium	02/22/99	306000	50000	20.0
Thallium	02/22/99	ND	10	3.0
Vanadium	02/22/99	3.15	NLE	1.0
Zinc	02/22/99	214	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4262.04
Sample Received: 02/04/99
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/22/99	687	200	10.0
Antimony	02/22/99	ND	20	2.0
Arsenic	02/22/99	ND	8	2.0
Barium	02/22/99	36.2	2000	0.5
Beryllium	02/22/99	ND	20	0.5
Cadmium	02/22/99	3.51	4	0.5
Calcium	02/22/99	98300	NLE	20.0
Chromium	02/22/99	8.30	100	0.5
Cobalt	02/22/99	1.27	NLE	0.5
Copper	02/22/99	179	1000	3.0
Iron	02/22/99	6510	300	10.0
Lead	02/22/99	ND	10	2.0
Magnesium	02/22/99	22800	NLE	20.0
Manganese	02/22/99	413	50	0.5
Mercury	02/19/99	0.16	2	0.1
Nickel	02/22/99	7.09	100	0.5
Potassium	02/22/99	4890	NLE	20.0
Selenium	02/22/99	7.58	50	3.0
Silver	02/22/99	ND	20	3.0
Sodium	02/22/99	108000	50000	20.0
Thallium	02/22/99	ND	10	3.0
Vanadium	02/22/99	3.07	NLE	1.0
Zinc	02/22/99	328	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4262.05
Sample Received: 02/04/99
Sample Matrix: Aqueous

Site: Bldg. 80, 166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/22/99	459	200	10.0
Antimony	02/22/99	ND	20	2.0
Arsenic	02/22/99	ND	8	2.0
Barium	02/22/99	35.3	2000	0.5
Beryllium	02/22/99	ND	20	0.5
Cadmium	02/22/99	0.984	4	0.5
Calcium	02/22/99	102000	NLE	20.0
Chromium	02/22/99	7.86	100	0.5
Cobalt	02/22/99	1.25	NLE	0.5
Copper	02/22/99	28.9	1000	3.0
Iron	02/22/99	5800	300	10.0
Lead	02/22/99	ND	10	2.0
Magnesium	02/22/99	23600	NLE	20.0
Manganese	02/22/99	436	50	0.5
Mercury	02/19/99	0.14	2	0.1
Nickel	02/22/99	6.45	100	0.5
Potassium	02/22/99	5040	NLE	20.0
Selenium	02/22/99	6.34	50	3.0
Silver	02/22/99	ND	20	3.0
Sodium	02/22/99	112000	50000	20.0
Thallium	02/22/99	ND	10	3.0
Vanadium	02/22/99	2.63	NLE	1.0
Zinc	02/22/99	311	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

	Lab	Acetone	2-Butanone	Carbon Disulfide	Benzene	Chloro benzene	Unknown	4,4'-DDD	Cadmium	Chromium	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	NLE	1	4	-	0.1	4	100	-
08/20/97	FMETL	ND	ND	2.31	1.38	2.61	115	ND	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	ND	8.0	148	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	2.26	ND	ND	ND	1.2	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	3.26	10	ND	8.0	1.3	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	ND	3.9	ND	V,S,P,M
08/24/98	FMETL	10.27	3.32	ND	ND	5.20	ND	0.059	4.49	3.12	V,S,P,M
11/20/98	FMETL	ND	ND	ND	ND	4.88	73	0.093	1.96	9.77	V,S,P,M
02/09/99	FMETL	ND	ND	ND	1.26	5.71	24	0.090	24.6	8.00	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 02/09/99

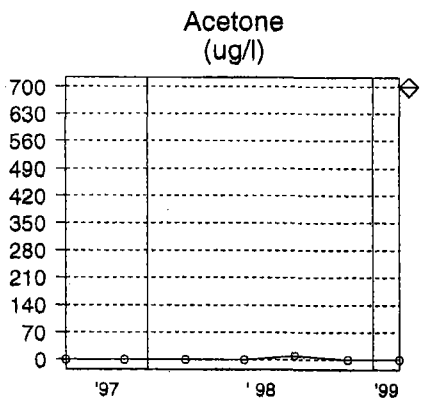
NOTES:

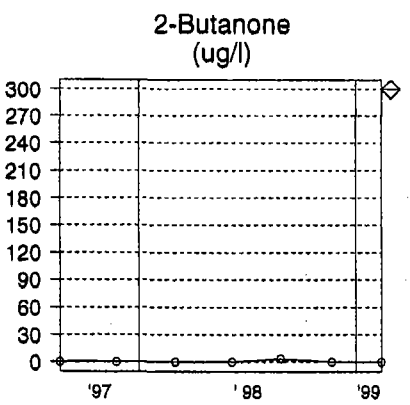
FORT MONMOUTH

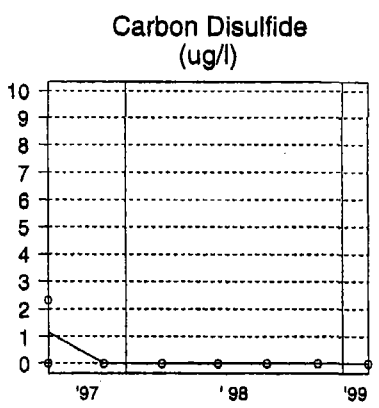
GW MONITORING
Bldg. 80

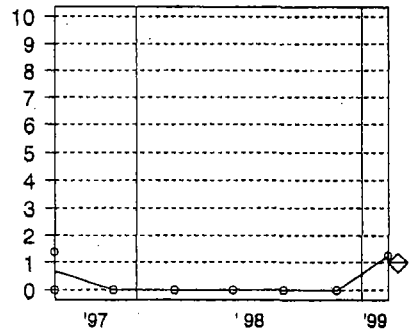
Well 1 of 1

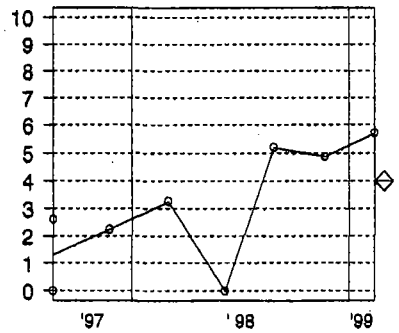
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

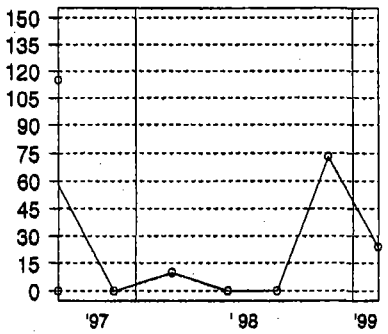


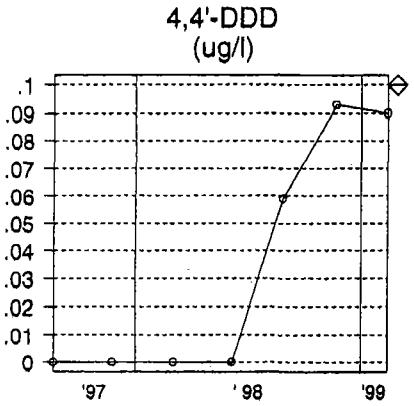


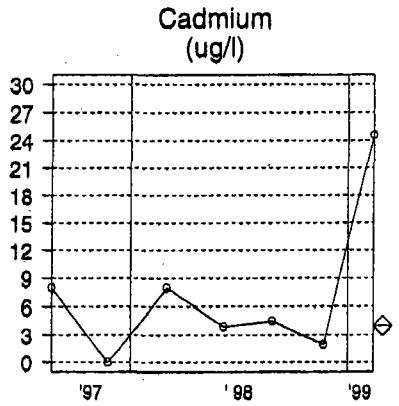


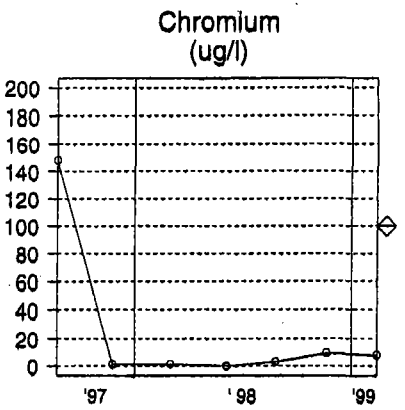












SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 02/09/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

04-15-1999 c:\mtech46\fm\80\gw\80.wsf

	Lab	Iron	Mang anese	silver	Sodium	Lead	Depth to Water				Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	300	50	20	50000	10	-				-
08/20/97	FMETL	-	-	-	-	2.5	2.60				V,Pb
08/20/97	FMETL	7490	136	8.0	110750	4.0	3.20				V,S,P,M
11/24/97	FMETL	9062	553	ND	97380	14	2.40				V,S,P,M
02/27/98	FMETL	70680	456	ND	279400	6.0	1.40				V,S,P,M
06/02/98	FMETL	8409	117	ND	147200	3.3	2.09				V,S,P,M
08/24/98	FMETL	67400	605	ND	533000	10.4	3.43				V,S,P,M
11/20/98	FMETL	68800	647	ND	530000	2.86	4.04				V,S,P,M
02/09/99	FMETL	17600	407	ND	306000	ND	3.84				V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 02/09/99

NOTES:

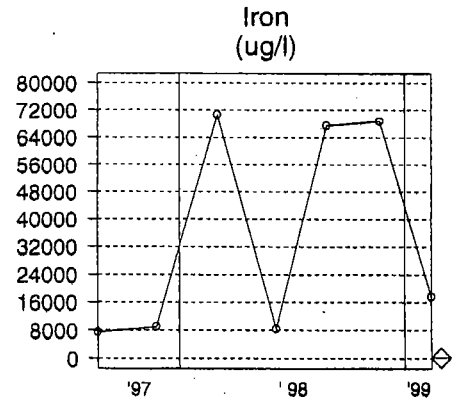
Page 2 of 2.

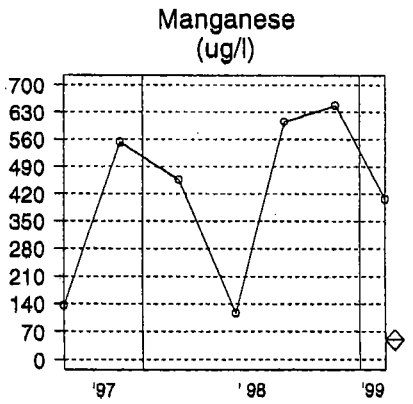
FORT MONMOUTH

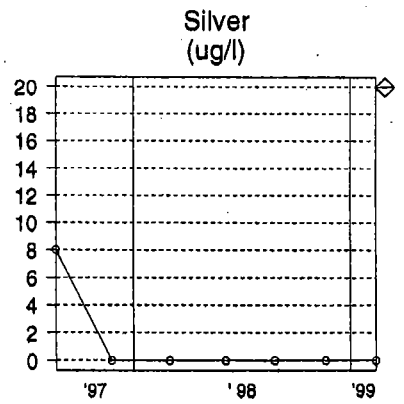
GW MONITORING
Bldg. 80

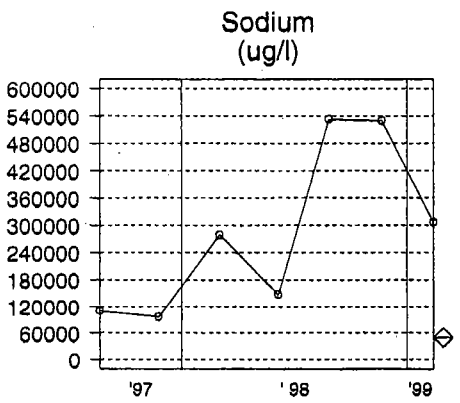
Well 1 of 1

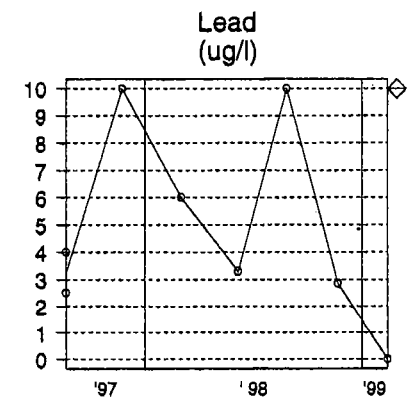
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

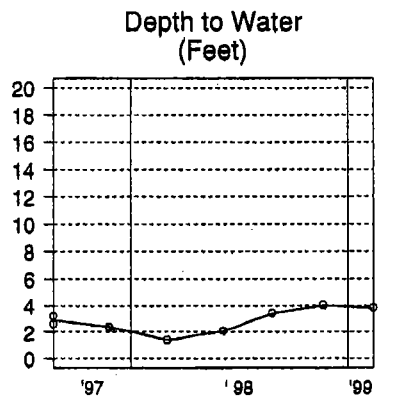












SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 02/09/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

04-15-1999 c:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chloro benzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/97	FMETL	ND	ND	ND	2.40	ND	ND	-	-	-	2.51
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	3.20
11/24/97	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	2.25
02/27/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	1.00
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	1.97
08/24/98	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	3.42
11/20/98	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	3.99
02/09/99	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	2.73

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 02/09/99

NOTES:

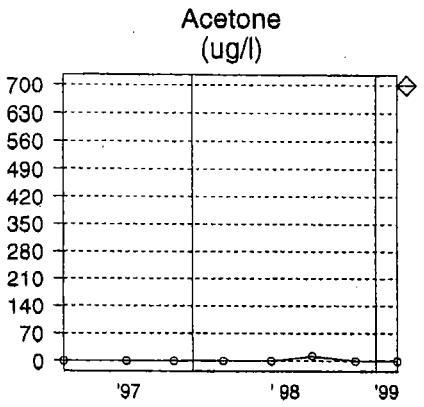
Page 1 of 2.

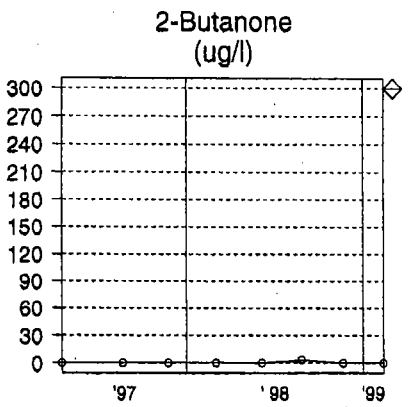
FORT MONMOUTH

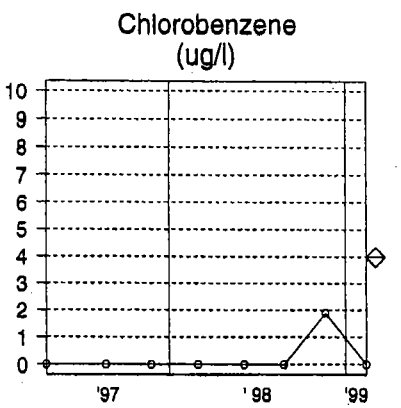
GW MONITORING
Bldg. 166

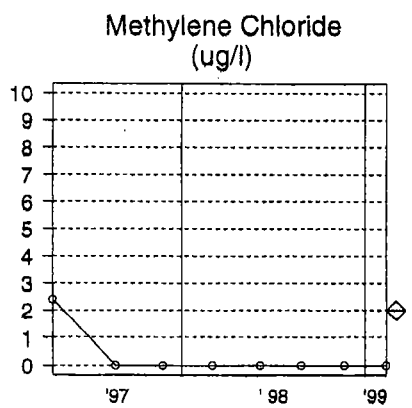
Well 1 of 1

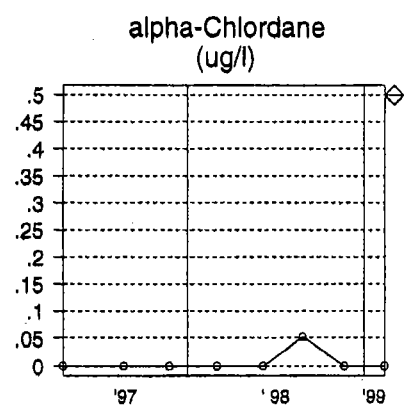
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

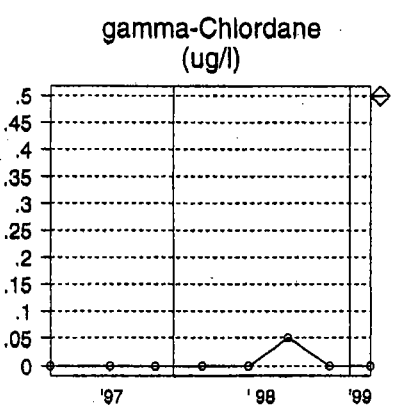


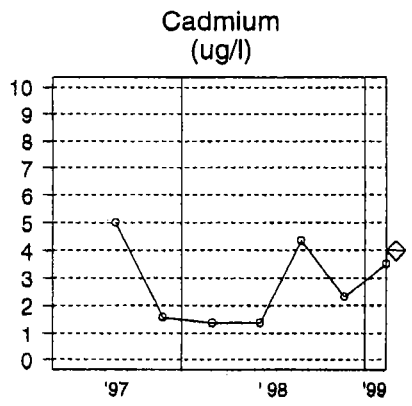


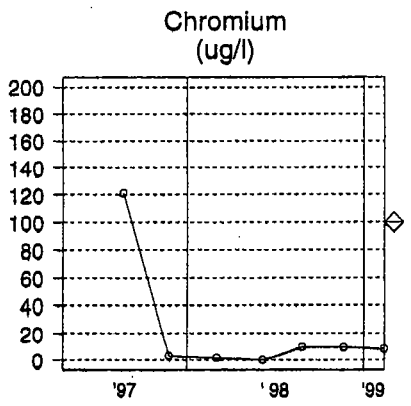


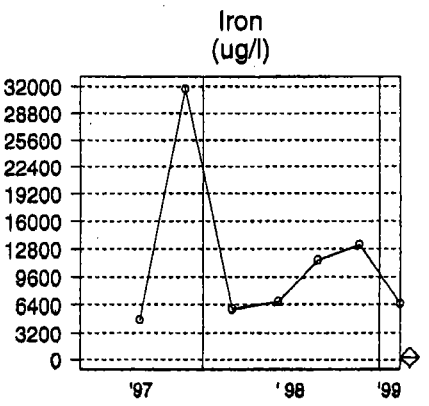












SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 02/09/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

04-15-1999 c:\mtech46\fm\166\gw\166.wsf

	Lab	Manganese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/97	FMETL	-	-	-	2.10	2.51					2.51
08/20/97	FMETL	336	26	83750	1.6	3.20					3.20
11/24/97	FMETL	287	ND	200200	15.0	2.25					2.25
02/27/98	FMETL	246	ND	29310	ND	1.00					1.00
06/02/98	FMETL	235	ND	27800	2.3	1.97					1.97
08/24/98	FMETL	397	ND	58200	12.4	3.42					3.42
11/20/98	FMETL	669	ND	114000	4.23	3.99					3.99
02/09/99	FMETL	413	ND	108000	ND	2.73					2.73

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 02/09/99

NOTES:

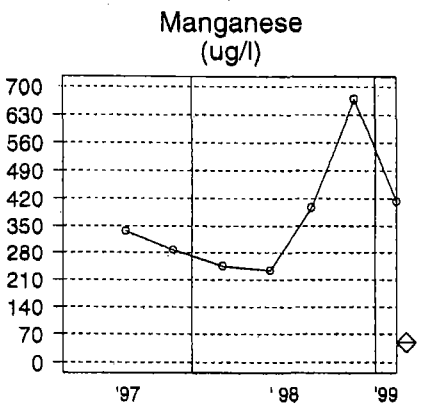
Page 2 of 2.

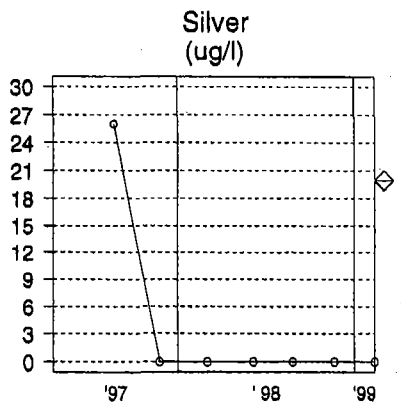
FORT MONMOUTH

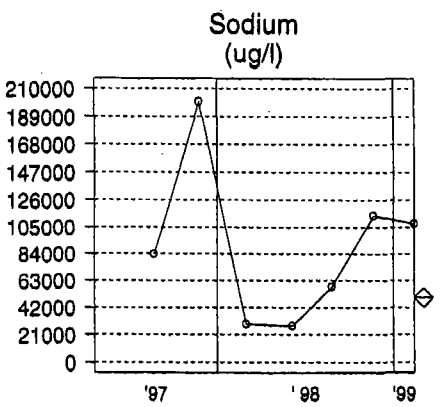
GW MONITORING
Bldg. 166

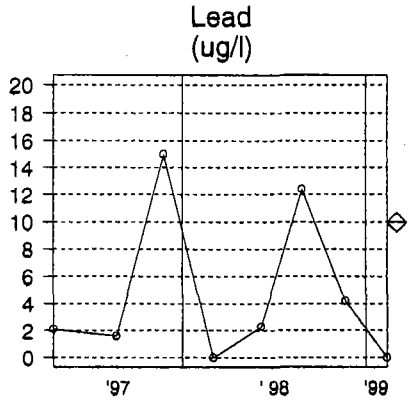
Well 1 of 1

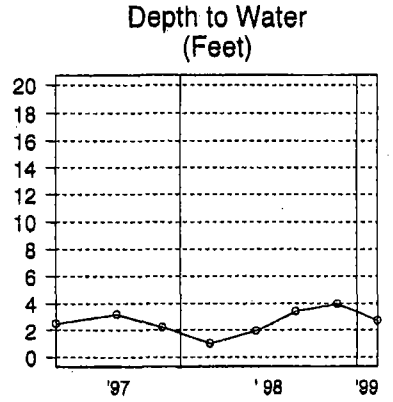
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 02/09/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

04-15-1999 c:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
4514.03	0080MW01	29-31774	05/26/99
4514.04	0166MW01	29-31773	05/26/99

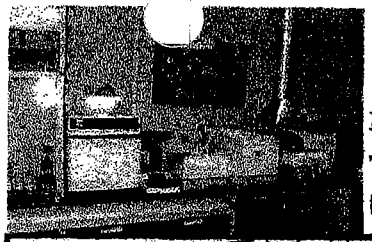
NJDEP Laboratory Certification # 13461

7-12-99
Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: ~~J. Fairhurst~~ / C. Appleby
Phone #: X21223
(X)DERA ( )OMA ( )Other:_____

Project No: LTM
Location: 166

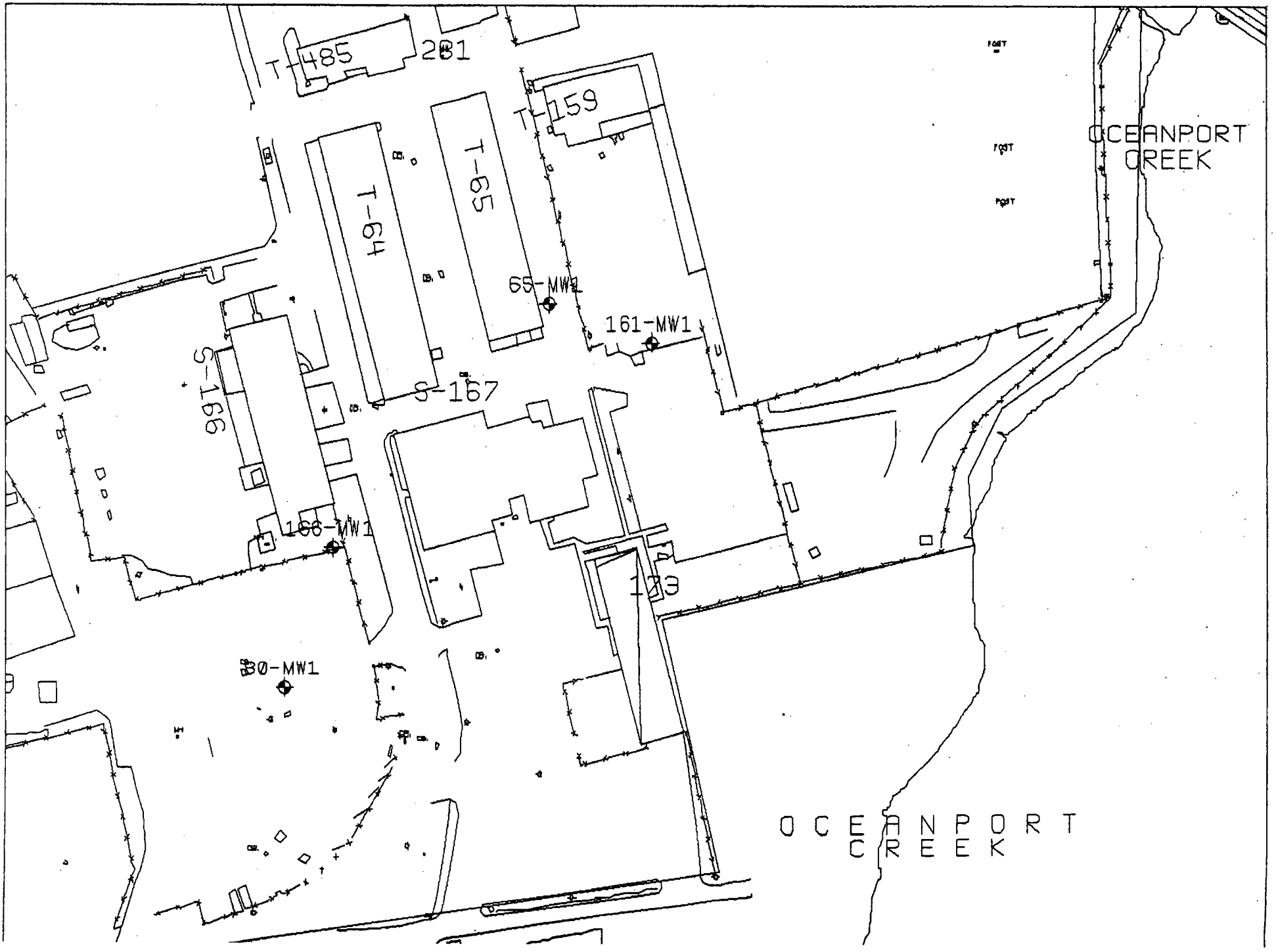
Samplers Name / Company : David Drew Fairhurst / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA +HS	BNA + 2.5	PEST /PCB	TAL METALS				HNO	Comments: Remarks / Preservation Method
9544 01	TRIP BLANK	5/26	0830	AQ	2	/							-	HNO3 / HCL PRESERVATION IN FIELD
02	FIELD BLANK		0915		5	/	/	/	/				-	
03	0080MW01		1005		5	/	/	/	/				2.0	
04	0166MW01		1026		5	/	/	/	/				0 0	
05	FIELD DUPLICATE		-		5	/	/	/	/				-	

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
D. Drew	5/26 1505				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified
Turnaround time: (X)Standard 4 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:


T-485
281
T-159
T-64
T-65
OCEANPORT
CREEK
65-MW1
161-MW1
S-166
S-167
166-MW1
133
80-MW1
OCEANPORT
CREEK

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Deinhardt
DATE: 05/26/99
WEATHER: Sunny, windy.
TIDE: N/A

ELEV. OF CASING SURVEY MARK: 6.91 ft
DEPTH TO WATER: 2.61 ft
DEPTH OF WELL: 12.26 ft
HEIGHT OF WATER: 9.65 ft
(9.65) X .65 X 3 = 18.8
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM): PERISTALIC
PURGE RATE: 0.25 GPM
Hnu READING: 2.0 PPM

PURGE START TIME: 08:49
pH 8.40 su — TEMP 17.9 °C
DISSOLVED O_2 16.5 PPM — SPECIFIC CONDUCTIVITY 1140 us/cm

PURGE END TIME: 10:05
pH 5.46 su — TEMP 18.0 °C
DISSOLVED O_2 45.7 PPM — SPECIFIC CONDUCTIVITY 1235 us/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 3.75 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 19 gal

pH 5.44 su — TEMP 17.8 °C
DISSOLVED O_2 44.5 PPM — SPECIFIC CONDUCTIVITY 399 us/cm

COMMENTS: Field Duplicate sample.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Deinhardt
DATE: 05/26/99
WEATHER: Sunny, windy.
TIDE: N/A

ELEV. OF CASING SURVEY MARK: 6.96 ft
DEPTH TO WATER: 2.9 ft
DEPTH OF WELL: 7.75 ft
HEIGHT OF WATER: 4.85 ft
(4.85) X .65 X 3 = 9.45
GALLONS OF H2O TO BE PURGED: 9.5 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM): PERISTALIC
PURGE RATE: 0.19 GPM
Hnu READING: 0.0 PPM

PURGE START TIME: 09:36
pH 7.67 su
DISSOLVED O_2 43.2 PPM
TEMP 19.3 °C
SPECIFIC CONDUCTIVITY 310 us/cm

PURGE END TIME: 10:26
pH 7.22 su
DISSOLVED O_2 32.7 PPM
TEMP 18.0 °C
SPECIFIC CONDUCTIVITY 437 us/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 2.6 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 19 gal

pH 7.18 su
DISSOLVED O_2 50.3 PPM
TEMP 17.7 °C
SPECIFIC CONDUCTIVITY 352 us/cm

COMMENTS:

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound identified below detection limit
B : Compound in both sample and blank
D : Results from dilution of sample
U : Compound searched for but not detected

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC000161.D**	Sample Name	**Vblk03**
Operator	**Skelton**	Field ID	**Vblk03**
Date Acquired	**27 May 1999 2:54 pm**	Sample Multiplie	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

6/1/99 3:55 PM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4514 Location: 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000161.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: not dec. Date Analyzed: 5/27/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VC000174.D	Sample Name	4514.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	28 May 1999 12:09 am	Sample Multiplie	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

6/1/99 3:55 PM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4514 Location: 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000174.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: not dec. Date Analyzed: 5/28/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VC000175.D	Sample Name	4514.02
Operator	Skelton	Field ID	Field Blank
Date Acquired	28 May 1999 12:50 am	Sample Multiplie	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4514 Location: 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000175.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: not dec. Date Analyzed: 5/28/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VC000176.D	Sample Name	4514.03
Operator	Skelton	Field ID	0080MW01
Date Acquired	28 May 1999 1:31 am	Sample Multiplie	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	10.11	45912	2.28 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene	19.70	192525	1.31 ug/L	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.38	724788	5.58 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	34.92	204879	1.97 ug/L	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

6/1/99 3:56 PM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0080MW01

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4514 Location: 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000176.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: not dec. Date Analyzed: 5/28/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 5

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000098-82-8	Benzene, (1-methylethyl)-	30.63	4	JN
2. 001073-06-9	Benzene, 1-bromo-3-fluoro-	31.25	22	JN
3. 000103-65-1	Benzene, propyl-	31.58	3	JN
4. 000141-93-5	Benzene, 1,3-diethyl-	34.30	3	JN
5. 000496-11-7	Indane	34.72	21	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VC000177.D	Sample Name	4514.04
Operator	Skelton	Field ID	0166MW01
Date Acquired	28 May 1999 2:12 am	Sample Multiplie	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

6/1/99 3:56 PM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0166MW01

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4514 Location: 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000177.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: not dec. Date Analyzed: 5/28/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 027133-93-3	2,3-Dihydro-1-methylindene	28.81	26	JN
2. 017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	31.78	4	JN
3. 003877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2	33.36	5	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VC000178.D	Sample Name	4514.05
Operator	Skelton	Field ID	Field Duplicate
Date Acquired	28 May 1999 2:53 am	Sample Multiplie	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene	19.70	187643	1.30 ug/L	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	28.38	749373	5.86 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	34.93	209696	2.05 ug/L	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

6/1/99 3:56 PM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Duplicate**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4514 Location: 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000178.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: not dec. Date Analyzed: 5/28/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 9

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 001680-51-9	Naphthalene, 1,2,3,4-tetrahydro-6	30.07	5	JN
2. 000098-82-8	Benzene, (1-methylethyl)-	30.62	4	JN
3. 001073-06-9	Benzene, 1-bromo-3-fluoro-	31.24	23	JN
4. 000103-65-1	Benzene, propyl-	31.59	4	JN
5. 000090-12-0	Naphthalene, 1-methyl-	33.55	24	JN
6. 000135-01-3	Benzene, 1,2-diethyl-	34.30	3	JN
7. 000105-05-5	Benzene, 1,4-diethyl-	34.51	3	JN
8. 000496-11-7	Indane	34.72	21	JN
9. 000135-01-3	Benzene, 1,2-diethyl-	34.82	3	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA02666.D**	Sample Name	**Sblk256**
Operator	**Bhaskar**	Misc Info	**Sblk256 A 990528**
Date Acquired	**2-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA02666.D**	Sample Name	**Sblk256**
Operator	**Bhaskar**	Misc Info	**Sblk256 A 990528**
Date Acquired	**2-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Sblk256**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4514 Location 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk256

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA02666.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: decanted: (Y/N) N Date Extracted: 5/28/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/2/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA02673.D**	Sample Name	**4514.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA02673.D**	Sample Name	**4514.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4514 Location 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA02673.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: decanted: (Y/N) N Date Extracted: 5/28/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.04	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA02674.D**	Sample Name	**4514.03**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene	8.63	81718	1.22 ug/L	600	0.16	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene	15.24	155317	1.29 ug/L	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA02674.D**	Sample Name	**4514.03**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene	16.43	214862	1.62 ug/L	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0080MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4514 Location 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA02674.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: decanted: (Y/N) N Date Extracted: 5/28/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.04	8	J
2. 001587-04-8	Benzene, 1-methyl-2-(2-propenyl)	10.54	8	JN
3. 000091-57-6	Naphthalene, 2-methyl-	12.95	10	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA02675.D**	Sample Name	**4514.04**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA02675.D**	Sample Name	**4514.04**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0166MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4514 Location 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA02675.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: decanted: (Y/N) N Date Extracted: 5/28/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.04	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA02676.D**	Sample Name	**4514.05**
Operator	**Bhaskar**	Misc Info	**Field Duplicate**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
108-95-2	Phenol			not detected	4000	0.47	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.18	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.15	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene	8.63	79665	1.30 ug/L	600	0.16	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.14	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.14	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.36	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.23	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.27	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.12	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.38	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.18	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.42	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.31	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene	15.25	158463	1.41 ug/L	400	0.26	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.69	ug/L	
132-64-9	Dibenzofuran	15.63	154418	1.00 ug/L	NLE	0.32	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.27	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA02676.D**	Sample Name	**4514.05**
Operator	**Bhaskar**	Misc Info	**Field Duplicate**
Date Acquired	**3-Jun-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
86-73-7	Fluorene	16.44	214451	1.73 ug/L	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.44	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.08	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine			not detected	50	1.45	ug/L	
129-00-0	Pyrene			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46	ug/L	
218-01-9	Chrysene			not detected	20	0.20	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.82	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.31	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.79	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.28	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.40	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Duplicate**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 4514 Location 166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4514.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA02676.D

Level: (low/med) LOW Date Received: 5/26/99

% Moisture: decanted: (Y/N) N Date Extracted: 5/28/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.04	14	J
2. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	10.55	9	JN
3. 001680-51-9	Naphthalene, 1,2,3,4-tetrahydro-6	12.68	5	JN
4. 000090-12-0	Naphthalene, 1-methyl-	12.95	11	JN
5.	unknown	16.59	5	J

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK341
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	5/27/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/4/99
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK342
	DPW, SELFM-PW-EV.	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	5/27/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/5/99
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4514.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/26/99
	Bldg. 173	**Extraction Date:**	5/27/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/5/99
Analysis:	EPA Method 608	**Location :**	166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4514.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/26/99
	Bldg. 173	**Extraction Date:**	5/27/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/5/99
Analysis:	EPA Method 608	**Location :**	166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1	16.04	0.10	0.0022	**0.148**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4514.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/26/99
	Bldg. 173	**Extraction Date:**	5/27/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/5/99
Analysis:	EPA Method 608	**Location :**	166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4514.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/26/99
	Bldg. 173	**Extraction Date:**	5/27/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	6/5/99
Analysis:	EPA Method 608	**Location :**	166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Duplicate
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	**ND**
beta-BHC	1		0.20	0.0024	**ND**
gamma-BHC	1		0.20	0.0015	**ND**
delta-BHC	1		NLE	0.0019	**ND**
Heptachlor	1		0.40	0.0020	**ND**
Aldrin	1		0.04	0.0010	**ND**
Heptachlor Epoxide	1		0.20	0.0009	**ND**
Endosulfan I	1		0.40	0.0057	**ND**
4,4'-DDE	1		0.10	0.0009	**ND**
Dieldrin	1		0.03	0.0016	**ND**
Endrin	1		2.00	0.0020	**ND**
Endrin Ketone	1		NLE	0.0012	**ND**
Endosulfan II	1		0.40	0.0033	**ND**
4,4'-DDD	1	16.04	0.10	0.0022	**0.057**
4,4'-DDT	1		0.10	0.0013	**ND**
Endosulfan-Sulfate	1		0.40	0.0027	**ND**
Methoxychlor	1		40.00	0.0038	**ND**
Alpha-chlordane	1		0.50	0.0011	**ND**
Gamma-chlordane	1		0.50	0.0009	**ND**
Toxaphene	1		3.00	0.0273	**ND**
Arochlor 1016	1		0.50	0.0640	**ND**
Arochlor 1221	1		0.50	0.0500	**ND**
Arochlor 1232	1		0.50	0.0500	**ND**
Arochlor 1242	1		0.50	0.0280	**ND**
Arochlor 1248	1		0.50	0.0500	**ND**
Arochlor 1254	1		0.50	0.0500	**ND**
Arochlor 1260	1		0.50	0.0680	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4514
Sample Prepared: 06/17/99

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/17/99	52.3	200	10.0
Antimony	06/17/99	2.35	20	2.0
Arsenic	06/17/99	ND	8	2.0
Barium	06/17/99	0.84	2000	0.5
Beryllium	06/17/99	ND	20	0.5
Cadmium	06/17/99	0.57	4	0.5
Calcium	06/17/99	129	NLE	20.0
Chromium	06/17/99	ND	100	0.5
Cobalt	06/17/99	ND	NLE	0.5
Copper	06/17/99	38.1	1000	3.0
Iron	06/17/99	32.0	300	10.0
Lead	06/17/99	ND	10	2.0
Magnesium	06/17/99	108	NLE	20.0
Manganese	06/17/99	ND	50	0.5
Mercury	06/23/99	ND	2	0.1
Nickel	06/17/99	1.89	100	0.5
Potassium	06/17/99	208	NLE	20.0
Selenium	06/17/99	ND	50	3.0
Silver	06/17/99	ND	20	3.0
Sodium	06/17/99	163	50000	20.0
Thallium	06/17/99	ND	10	3.0
Vanadium	06/17/99	ND	NLE	1.0
Zinc	06/17/99	16.2	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4514.02
Sample Received: 05/26/99
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/17/99	22.9	200	10.0
Antimony	06/17/99	ND	20	2.0
Arsenic	06/17/99	ND	8	2.0
Barium	06/17/99	16.7	2000	0.5
Beryllium	06/17/99	ND	20	0.5
Cadmium	06/17/99	0.993	4	0.5
Calcium	06/17/99	79.2	NLE	20.0
Chromium	06/17/99	ND	100	0.5
Cobalt	06/17/99	ND	NLE	0.5
Copper	06/17/99	9.90	1000	3.0
Iron	06/17/99	66.6	300	10.0
Lead	06/17/99	ND	10	2.0
Magnesium	06/17/99	ND	NLE	20.0
Manganese	06/17/99	ND	50	0.5
Mercury	06/23/99	ND	2	0.1
Nickel	06/17/99	ND	100	0.5
Potassium	06/17/99	ND	NLE	20.0
Selenium	06/17/99	ND	50	3.0
Silver	06/17/99	ND	20	3.0
Sodium	06/17/99	465	50000	20.0
Thallium	06/17/99	ND	10	3.0
Vanadium	06/17/99	ND	NLE	1.0
Zinc	06/17/99	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4514.03
Sample Received: 05/26/99
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/17/99	553	200	10.0
Antimony	06/17/99	ND	20	2.0
Arsenic	06/17/99	24.0	8	2.0
Barium	06/17/99	89.7	2000	0.5
Beryllium	06/17/99	ND	20	0.5
Cadmium	06/17/99	3.64	4	0.5
Calcium	06/17/99	65000	NLE	20.0
Chromium	06/17/99	5.70	100	0.5
Cobalt	06/17/99	2.90	NLE	0.5
Copper	06/17/99	13.9	1000	3.0
Iron	06/17/99	56700	300	10.0
Lead	06/17/99	5.34	10	2.0
Magnesium	06/17/99	15300	NLE	20.0
Manganese	06/17/99	564	50	0.5
Mercury	06/23/99	ND	2	0.1
Nickel	06/17/99	1.72	100	0.5
Potassium	06/17/99	5730	NLE	20.0
Selenium	06/17/99	5.22	50	3.0
Silver	06/17/99	ND	20	3.0
Sodium	06/17/99	457000	50000	20.0
Thallium	06/17/99	ND	10	3.0
Vanadium	06/17/99	6.41	NLE	1.0
Zinc	06/17/99	80.3	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4514.04
Sample Received: 05/26/99
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/17/99	945	200	10.0
Antimony	06/17/99	ND	20	2.0
Arsenic	06/17/99	4.57	8	2.0
Barium	06/17/99	31.7	2000	0.5
Beryllium	06/17/99	ND	20	0.5
Cadmium	06/17/99	3.04	4	0.5
Calcium	06/17/99	61200	NLE	20.0
Chromium	06/17/99	9.16	100	0.5
Cobalt	06/17/99	1.23	NLE	0.5
Copper	06/17/99	47.1	1000	3.0
Iron	06/17/99	9880	300	10.0
Lead	06/17/99	11.4	10	2.0
Magnesium	06/17/99	15200	NLE	20.0
Manganese	06/17/99	368	50	0.5
Mercury	06/23/99	ND	2	0.1
Nickel	06/17/99	3.85	100	0.5
Potassium	06/17/99	4410	NLE	20.0
Selenium	06/17/99	3.39	50	3.0
Silver	06/17/99	ND	20	3.0
Sodium	06/17/99	72900	50000	20.0
Thallium	06/17/99	ND	10	3.0
Vanadium	06/17/99	7.01	NLE	1.0
Zinc	06/17/99	160	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4514.05
Sample Received: 05/26/99
Sample Matrix: Aqueous

Site: Bldg. 166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/17/99	1210	200	10.0
Antimony	06/17/99	ND	20	2.0
Arsenic	06/17/99	22.0	8	2.0
Barium	06/17/99	91.9	2000	0.5
Beryllium	06/17/99	ND	20	0.5
Cadmium	06/17/99	4.22	4	0.5
Calcium	06/17/99	64900	NLE	20.0
Chromium	06/17/99	9.82	100	0.5
Cobalt	06/17/99	2.77	NLE	0.5
Copper	06/17/99	22.2	1000	3.0
Iron	06/17/99	49500	300	10.0
Lead	06/17/99	6.13	10	2.0
Magnesium	06/17/99	13900	NLE	20.0
Manganese	06/17/99	508	50	0.5
Mercury	06/23/99	ND	2	0.1
Nickel	06/17/99	2.01	100	0.5
Potassium	06/17/99	5820	NLE	20.0
Selenium	06/17/99	7.40	50	3.0
Silver	06/17/99	ND	20	3.0
Sodium	06/17/99	416000	50000	20.0
Thallium	06/17/99	ND	10	3.0
Vanadium	06/17/99	7.77	NLE	1.0
Zinc	06/17/99	86.8	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

	Lab	Acetone	2-Butanone	Carbon Disulfide	Benzene	Chloro benzene	Unknown	4,4'-DDD	Cadmium	Chromium	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	NLE	1	4	-	0.1	4	100	-
08/20/97	FMETL	ND	ND	2.31	1.38	2.61	115	ND	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	ND	8.0	148	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	2.26	ND	ND	ND	1.2	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	3.26	10	ND	8.0	1.3	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	ND	3.9	ND	V,S,P,M
08/24/98	FMETL	10.27	3.32	ND	ND	5.20	ND	0.059	4.49	3.12	V,S,P,M
11/20/98	FMETL	ND	ND	ND	ND	4.88	73	0.093	1.96	9.77	V,S,P,M
02/09/99	FMETL	ND	ND	ND	1.26	5.71	24	0.090	24.6	8.00	V,S,P,M
05/26/99	FMETL	2.28	ND	ND	1.31	5.58	ND	0.148	3.64	5.70	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 05/26/99

NOTES:

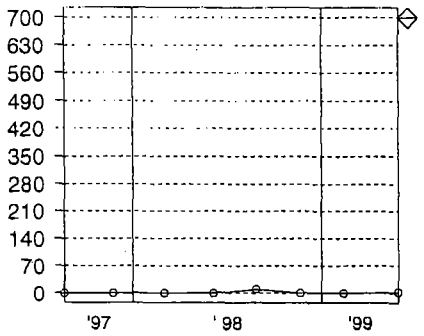
Page 1 of 2.

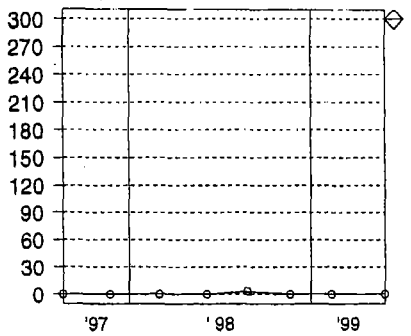
FORT MONMOUTH

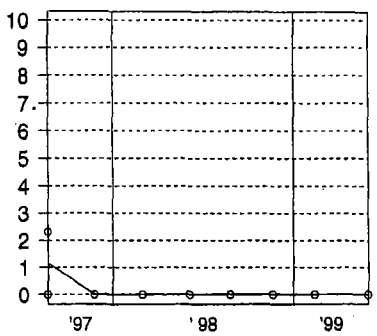
GW MONITORING
Bldg. 80

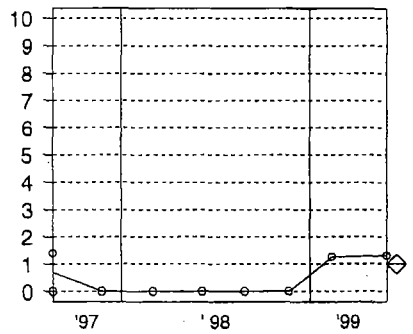
Well 1 of 1

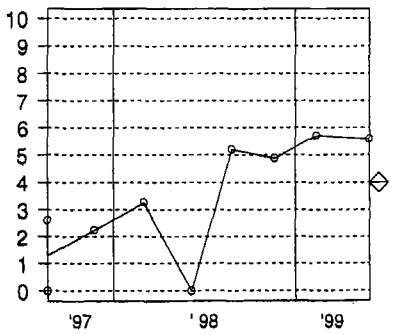
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

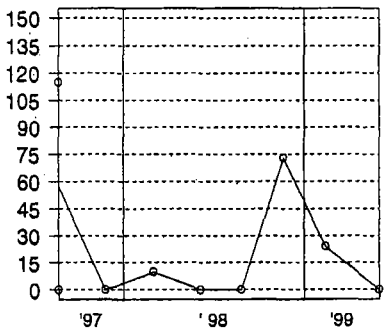


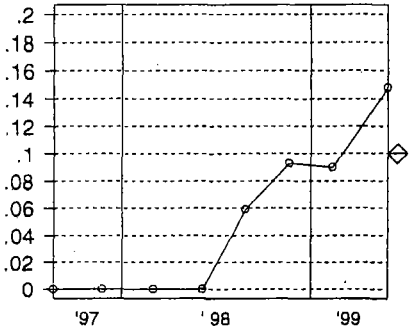


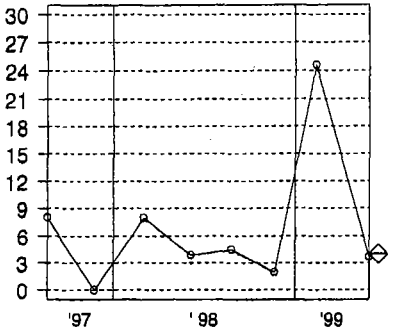


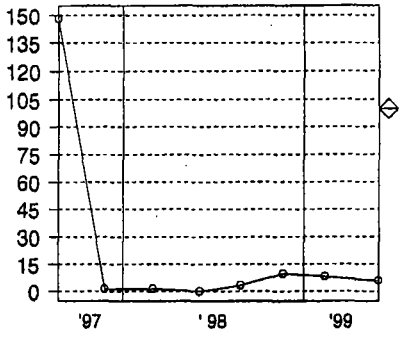












SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 05/26/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

07-08-1999 c:\mtech46\fm\80\gw\80.wsf

	Lab	Iron	Mang anese	silver	Sodium	Lead	Depth to Water				Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	300	50	20	50000	10	-				-
08/20/97	FMETL	-	-	-	-	2.5	2.60				V,Pb
08/20/97	FMETL	7490	136	8.0	110750	4.0	3.20				V,S,P,M
11/24/97	FMETL	9062	553	ND	97380	14	2.40				V,S,P,M
02/27/98	FMETL	70680	456	ND	279400	6.0	1.40				V,S,P,M
06/02/98	FMETL	8409	117	ND	147200	3.3	2.09				V,S,P,M
08/24/98	FMETL	67400	605	ND	533000	10.4	3.43				V,S,P,M
11/20/98	FMETL	68800	647	ND	530000	2.86	4.04				V,S,P,M
02/09/99	FMETL	17600	407	ND	306000	ND	3.84				V,S,P,M
05/26/99	FMETL	56700	564	ND	457000	5.34	2.61				V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 05/26/99

NOTES:

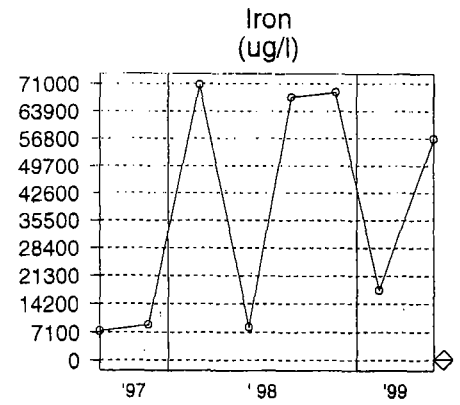
Page 2 of 2.

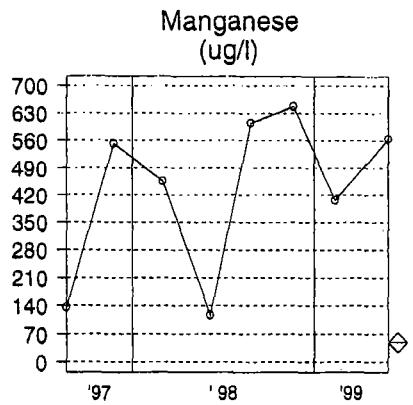
FORT MONMOUTH

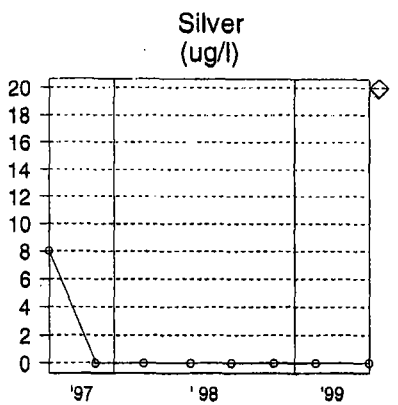
GW MONITORING
Bldg. 80

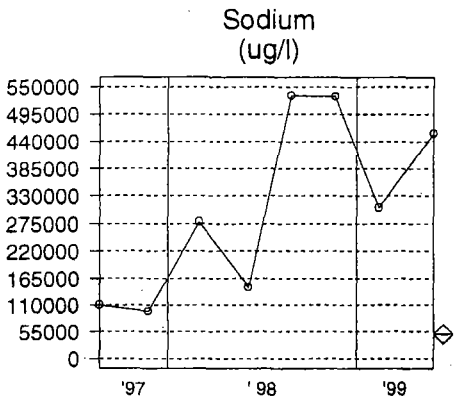
Well 1 of 1

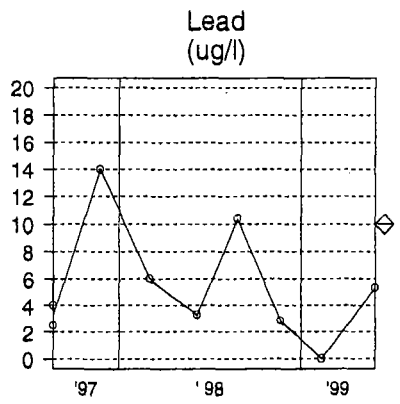
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

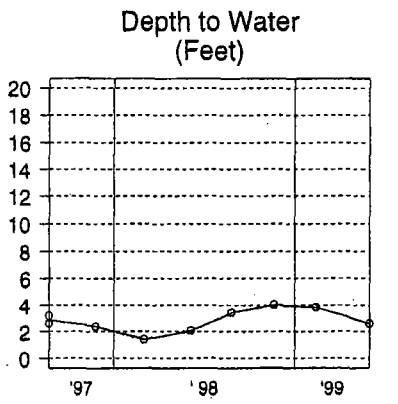












SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 05/26/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

07-08-1999 c:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chlorobenzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/97	FMETL	ND	ND	ND	2.40	ND	ND	-	-	-	2.51
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	3.20
11/24/97	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	2.25
02/27/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	1.00
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	1.97
08/24/98	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	3.42
11/20/98	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	3.99
02/09/99	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	2.73
05/26/99	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	2.90

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 05/26/99

NOTES:

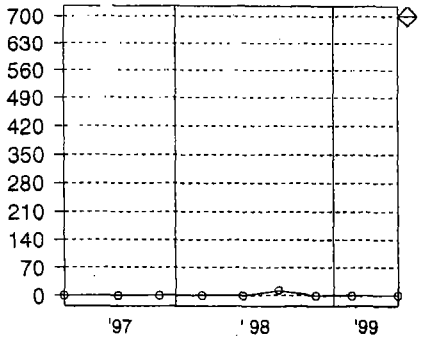
Page 1 of 2.

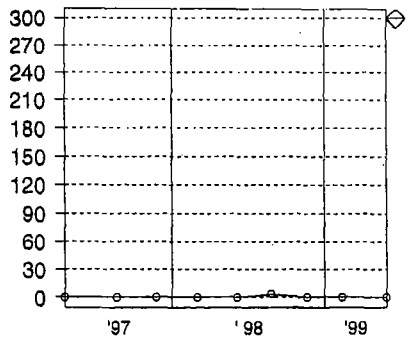
FORT MONMOUTH

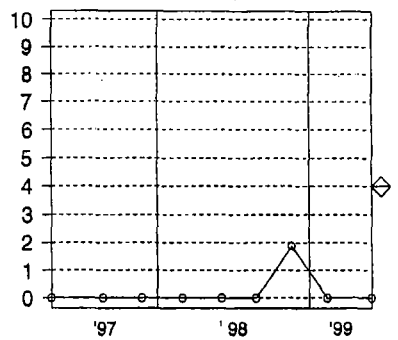
GW MONITORING
Bldg. 166

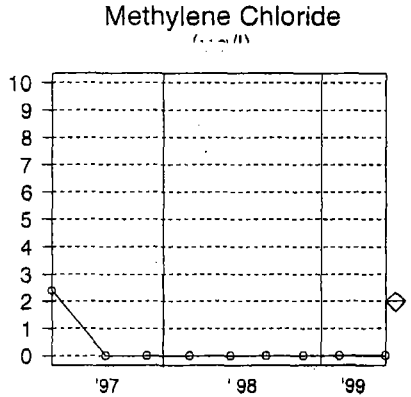
Well 1 of 1

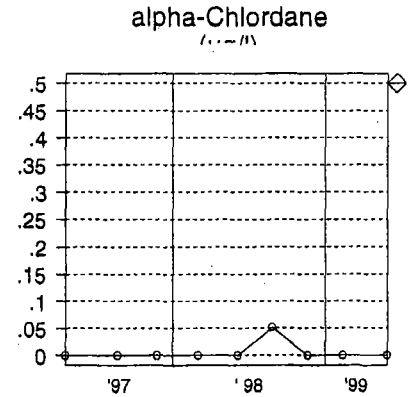
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

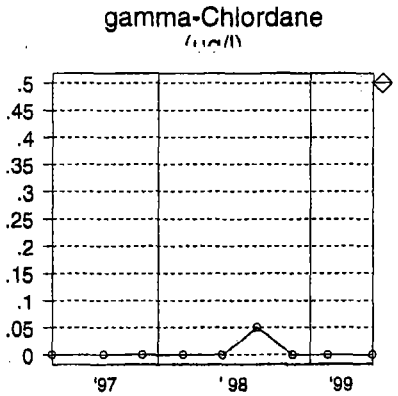


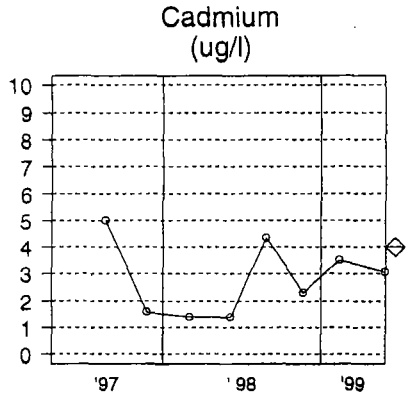


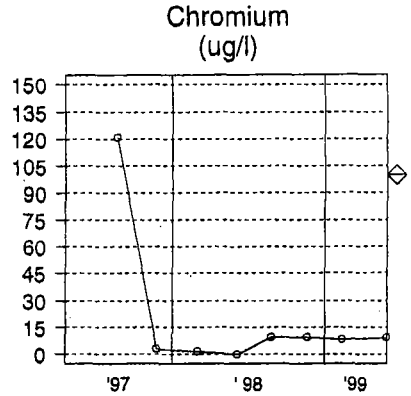


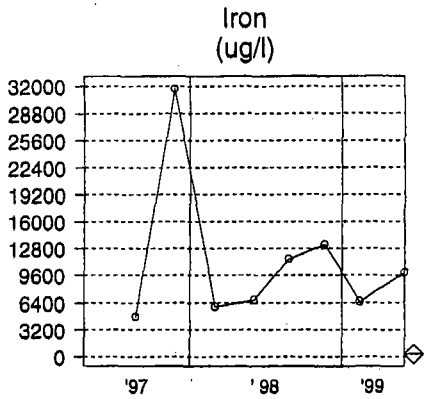












SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 05/26/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Manganese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/97	FMETL	-	-	-	2.10	2.51					2.51
08/20/97	FMETL	336	26	83750	1.6	3.20					3.20
11/24/97	FMETL	287	ND	200200	15.0	2.25					2.25
02/27/98	FMETL	246	ND	29310	ND	1.00					1.00
06/02/98	FMETL	235	ND	27800	2.3	1.97					1.97
08/24/98	FMETL	397	ND	58200	12.4	3.42					3.42
11/20/98	FMETL	669	ND	114000	4.23	3.99					3.99
02/09/99	FMETL	413	ND	108000	ND	2.73					2.73
05/26/99	FMETL	368	ND	72900	11.4	2.90					2.90

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 05/26/99

NOTES:

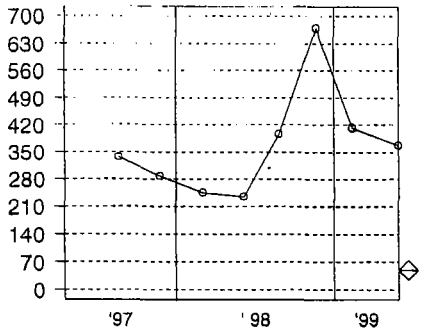
Page 2 of 2.

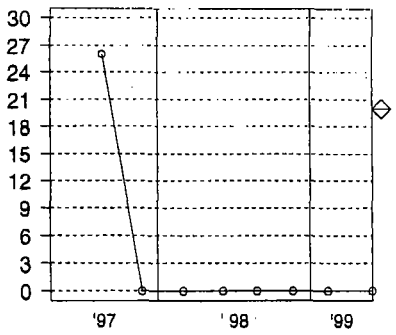
FORT MONMOUTH

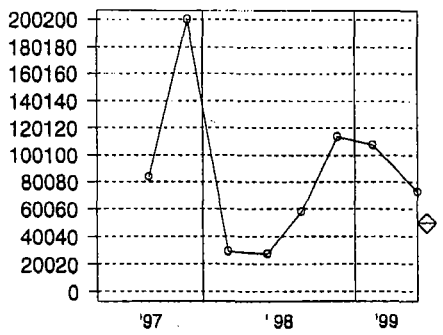
GW MONITORING
Bldg. 166

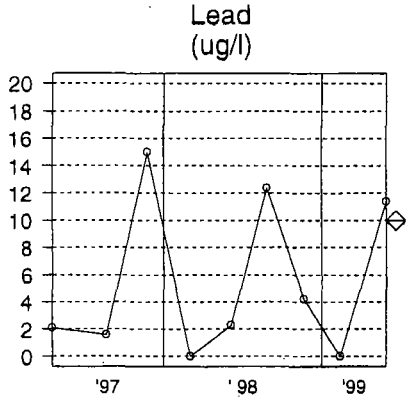
Well 1 of 1

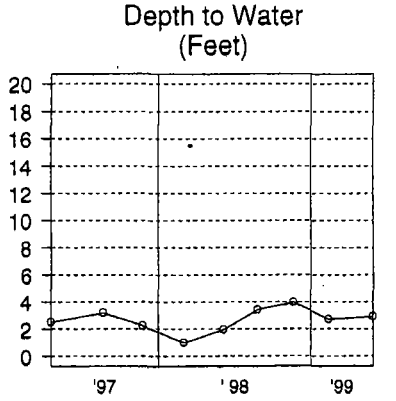
U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 05/26/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

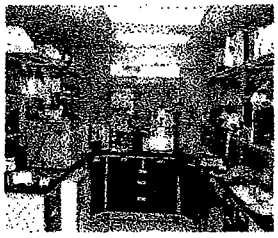
GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
4808.01	0080MW01	29-31774	09/22/99
4808.02	0166MW01	29-31773	09/22/99

NJDEP Laboratory Certification # 13461

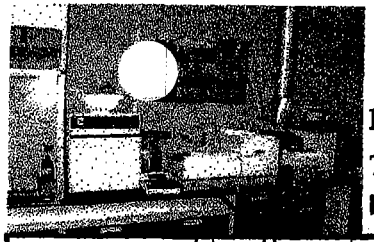
10-13-99
Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608

Sampling



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:appleby@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: L. Appleby
Phone #: X 24224
( )DERA (X)OMA ( )Other:

Project No:
Location: 80/166 MW's 3rd Qrtr '99

Samplers Name / Company: Corey McCormack, TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	BNA+25	TAL metals	Pest/PCB				Hno3 pres	Comments: Remarks / Preservation Method
														HCl/HNO3/ 4°C
11808.01	0080 MW02	9/22/99	1425	AQ	5	✓	✓	✓	✓				0.0	29-31774
.02	0166 MW01	↓	1355	↓	9	✓	✓	✓	✓				0.0	29-31773
.03	Trip Blank		1250		2	✓							—	
.04	Field Blank		1350		5	✓	✓	✓	✓				—	
.05	Dupe	↓	—	↓	5	✓	✓	✓	✓				—	

Analysis Parameters

Relinquished by (signature)	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	9/22/99 1445				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified
Turnaround time: (X)Standard 4 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:
T.L.: N/A

MS/MSDS km

print legibly

Coc.xls9/9/99


T-485
281
T-159
T-64
T-65
65-MW1
161-MW1
S-166
S-167
OCEANPORT CREEK
OCEANPORT CREEK

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack.
DATE: 09/22/99
WEATHER: Overcast, cold.
TIDE: N/A

ELEV. OF CASING SURVEY MARK: 6.91 ft
DEPTH TO WATER: 2.73 ft
DEPTH OF WELL: 12.26 ft
HEIGHT OF WATER: 9.53 ft
(9.53) X .65 X 3 = 18.58
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM): PERISTALIC
PURGE RATE: 0.23 GPM
Hnu READING: 0.0 PPM

PURGE START TIME: 13:03
pH 6.20 su — TEMP 12.5 °C
DISSOLVED O_2 6.01 PPM — SPECIFIC CONDUCTIVITY 138 us/cm

PURGE END TIME: 14:25
pH 6.14 su — TEMP 12.4 °C
DISSOLVED O_2 4.20 PPM — SPECIFIC CONDUCTIVITY 139 us/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 3.21 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 19 gal

pH 6.16 su — TEMP 12.4 °C
DISSOLVED O_2 4.17 PPM — SPECIFIC CONDUCTIVITY 137 us/cm

COMMENTS: Dup. Here. No phases, fuel odor and sheen.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack.
DATE: 09/22/99
WEATHER: Overcast, cold.
TIDE: N/A

ELEV. OF CASING SURVEY MARK: 6.96 ft
DEPTH TO WATER: 2.71 ft
DEPTH OF WELL: 7.75 ft
HEIGHT OF WATER: 5.04 ft
(5.04) X .65 X 3 = 9.82
GALLONS OF H2O TO BE PURGED: 10 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM): PERISTALIC
PURGE RATE: 0.23 GPM
Hnu READING: 0.0 PPM

PURGE START TIME: 13:11
pH 6.77 su — TEMP 12.6 °C
DISSOLVED O_2 6.11 PPM — SPECIFIC CONDUCTIVITY 49 us/cm

PURGE END TIME: 13:55
pH 6.81 su — TEMP 12.5 °C
DISSOLVED O_2 4.23 PPM — SPECIFIC CONDUCTIVITY 50 us/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 2.75 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 10 gal

pH 6.80 su — TEMP 12.5 °C
DISSOLVED O_2 4.20 PPM — SPECIFIC CONDUCTIVITY 48 us/cm

COMMENTS: No phases, MS/MSD here. Old fuel odor.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound identified below detection limit
B	: Compound in both sample and blank
D	: Results from dilution of sample
U	: Compound searched for but not detected
E	: Compound exceeds calibration limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VC000924.D	Sample Name	Vblk31
Operator	Skelton	Field ID	Vblk31
Date Acquired	24 Sep 1999 2:41 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

10/1/99 9:36 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk31**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk31

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000924.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: not dec. Date Analyzed: 9/24/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC000949.D**	Sample Name	**4808.03**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**25 Sep 1999 7:30 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride	11.17	153351	3.91 ug/L	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

10/1/99 9:36 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4808.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000949.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: not dec. Date Analyzed: 9/25/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC000950.D**	Sample Name	**4808.04**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**25 Sep 1999 8:10 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

10/1/99 9:36 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4808.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000950.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: not dec. Date Analyzed: 9/25/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC000947.D**	Sample Name	**4808.01**
Operator	**Skelton**	Field ID	**0080MW01**
Date Acquired	**25 Sep 1999 6:10 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

10/1/99 9:36 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0080MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4808.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000947.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: not dec. Date Analyzed: 9/25/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC000948.D**	Sample Name	**4808.02**
Operator	**Skelton**	Field ID	**0166MW01**
Date Acquired	**25 Sep 1999 6:50 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

10/1/99 9:36 AM

C:\HPCHEM\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0166MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4808.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000948.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: not dec. Date Analyzed: 9/25/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC000951.D**	Sample Name	**4808.05**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**25 Sep 1999 8:50 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 4808.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000951.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: not dec. Date Analyzed: 9/25/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatiles

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN03923.D**	Sample Name	**Sblk306**
Operator	**Bhaskar**	Misc Info	**Sblk306 A 990929**
Date Acquired	**1-Oct-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN03923.D**	Sample Name	**Sblk306**
Operator	**Bhaskar**	Misc Info	**Sblk306 A 990929**
Date Acquired	**1-Oct-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Sblk306**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: Sblk306

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03923.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/1/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	23.40	6	J
2.	unknown	23.48	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BN03929.D	Sample Name	4808.04
Operator	Bhaskar	Misc Info	Field Blank
Date Acquired	1-Oct-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN03929.D**	Sample Name	**4808.04**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**1-Oct-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4808.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03929.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: decanted: (Y/N) N Date Extracted: 9/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/1/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BN03925.D	Sample Name	4808.01
Operator	Bhaskar	Misc Info	0080MW01
Date Acquired	1-Oct-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene	12.45	52487	1.73 ug/L	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene	14.84	33794	1.29 ug/L	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BN03925.D	Sample Name	4808.01
Operator	Bhaskar	Misc Info	0080MW01
Date Acquired	1-Oct-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene	16.04	51516	1.69 ug/L	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0080MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4808.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03925.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: decanted: (Y/N) N Date Extracted: 9/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/1/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BN03926.D	Sample Name	4808.02
Operator	Bhaskar	Misc Info	0166MW01
Date Acquired	1-Oct-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	BN03926.D	Sample Name	4808.02
Operator	Bhaskar	Misc Info	0166MW01
Date Acquired	1-Oct-99	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected.	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	23.88	89091	2.60 ug/L	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0166MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 4808.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03926.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/1/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN03930.D**	Sample Name	**4808.05**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**1-Oct-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene	12.46	45013	1.62 ug/L	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene	14.85	26852	1.10 ug/L	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN03930.D**	Sample Name	**4808.05**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**1-Oct-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene	16.04	40250	1.43 ug/L	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 4808 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4808.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03930.D

Level: (low/med) LOW Date Received: 9/22/99

% Moisture: decanted: (Y/N) N Date Extracted: 9/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/1/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Pesticide/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK410
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	9/23/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/30/99
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Aldehyde	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4808.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/22/99
	Bldg. 173	**Extraction Date:**	9/23/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/30/99
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Aldehyde	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4808.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/22/99
	Bldg. 173	**Extraction Date:**	9/23/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/30/99
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Aldehyde	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4808.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/22/99
	Bldg. 173	**Extraction Date:**	9/23/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/30/99
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Aldehyde	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Alpha-chlordane	1	15.34	0.50	0.0011	**0.048**
Gamma-chlordane	1	15.65	0.50	0.0009	**0.049**
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	4808.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/22/99
	Bldg. 173	**Extraction Date:**	9/23/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/30/99
Analysis:	EPA Method 608	**Location :**	80/166 MWs
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Aldehyde	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Metals

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4808
Sample Prepared: 10/07/99

Site: 80/166

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/07/99	28.2	200	10.0
Antimony	10/07/99	4.65	20	2.0
Arsenic	10/07/99	ND	8	2.0
Barium	10/07/99	3.60	2000	0.5
Beryllium	10/07/99	ND	20	0.5
Cadmium	10/07/99	ND	4	0.5
Calcium	10/07/99	287	NLE	20.0
Chromium	10/07/99	3.63	100	0.5
Cobalt	10/07/99	ND	NLE	0.5
Copper	10/07/99	159	1000	3.0
Iron	10/07/99	32.2	300	10.0
Lead	10/07/99	ND	10	2.0
Magnesium	10/07/99	129	NLE	20.0
Manganese	10/07/99	ND	50	0.5
Mercury	09/28/99	ND	2	0.1
Nickel	10/07/99	2.95	100	0.5
Potassium	10/07/99	525	NLE	20.0
Selenium	10/07/99	ND	50	3.0
Silver	10/07/99	ND	20	3.0
Sodium	10/07/99	597	50000	20.0
Thallium	10/07/99	ND	10	3.0
Vanadium	10/07/99	ND	NLE	1.0
Zinc	10/07/99	16.5	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4808.04
Sample Received: 09/22/99
Sample Matrix: Aqueous

Site: 80/166

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/07/99	ND	200	10.0
Antimony	10/07/99	ND	20	2.0
Arsenic	10/07/99	ND	8	2.0
Barium	10/07/99	ND	2000	0.5
Beryllium	10/07/99	ND	20	0.5
Cadmium	10/07/99	ND	4	0.5
Calcium	10/07/99	ND	NLE	20.0
Chromium	10/07/99	ND	100	0.5
Cobalt	10/07/99	ND	NLE	0.5
Copper	10/07/99	ND	1000	3.0
Iron	10/07/99	29.5	300	10.0
Lead	10/07/99	ND	10	2.0
Magnesium	10/07/99	ND	NLE	20.0
Manganese	10/07/99	ND	50	0.5
Mercury	09/28/99	ND	2	0.1
Nickel	10/07/99	ND	100	0.5
Potassium	10/07/99	105	NLE	20.0
Selenium	10/07/99	ND	50	3.0
Silver	10/07/99	ND	20	3.0
Sodium	10/07/99	82.2	50000	20.0
Thallium	10/07/99	ND	10	3.0
Vanadium	10/07/99	ND	NLE	1.0
Zinc	10/07/99	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4808.01
Sample Received: 09/22/99
Sample Matrix: Aqueous

Site: 80/166

Field ID#:0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/07/99	542	200	10.0
Antimony	10/07/99	ND	20	2.0
Arsenic	10/07/99	11.8	8	2.0
Barium	10/07/99	47.7	2000	0.5
Beryllium	10/07/99	ND	20	0.5
Cadmium	10/07/99	3.31	4	0.5
Calcium	10/07/99	28400	NLE	20.0
Chromium	10/07/99	4.65	100	0.5
Cobalt	10/07/99	ND	NLE	0.5
Copper	10/07/99	12.6	1000	3.0
Iron	10/07/99	10500	300	10.0
Lead	10/07/99	5.15	10	2.0
Magnesium	10/07/99	3820	NLE	20.0
Manganese	10/07/99	228	50	0.5
Mercury	09/28/99	ND	2	0.1
Nickel	10/07/99	2.00	100	0.5
Potassium	10/07/99	4660	NLE	20.0
Selenium	10/07/99	ND	50	3.0
Silver	10/07/99	ND	20	3.0
Sodium	10/07/99	181000	50000	20.0
Thallium	10/07/99	ND	10	3.0
Vanadium	10/07/99	3.18	NLE	1.0
Zinc	10/07/99	59.5	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4808.02
Sample Received: 09/22/99
Sample Matrix: Aqueous

Site: 80/166

Field ID#:0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/07/99	97.5	200	10.0
Antimony	10/07/99	ND	20	2.0
Arsenic	10/07/99	ND	8	2.0
Barium	10/07/99	24.5	2000	0.5
Beryllium	10/07/99	ND	20	0.5
Cadmium	10/07/99	2.44	4	0.5
Calcium	10/07/99	70100	NLE	20.0
Chromium	10/07/99	4.56	100	0.5
Cobalt	10/07/99	1.29	NLE	0.5
Copper	10/07/99	66.0	1000	3.0
Iron	10/07/99	2310	300	10.0
Lead	10/07/99	7.95	10	2.0
Magnesium	10/07/99	15400	NLE	20.0
Manganese	10/07/99	214	50	0.5
Mercury	09/28/99	ND	2	0.1
Nickel	10/07/99	8.48	100	0.5
Potassium	10/07/99	6130	NLE	20.0
Selenium	10/07/99	ND	50	3.0
Silver	10/07/99	ND	20	3.0
Sodium	10/07/99	46500	50000	20.0
Thallium	10/07/99	ND	10	3.0
Vanadium	10/07/99	1.53	NLE	1.0
Zinc	10/07/99	261	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 4808.05
Sample Received: 09/22/99
Sample Matrix: Aqueous

Site: 80/166

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/07/99	538	200	10.0
Antimony	10/07/99	2.23	20	2.0
Arsenic	10/07/99	11.3	8	2.0
Barium	10/07/99	46.2	2000	0.5
Beryllium	10/07/99	ND	20	0.5
Cadmium	10/07/99	3.59	4	0.5
Calcium	10/07/99	27500	NLE	20.0
Chromium	10/07/99	4.69	100	0.5
Cobalt	10/07/99	ND	NLE	0.5
Copper	10/07/99	40.4	1000	3.0
Iron	10/07/99	9870	300	10.0
Lead	10/07/99	5.68	10	2.0
Magnesium	10/07/99	3590	NLE	20.0
Manganese	10/07/99	221	50	0.5
Mercury	09/28/99	ND	2	0.1
Nickel	10/07/99	3.98	100	0.5
Potassium	10/07/99	4670	NLE	20.0
Selenium	10/07/99	ND	50	3.0
Silver	10/07/99	ND	20	3.0
Sodium	10/07/99	173000	50000	20.0
Thallium	10/07/99	ND	10	3.0
Vanadium	10/07/99	3.18	NLE	1.0
Zinc	10/07/99	74.7	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	Acetone	Carbon Disulfide	Benzene	Chloro benzene	Unknown	4,4'-DDD	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	NLE	1	4	-	0.1	4	100	300	-
08/20/97	FMETL	ND	2.31	1.38	2.61	115	ND	-	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	8.0	148	7490	V,S,P,M
11/24/97	FMETL	ND	ND	ND	2.26	ND	ND	ND	1.2	9062	V,S,P,M
02/27/98	FMETL	ND	ND	ND	3.26	10	ND	8.0	1.3	70680	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	3.9	ND	8409	V,S,P,M
08/24/98	FMETL	10.27	ND	ND	5.20	ND	0.059	4.49	3.12	67400	V,S,P,M
11/20/98	FMETL	ND	ND	ND	4.88	73	0.093	1.96	9.77	68800	V,S,P,M
02/09/99	FMETL	ND	ND	1.26	5.71	24	0.090	24.6	8.00	17600	V,S,P,M
05/26/99	FMETL	2.28	ND	1.31	5.58	ND	0.148	3.64	5.70	56700	V,S,P,M
09/22/99	FMETL	ND	ND	ND	ND	ND	ND	3.31	4.65	10500	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 09/22/99

NOTES:

Page 1 of 2.

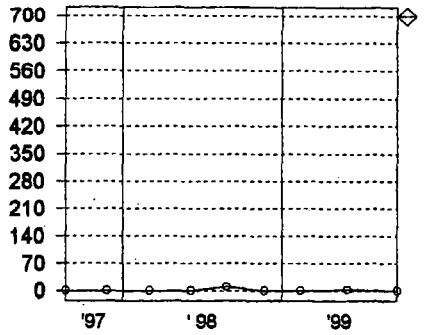
FORT MONMOUTH

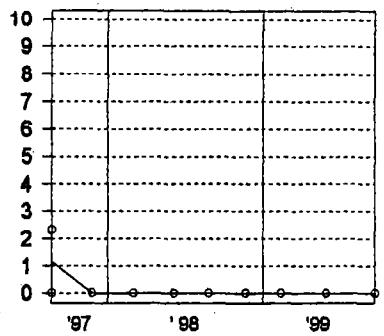
GW MONITORING
Bldg. 80

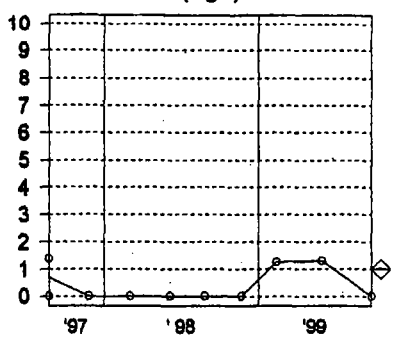
Well 1 of 1

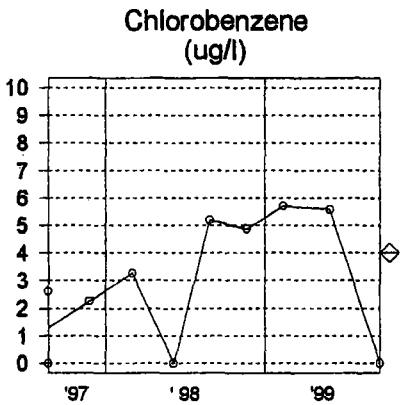


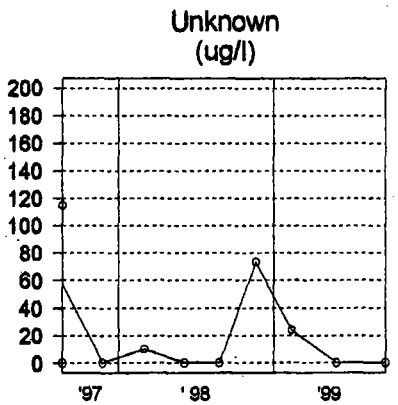
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

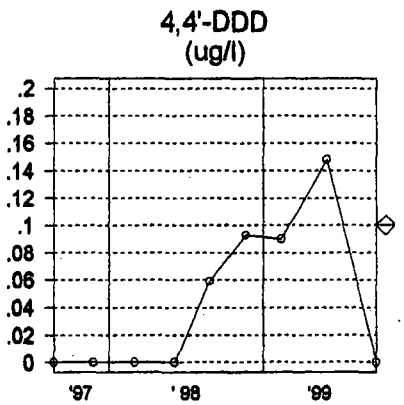


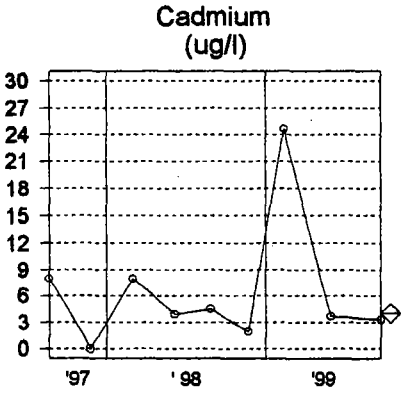


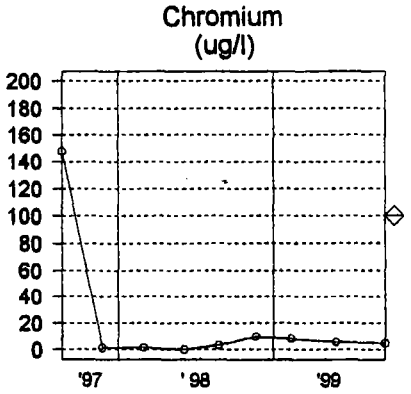


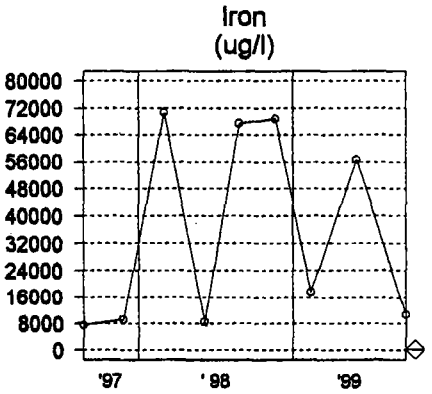












SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 09/22/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-12-1999 x:\mtech46\fm\80\gw\80.wsf

	Lab	Manganese	silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
08/20/97	FMETL	-	-	-	2.5	2.60					V,Pb
08/20/97	FMETL	136	8.0	110750	4.0	3.20					V,S,P,M
11/24/97	FMETL	553	ND	97380	14	2.40					V,S,P,M
02/27/98	FMETL	456	ND	279400	6.0	1.40					V,S,P,M
06/02/98	FMETL	117	ND	147200	3.3	2.09					V,S,P,M
08/24/98	FMETL	605	ND	533000	10.4	3.43					V,S,P,M
11/20/98	FMETL	647	ND	530000	2.86	4.04					V,S,P,M
02/09/99	FMETL	407	ND	306000	ND	3.84					V,S,P,M
05/26/99	FMETL	564	ND	457000	5.34	2.61					V,S,P,M
09/22/99	FMETL	228	ND	181000	5.15	2.73					V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 09/22/99

NOTES:

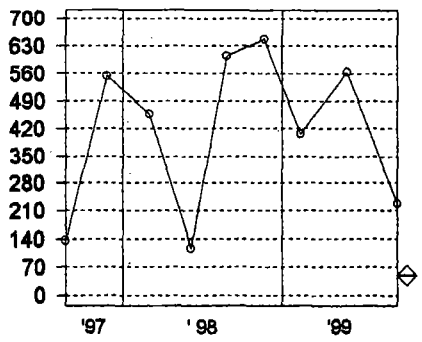
Page 2 of 2.

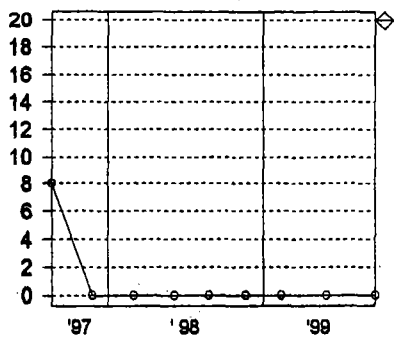
FORT MONMOUTH

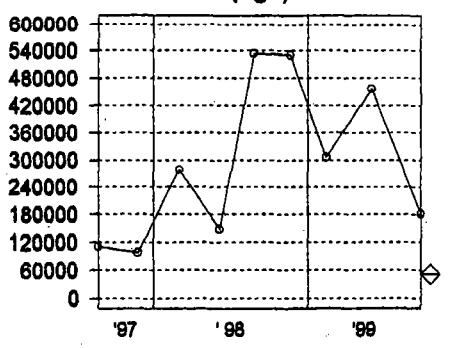
GW MONITORING
Bldg. 80

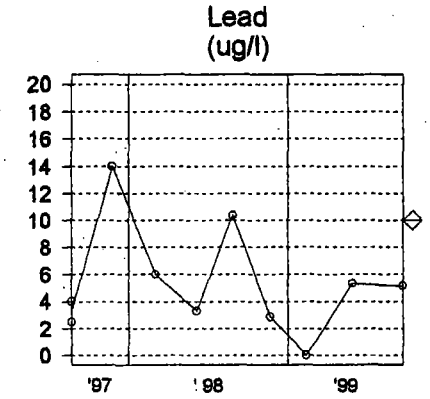
Well 1 of 1

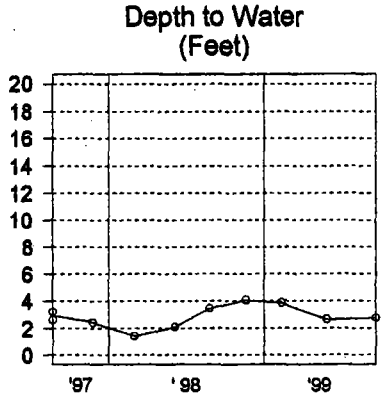
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 09/22/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-12-1999 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chloro benzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/97	FMETL	ND	ND	ND	2.40	ND	ND	-	-	-	2.51
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	3.20
11/24/97	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	2.25
02/27/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	1.00
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	1.97
08/24/98	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	3.42
11/20/98	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	3.99
02/09/99	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	2.73
05/26/99	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	2.90
09/22/99	FMETL	ND	ND	ND	ND	0.048	0.049	2.44	4.56	2310	2.71

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 09/22/99

NOTES:

Page 1 of 2.

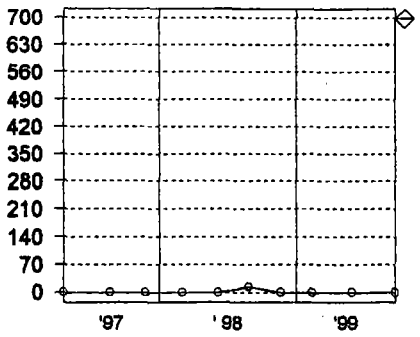
FORT MONMOUTH

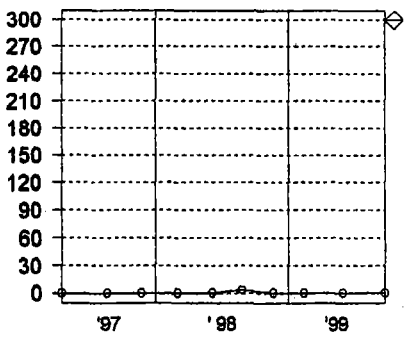
GW MONITORING
Bldg. 166

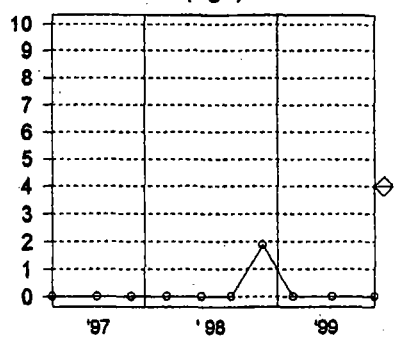
Well 1 of 1

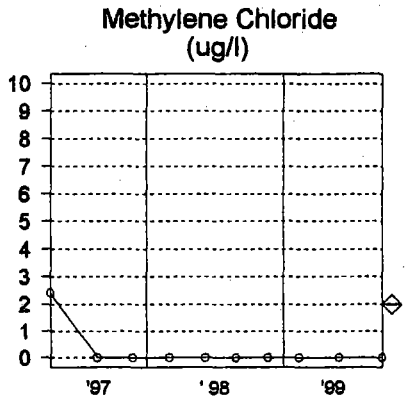
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

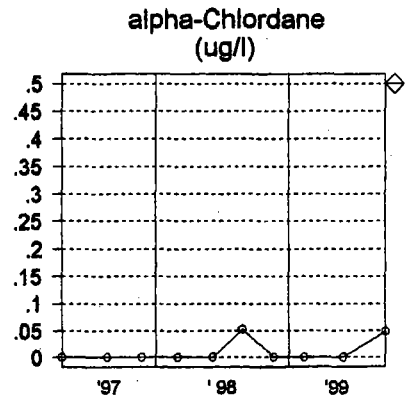
10-12-1999 x:\mtech46\fm\166\gw\166.wsf

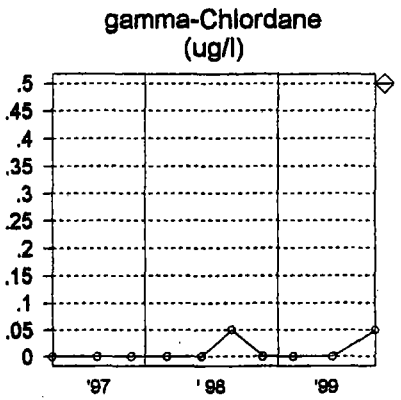


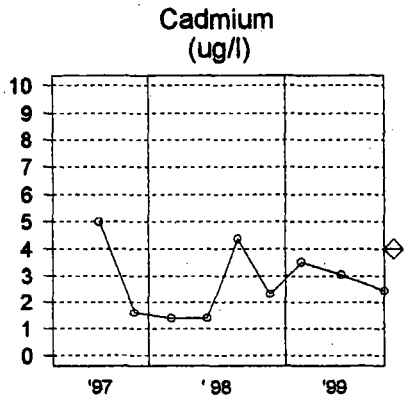


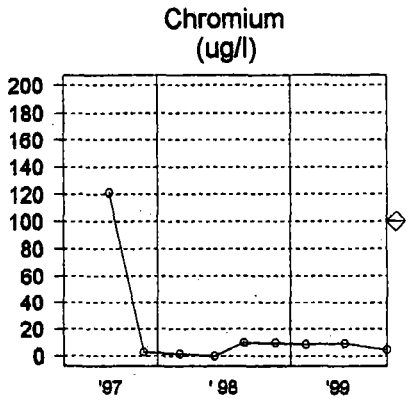


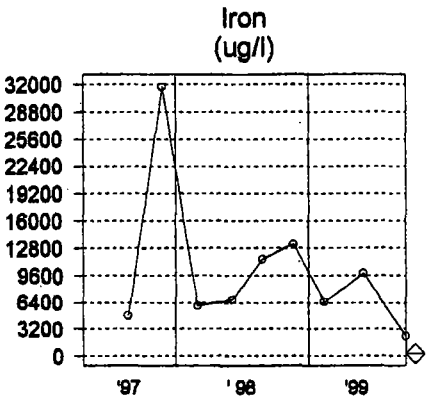












SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 09/22/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-12-1999 x:\mtech46\fm\166\gw\166.wsf

	Lab	Manganese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/97	FMETL	-	-	-	2.10	2.51					2.51
08/20/97	FMETL	336	26	83750	1.6	3.20					3.20
11/24/97	FMETL	287	ND	200200	15.0	2.25					2.25
02/27/98	FMETL	246	ND	29310	ND	1.00					1.00
06/02/98	FMETL	235	ND	27800	2.3	1.97					1.97
08/24/98	FMETL	397	ND	58200	12.4	3.42					3.42
11/20/98	FMETL	669	ND	114000	4.23	3.99					3.99
02/09/99	FMETL	413	ND	108000	ND	2.73					2.73
05/26/99	FMETL	368	ND	72900	11.4	2.90					2.90
09/22/99	FMETL	214	ND	46500	7.95	2.71					2.71

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 09/22/99

NOTES:

Page 2 of 2.

FORT MONMOUTH

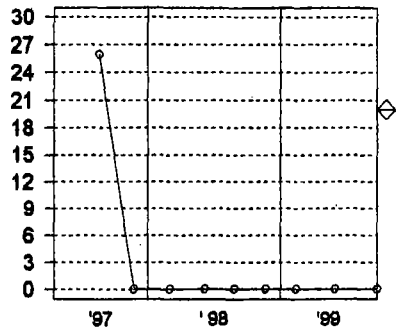
GW MONITORING
Bldg. 166

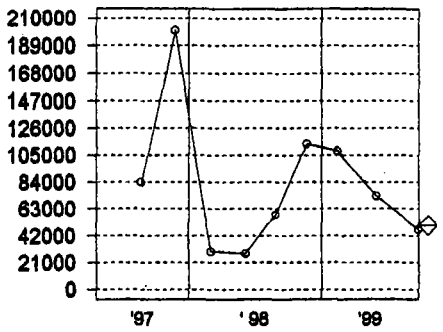
Well 1 of 1

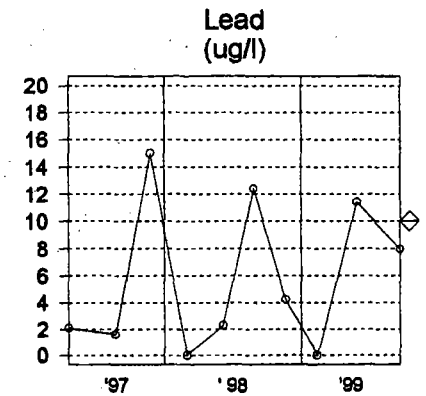
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

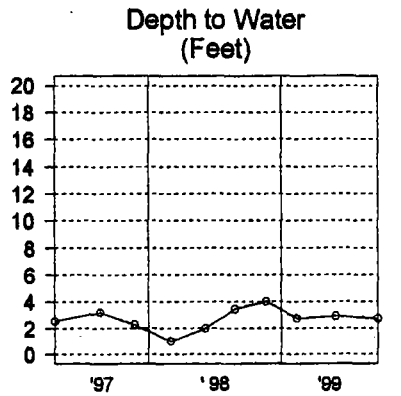
10-12-1999 x:\mtech46\fm\166\gw\166.wsf











SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 09/22/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

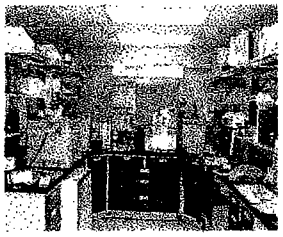
Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-12-1999 x:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5021.01	0080MW01	29-31774	12/17/99
5021.02	0166MW01	29-31773	12/17/99

NJDEP Laboratory Certification # 13461

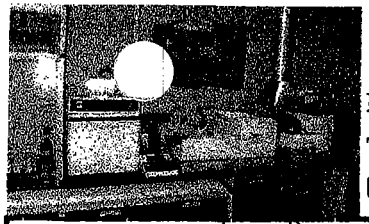
1-28-00
Daniel Wright/Date.
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608

Sampling



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:appleby@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: D. Dean
Phone #: X21475
( )DERA (X)OMA ( )Other:_____

Project No:
Location: 80/166 mw
4th Qrtr '99

Samplers Name / Company: Corey McCormack, JUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL MTMs	BNA's	Pest/PCB				Hno Read	Remarks / Preservation Method
5021 .01	0080 MW01	12/17/99	0948	AQ	9	✓	✓	✓	✓			0	0.7	29-31774
" .02	0166 MW01	↓	0915	↓	5	✓	✓	✓	✓				0.3	29-31773

Comments: HCL/HNO3/4°C

Shares Trip/FB/Dupe from 108 same date. CBM

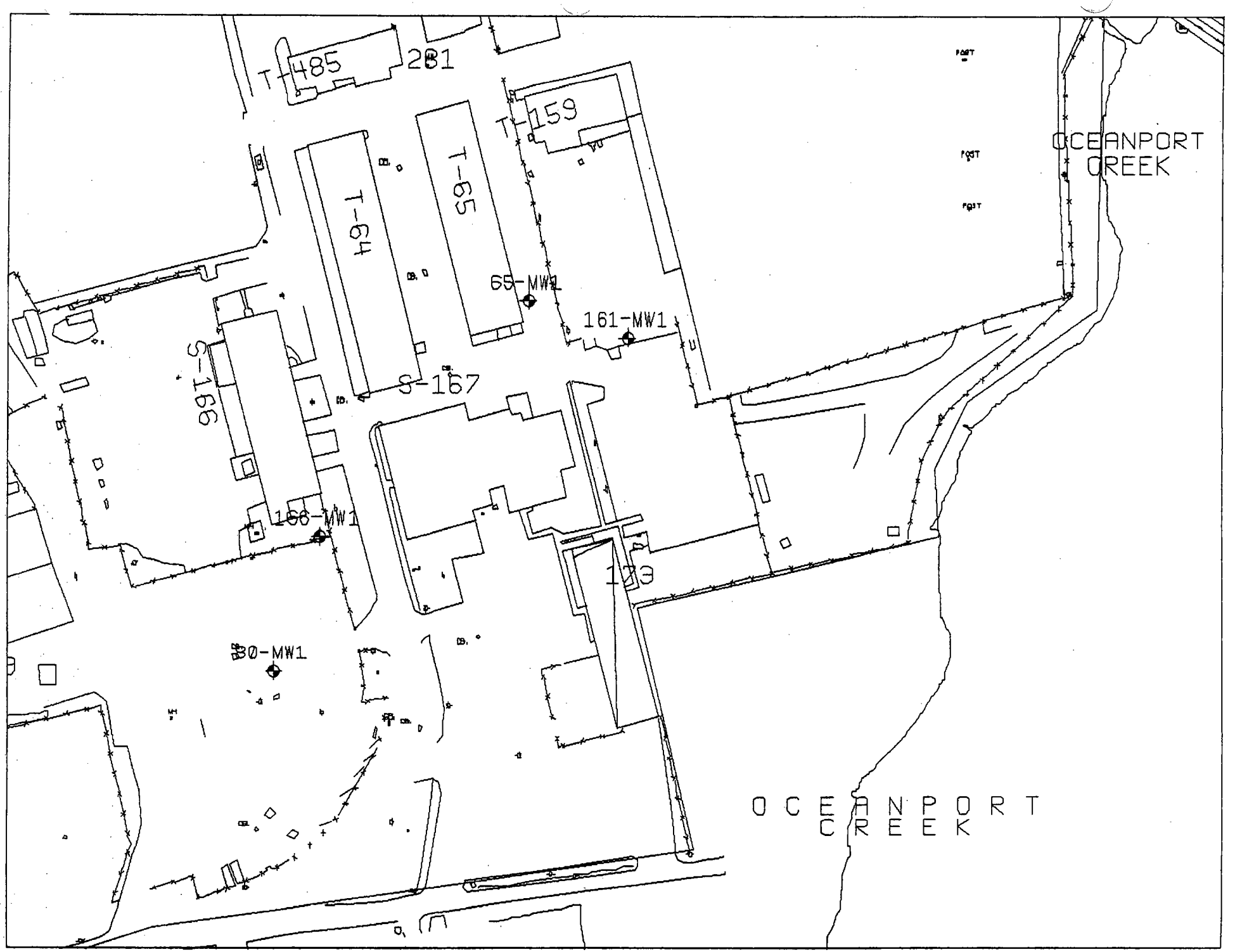
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	12/17/99 1500				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Tide: N/A MS/MSDS Here

print legibly

Coc.xls11/1/99


T-485
281
T-159
T-64
T-65
OCEANPORT
CREEK
65-MW1
161-MW1
S-166
S-167
166-MW1
173
30-MW1
OCEANPORT
CREEK

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12 /17/ 99
WEATHER: Sunny, Cold
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.91 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.52 ft
DEPTH OF WELL: 12.26 ft
DEPTH TO TOP OF SCREEN: 3.00 ft
HEIGHT OF WATER: 9.74 ft
(9.74) X .65 X 3 = 18.99
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.7 ppm

PURGE START TIME: 08:25
pH 6.20 su
TEMP 13.4 °C
DISSOLVED O_2 6.10 ppm
SPECIFIC CONDUCTIVITY 795 us/cm

PURGE END TIME: 09:47
pH 6.13 su
TEMP 13.2 °C
DISSOLVED O_2 5.31 ppm
SPECIFIC CONDUCTIVITY 793 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.18 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 19 gal

SAMPLE START TIME: 09:48
pH 6.12 su
TEMP 13.1 °C
DISSOLVED O_2 5.30 ppm
SPECIFIC CONDUCTIVITY 794 us/cm

SAMPLE END TIME: 09:53

COMMENTS: MS/MSD

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12 /17/ 99
WEATHER: Sunny, Cold
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.96 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.57 ft
DEPTH OF WELL: 7.75 ft
DEPTH TO TOP OF SCREEN: 6.00 ft
HEIGHT OF WATER: 5.18 ft
(5.18) X .65 X 3 = 10.10
GALLONS OF H2O TO BE PURGED: 10 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.3 ppm

PURGE START TIME: 08:31
pH 6.80 su
TEMP 13.3 °C
DISSOLVED O_2 6.44 ppm
SPECIFIC CONDUCTIVITY 440 us/cm

PURGE END TIME: 09:14
pH 6.79 su
TEMP 13.2 °C
DISSOLVED O_2 5.21 ppm
SPECIFIC CONDUCTIVITY 440 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.61 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 10 gal

SAMPLE START TIME: 09:15
pH 6.77 su
TEMP 13.2 °C
DISSOLVED O_2 5.19 ppm
SPECIFIC CONDUCTIVITY 438 us/cm

SAMPLE END TIME: 09:18

COMMENTS:

Volatiles

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
· NJDEPE # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound identified below detection limit
B	: Compound in both sample and blank
D	: Results from dilution of sample
U	: Compound searched for but not detected
E	: Compound exceeds calibration limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC001637.D**	Sample Name	**Vblk44**
Operator	**Skelton**	Field ID	**Vblk44**
Date Acquired	**27 Dec 1999 9:45 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75343	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156594	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1/3/00 10:29 AM

C:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk44**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5021 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk44

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC001637.D

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. Date Analyzed: 12/27/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC001655.D**	Sample Name	**5021.01**
Operator	**Skelton**	Field ID	**0080MW01**
Date Acquired	**27 Dec 1999 10:06 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75343	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156594	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.34	276225	1.95 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1/3/00 10:29 AM

C:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0080MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5021 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5021.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC001655.D

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. Date Analyzed: 12/27/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 2

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	33.11	10	JN
2.	unknown	34.45	6	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VC001656.D**	Sample Name	**5021.02**
Operator	**Skelton**	Field ID	**0166MW01**
Date Acquired	**27 Dec 1999 10:46 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75343	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156594	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.34	154028	1.28 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1/3/00 10:29 AM

C:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0166MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5021 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5021.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC001656.D

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. Date Analyzed: 12/27/99

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000090-12-0	Naphthalene, 1-methyl-	30.47	3	JN

Semi-Volatiles

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04114.D**	Sample Name	**Sblk329**
Operator	**Bhaskar**	Misc Info	**Sblk329 A 991220**
Date Acquired	**22-Dec-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04114.D**	Sample Name	**Sblk329**
Operator	**Bhaskar**	Misc Info	**Sblk329 A 991220**
Date Acquired	**22-Dec-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Sblk329**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5021 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: Sblk329

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04114.D

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: decanted: (Y/N) N Date Extracted: 12/20/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/22/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.47	50	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04116.D**	Sample Name	**5021.01**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**22-Dec-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene	12.40	89697	2.67 ug/L	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04116.D**	Sample Name	**5021.01**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**22-Dec-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0080MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5021 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5021.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04116.D

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: decanted: (Y/N) N Date Extracted: 12/20/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/22/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.46	48	J
2.	unknown	16.70	10	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04119.D**	Sample Name	**5021.02**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**22-Dec-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04119.D**	Sample Name	**5021.02**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**22-Dec-99**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0166MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5021 Location: 80/166 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5021.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04119.D

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/20/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/22/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.47	33	J

Pesticide/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK445
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	12/22/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/29/99
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5021.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/17/99
	Bldg. 173	**Extraction Date:**	12/22/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/29/99
Analysis:	EPA Method 608	**Location :**	80/166 MW
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1	17.01	0.10	0.0022	**0.040**
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5021.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/17/99
	Bldg. 173	**Extraction Date:**	12/22/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/29/99
Analysis:	EPA Method 608	**Location :**	80/166 MW
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Metals

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5021
Sample Prepared: 01/03/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/04/00	ND	200	10.0
Antimony	01/04/00	ND	20	2.0
Arsenic	01/04/00	ND	8	2.0
Barium	01/04/00	1.29	2000	0.5
Beryllium	01/04/00	ND	20	0.5
Cadmium	01/04/00	ND	4	0.5
Calcium	01/04/00	80.0	NLE	20.0
Chromium	01/04/00	ND	100	0.5
Cobalt	01/04/00	ND	NLE	0.5
Copper	01/04/00	8.29	1000	3.0
Iron	01/04/00	66.2	300	10.0
Lead	01/04/00	ND	10	2.0
Magnesium	01/04/00	ND	NLE	20.0
Manganese	01/04/00	ND	50	0.5
Mercury	01/06/00	ND	2	0.1
Nickel	01/04/00	ND	100	0.5
Potassium	01/04/00	ND	NLE	20.0
Selenium	01/04/00	ND	50	3.0
Silver	01/04/00	ND	20	3.0
Sodium	01/04/00	33.1	50000	20.0
Thallium	01/04/00	ND	10	3.0
Vanadium	01/04/00	ND	NLE	1.0
Zinc	01/04/00	6.08	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5021.01
Sample Received: 12/17/99
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/04/00	121	200	10.0
Antimony	01/04/00	ND	20	2.0
Arsenic	01/04/00	6.56	8	2.0
Barium	01/04/00	56.5	2000	0.5
Beryllium	01/04/00	ND	20	0.5
Cadmium	01/04/00	6.69	4	0.5
Calcium	01/04/00	50200	NLE	20.0
Chromium	01/04/00	2.82	100	0.5
Cobalt	01/04/00	1.84	NLE	0.5
Copper	01/04/00	6.13	1000	3.0
Iron	01/04/00	28500	300	10.0
Lead	01/04/00	ND	10	2.0
Magnesium	01/04/00	10600	NLE	20.0
Manganese	01/04/00	424	50	0.5
Mercury	01/06/00	ND	2	0.1
Nickel	01/04/00	ND	100	0.5
Potassium	01/04/00	6360	NLE	20.0
Selenium	01/04/00	ND	50	3.0
Silver	01/04/00	ND	20	3.0
Sodium	01/04/00	359000	50000	20.0
Thallium	01/04/00	ND	10	3.0
Vanadium	01/04/00	1.21	NLE	1.0
Zinc	01/04/00	23.2	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5021.02
Sample Received: 12/17/99
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/04/00	362	200	10.0
Antimony	01/04/00	2.75	20	2.0
Arsenic	01/04/00	ND	8	2.0
Barium	01/04/00	25.7	2000	0.5
Beryllium	01/04/00	ND	20	0.5
Cadmium	01/04/00	2.95	4	0.5
Calcium	01/04/00	69600	NLE	20.0
Chromium	01/04/00	4.75	100	0.5
Cobalt	01/04/00	1.01	NLE	0.5
Copper	01/04/00	5.31	1000	3.0
Iron	01/04/00	10300	300	10.0
Lead	01/04/00	ND	10	2.0
Magnesium	01/04/00	16500	NLE	20.0
Manganese	01/04/00	377	50	0.5
Mercury	01/06/00	ND	2	0.1
Nickel	01/04/00	1.13	100	0.5
Potassium	01/04/00	4670	NLE	20.0
Selenium	01/04/00	ND	50	3.0
Silver	01/04/00	ND	20	3.0
Sodium	01/04/00	60300	50000	20.0
Thallium	01/04/00	ND	10	3.0
Vanadium	01/04/00	2.42	NLE	1.0
Zinc	01/04/00	54.4	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	Acetone	2-Butanone	Carbon Disulfide	Benzene	Chloro benzene	4,4'-DDD	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	NLE	1	4	0.1	4	100	300	-
08/20/97	FMETL	ND	ND	2.31	1.38	2.61	ND	-	-	-	V,Pb
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	8.0	148	7490	V,S,P,M
11/24/97	FMETL	ND	ND	ND	ND	2.26	ND	ND	1.2	9062	V,S,P,M
02/27/98	FMETL	ND	ND	ND	ND	3.26	ND	8.0	1.3	70680	V,S,P,M
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	3.9	ND	8409	V,S,P,M
08/24/98	FMETL	10.27	3.32	ND	ND	5.20	0.059	4.49	3.12	67400	V,S,P,M
11/20/98	FMETL	ND	ND	ND	ND	4.88	0.093	1.96	9.77	68800	V,S,P,M
02/09/99	FMETL	ND	ND	ND	1.26	5.71	0.090	24.6	8.00	17600	V,S,P,M
05/26/99	FMETL	2.28	ND	ND	1.31	5.58	0.148	3.64	5.70	56700	V,S,P,M
09/22/99	FMETL	ND	ND	ND	ND	ND	ND	3.31	4.65	10500	V,S,P,M
12/17/99	FMETL	ND	ND	ND	ND	1.95	0.04	6.69	2.82	28500	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 12/17/99

NOTES:

Page 1 of 2.

FORT MONMOUTH

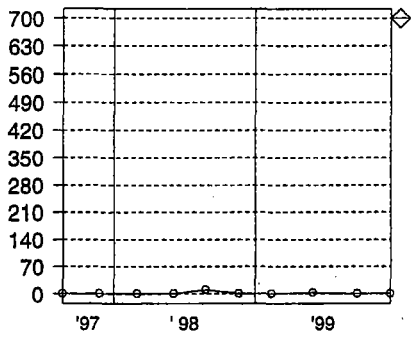
GW MONITORING
Bldg. 80

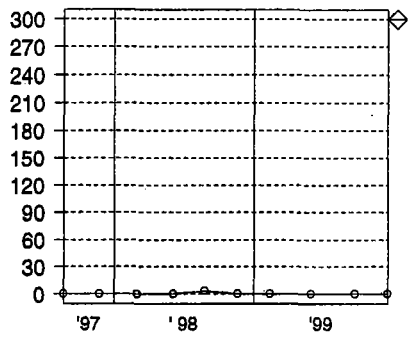
Well 1 of 1

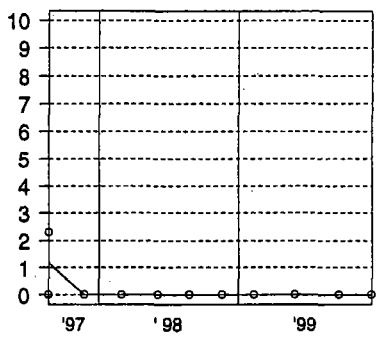


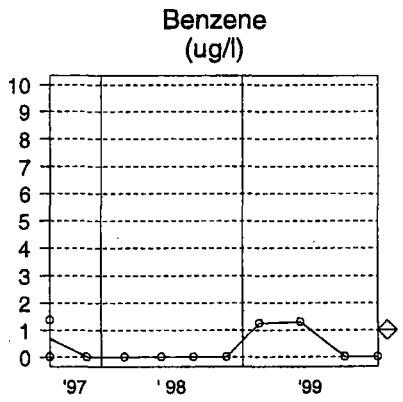
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

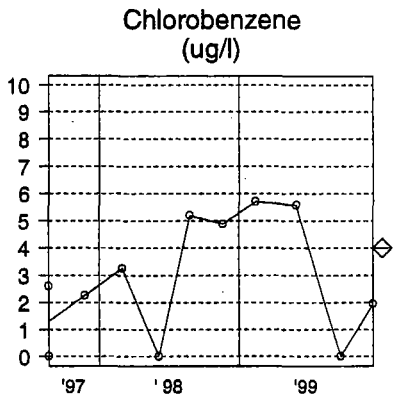
01-27-2000 x:\mtech46\fm\80\gw\80.wsf

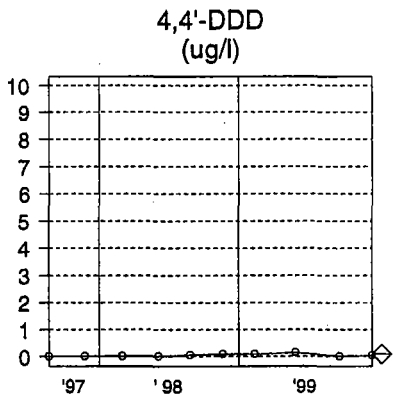


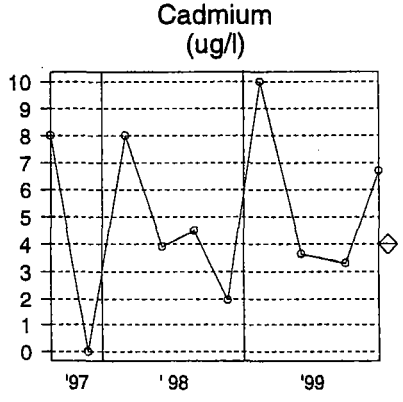


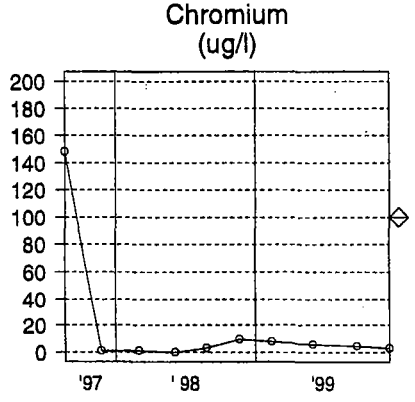


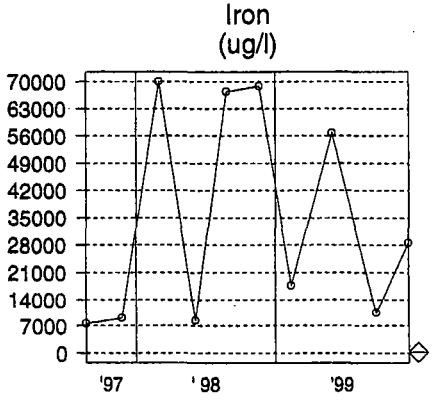












SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 12/17/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-27-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Mang anese	silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
08/20/97	FMETL	-	-	-	2.5	2.60					V,Pb
08/20/97	FMETL	136	8.0	110750	4.0	3.20					V,S,P,M
11/24/97	FMETL	553	ND	97380	14	2.40					V,S,P,M
02/27/98	FMETL	456	ND	279400	6.0	1.40					V,S,P,M
06/02/98	FMETL	117	ND	147200	3.3	2.09					V,S,P,M
08/24/98	FMETL	605	ND	533000	10.4	3.43					V,S,P,M
11/20/98	FMETL	647	ND	530000	2.86	4.04					V,S,P,M
02/09/99	FMETL	407	ND	306000	ND	3.84					V,S,P,M
05/26/99	FMETL	564	ND	457000	5.34	2.61					V,S,P,M
09/22/99	FMETL	228	ND	181000	5.15	2.73					V,S,P,M
12/17/99	FMETL	424	ND	359000	ND	2.52					V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 12/17/99

NOTES:

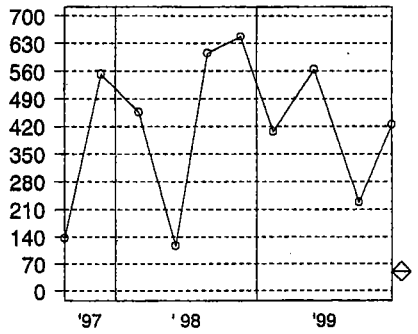
Page 2 of 2.

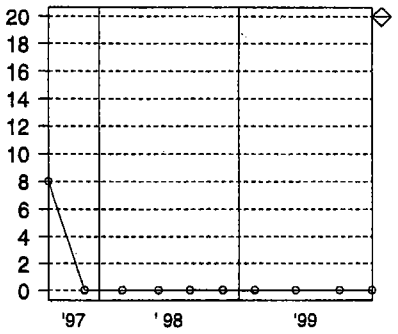
FORT MONMOUTH

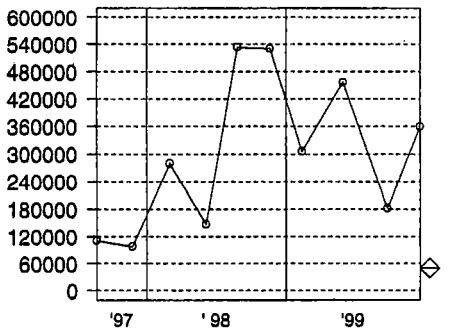
GW MONITORING
Bldg. 80

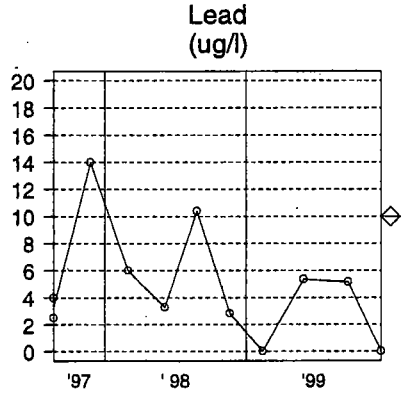
Well 1 of 1

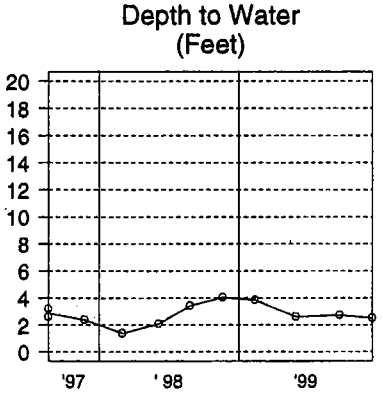
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0080MW01

Sampling Dates:
08/20/97 - 12/17/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-27-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chloro benzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/97	FMETL	ND	ND	ND	2.40	ND	ND	-	-	-	2.51
08/20/97	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	3.20
11/24/97	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	2.25
02/27/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	1.00
06/02/98	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	1.97
08/24/98	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	3.42
11/20/98	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	3.99
02/09/99	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	2.73
05/26/99	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	2.90
09/22/99	FMETL	ND	ND	ND	ND	0.048	0.049	2.44	4.56	2310	2.71
12/17/99	FMETL	ND	ND	1.28	ND	ND	ND	2.95	4.75	10300	2.57

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 12/17/99

NOTES:

Page 1 of 2.

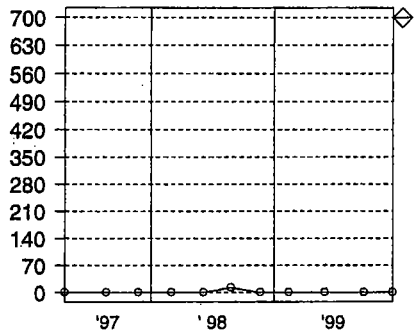
FORT MONMOUTH

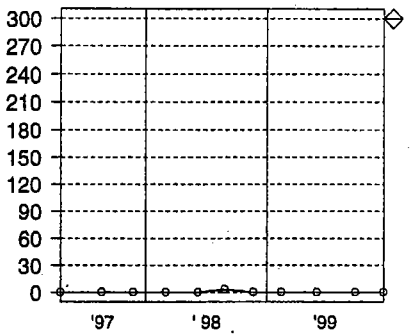
GW MONITORING
Bldg. 166

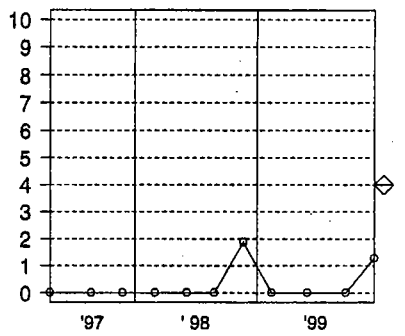
Well 1 of 1

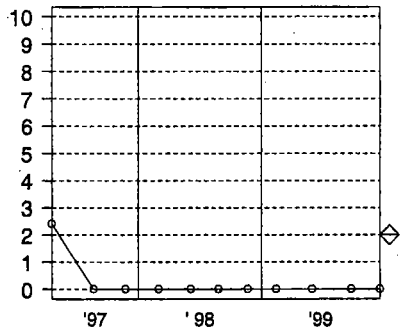
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

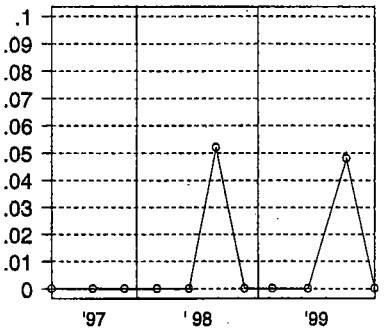
01-27-2000 x:\mtech46\fm\166\gw\166.wsf

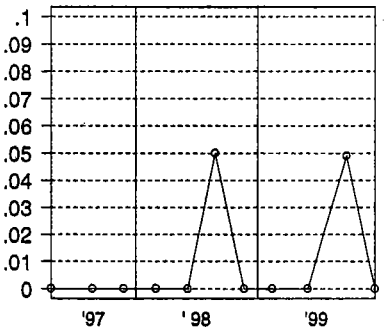


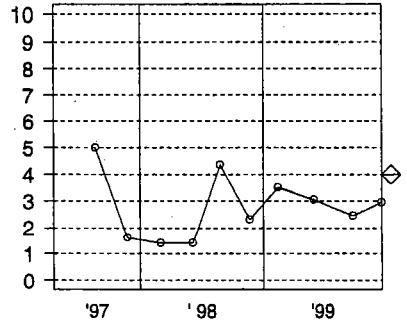


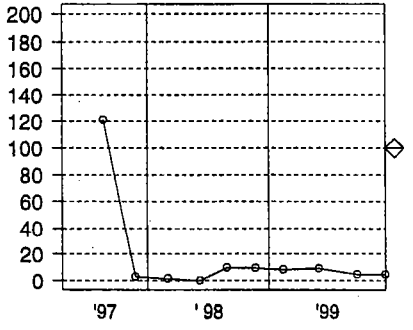


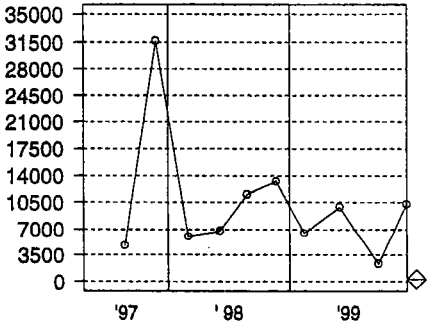












SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 12/17/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-27-2000 x:\mtech46\fm\168\gw\166.wsf

	Lab	Manganese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/97	FMETL	-	-	-	2.10	2.51					2.51
08/20/97	FMETL	336	26	83750	1.6	3.20					3.20
11/24/97	FMETL	287	ND	200200	15.0	2.25					2.25
02/27/98	FMETL	246	ND	29310	ND	1.00					1.00
06/02/98	FMETL	235	ND	27800	2.3	1.97					1.97
08/24/98	FMETL	397	ND	58200	12.4	3.42					3.42
11/20/98	FMETL	669	ND	114000	4.23	3.99					3.99
02/09/99	FMETL	413	ND	108000	ND	2.73					2.73
05/26/99	FMETL	368	ND	72900	11.4	2.90					2.90
09/22/99	FMETL	214	ND	46500	7.95	2.71					2.71
12/17/99	FMETL	377	ND	60300	ND	2.57					2.57

SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 12/17/99

NOTES:

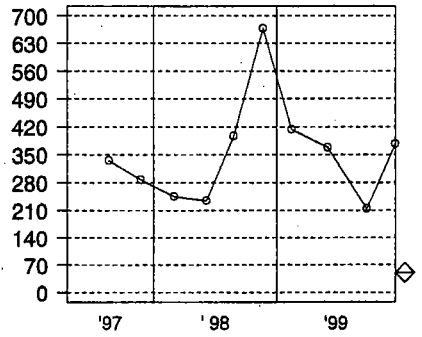
Page 2 of 2.

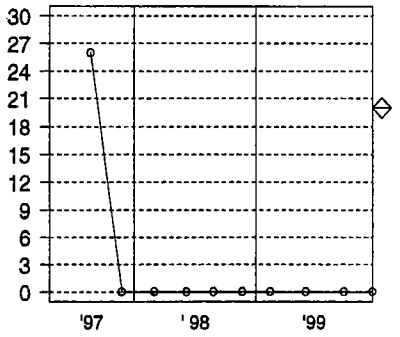
FORT MONMOUTH

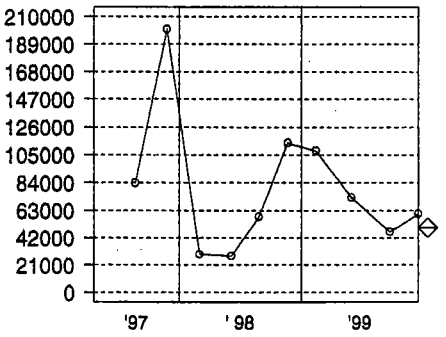
GW MONITORING
Bldg. 166

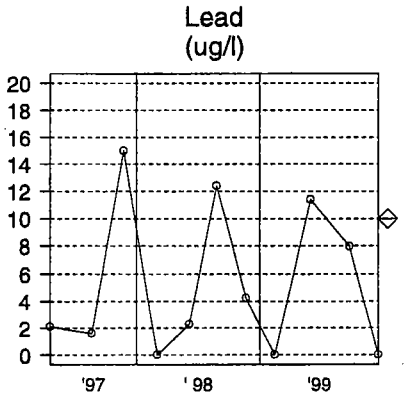
Well 1 of 1

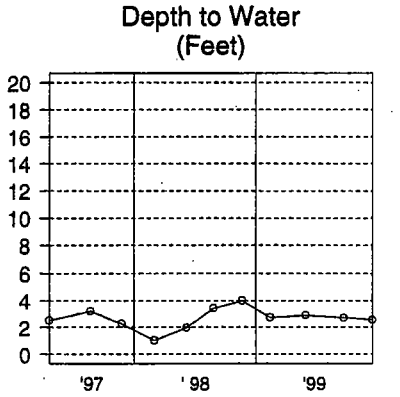
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/97 - 12/17/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-27-2000 x:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5223.04	0080MW01	29-31774	03/06/00
5223.05	0166MW01	29-31773	03/06/00

NJDEP Laboratory Certification # 13461

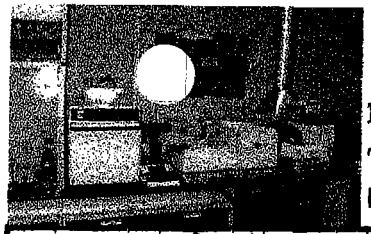
5-1-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: D. DeCarl
Phone #: X2 1475
( )DERA (X)OMA ( )Other:_____

Project No:
Location: 80/166 MW's
1st Qtr 00

Samplers Name / Company: Corey McCormack, TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL MTLS	Pest / PCB	BNA's				Hno3 pH	Comments: Remarks / Preservation Method
5223 .01	Trip	3/6/00	0740	AQ	2	✓							—	HCl/HNO3/4°C
.02	Field Blank		0945		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	00 80mw01		1023		9	✓	✓	✓	—				0.4	29-31774
.05	0166 mw01 *		0954		5	✓	✓	✓	—				0.3	29-31773

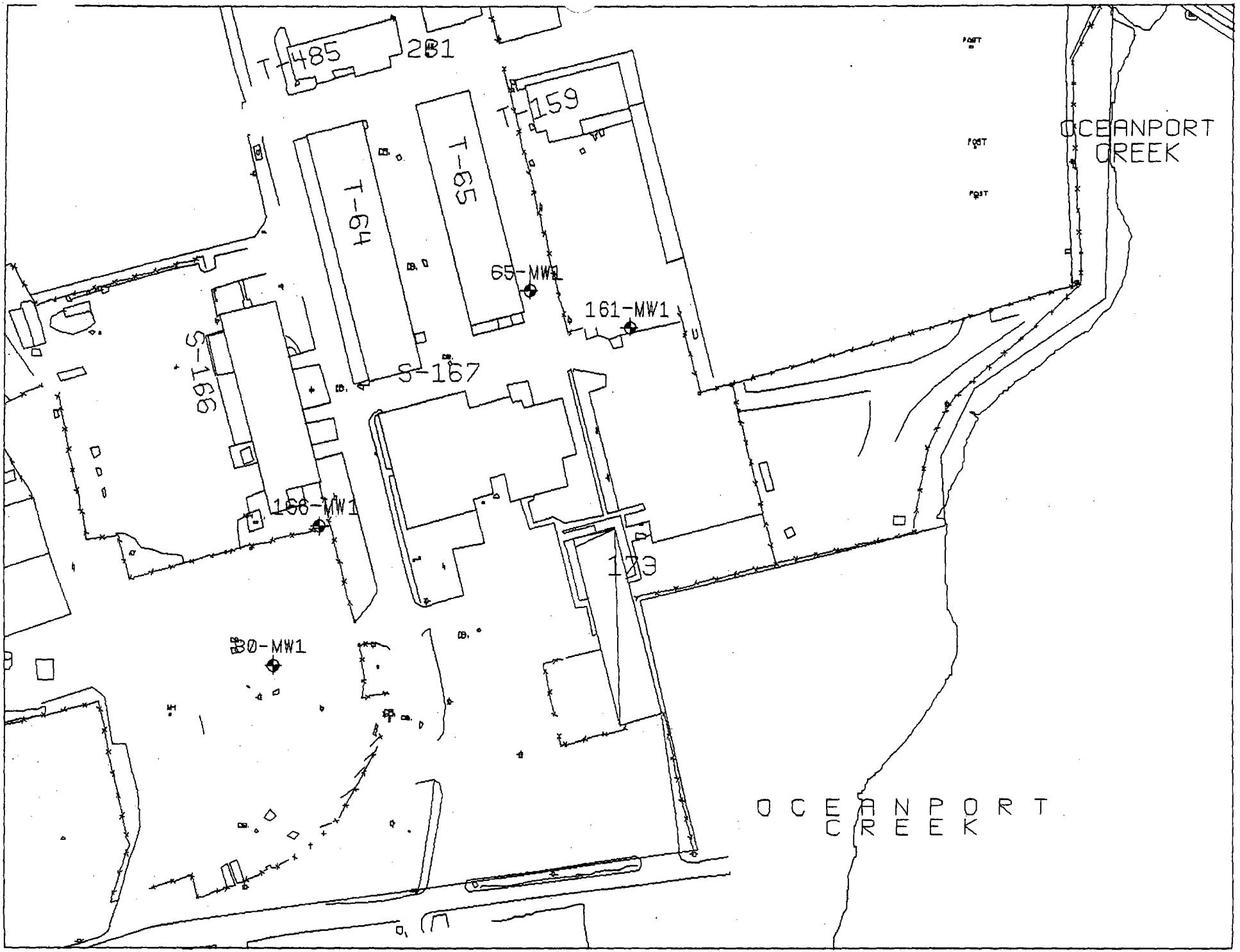
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	3/6/00 1445				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:
Tide: N/A

print legibly

Coc.xls1/31/00


T-485
281
T-159
OCEANPORT
CREEK
T-64
T-65
65-MW1
161-MW1
S-166
S-167
166-MW1
133
80-MW1
OCEANPORT
CREEK

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 03/06/00
WEATHER: Sunny, Cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.91 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.76 ft
DEPTH OF WELL: 12.26 ft
DEPTH TO TOP OF SCREEN: 3.00 ft
HEIGHT OF WATER: 9.50 ft
(9.50) X .65 X 3 = 18.52
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.4 ppm

PURGE START TIME: 09:00
pH 6.24 su — TEMP 13.4 °C
DISSOLVED O_2 6.07 ppm — SPECIFIC CONDUCTIVITY 787 us/cm

PURGE END TIME: 10:22
pH 6.21 su — TEMP 13.2 °C
DISSOLVED O_2 5.28 ppm — SPECIFIC CONDUCTIVITY 780 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.10 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 19 gal

SAMPLE START TIME: 10:23
pH 6.21 su — TEMP 13.1 °C
DISSOLVED O_2 5.30 ppm — SPECIFIC CONDUCTIVITY 780 us/cm

SAMPLE END TIME: 10:27

COMMENTS: MS/MSD Here.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 03/06/00
WEATHER: Sunny, Cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.96 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.61 ft
DEPTH OF WELL: 7.75 ft
DEPTH TO TOP OF SCREEN: 6.00 ft
HEIGHT OF WATER: 5.14 ft
(5.14) X .65 X 3 = 10.023
GALLONS OF H2O TO BE PURGED: 10 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.3 ppm

PURGE START TIME: 09:10
pH 6.79 su — TEMP 13.5 °C
DISSOLVED O_2 6.21 ppm — SPECIFIC CONDUCTIVITY 431 us/cm

PURGE END TIME: 09:53
pH 6.77 su — TEMP 13.3 °C
DISSOLVED O_2 5.13 ppm — SPECIFIC CONDUCTIVITY 433 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.71 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 10 gal

SAMPLE START TIME: 09:54
pH 6.77 su — TEMP 13.2 °C
DISSOLVED O_2 5.10 ppm — SPECIFIC CONDUCTIVITY 433 us/cm

SAMPLE END TIME: 10:00

COMMENTS: DUP. Here.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound Identified Below Detection Limit
B : Compound is in Both Sample and Blank
D : Results are from a Dilution of the Sample
U : Compound Searched for but not Detected
E : Compound Exceeds Calibration Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

a File	VC002306.D	Sample Name	Vblk63
rator	Skelton	Field ID	Vblk63
Date Aquired	36592.42361	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
3-2	Benzene			not detected	1	0.23 ug/L	
06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/27/00 3:53 PM

D:\HPCHEM\CUSTRPT\VOLATILE\624FY00.CRT

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk63**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5223 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk63

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC002306.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: not dec. Date Analyzed: 3/7/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

a File	VC002327.D	Sample Name	5223.01
rator	Skelton	Field ID	Trip Blank
Date Aquired	36593.5375	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride	11.16	78949	1.12 ug/L	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
[illegible]3-2	Benzene			not detected	1	0.23 ug/L	
[illegible]-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/27/00 3:53 PM

D:\HPCHEM\CUSTRPT\VOLATILE\624FY00.CRT

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5223 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC002327.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: not dec. Date Analyzed: 3/8/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

File	VC002328.D	Sample Name	5223.02
ator	Skelton	Field ID	Field Blank
Date Aquired	36593.06597	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier		
107028	Acrolein			not detected	50	1.85 ug/L			
107131	Acrylonitrile			not detected	50	2.78 ug/L			
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L			
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L			
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L			
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L			
74-87-3	Chloromethane			not detected	30	1.16 ug/L			
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L			
74-83-9	Bromomethane			not detected	10	1.10 ug/L			
75-00-3	Chloroethane			not detected	nle	1.01 ug/L			
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L			
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L			
67-64-1	Acetone			not detected	700	1.36 ug/L			
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L			
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L			
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L			
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L			
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L			
78-93-3	2-Butanone			not detected	300	0.62 ug/L			
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L			
67-66-3	Chloroform			not detected	6	0.30 ug/L			
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L			
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L			
3-2	Benzene			not detected	1	0.23 ug/L			
06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L			
79-01-6	Trichloroethene			not detected	1	0.23 ug/L			
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L			
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L			
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L			
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L			
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L			
108-88-3	Toluene			not detected	1000	0.37 ug/L			
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L			
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L			
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L			
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L			
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L			
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L			
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L			
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L			
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L			
100-42-5	Styrene			not detected	100	0.56 ug/L			
75-25-2	Bromoform			not detected	4	0.70 ug/L			
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L			
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L			
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L			
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L			

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/27/00 3:53 PM

D:\HPCHEM\CUSTRPT\VOLATILE\624FY00.CRT

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5223 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC002328.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: not dec. Date Analyzed: 3/8/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC002329.D	Sample Name	5223.03
Operator	Skelton	Field ID	Dupe
Date Aquired	36593.09444	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
[illegible]3-2	Benzene			not detected	1	0.23 ug/L	
[illegible]06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.34	127652	1.13 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/27/00 3:53 PM

D:\HPCHEM\CUSTRPT\VOLATILE\624FY00.CRT

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5223 Location: 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 5223.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC002329.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: not dec. _____ Date Analyzed: 3/8/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

File	VC002330.D	Sample Name	5223.04
rator	Skelton	Field ID	0080MW01
Date Aquired	36593.12222	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
3-2	Benzene			not detected	1	0.23 ug/L	
06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.34	428956	3.83 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	33.96	107026	1.56 ug/L	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/27/00 3:53 PM

D:\HPCHEM\CUSTRPT\VOLATILE\624FY00.CRT

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0080MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5223 Location: 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 5223.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC002330.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: not dec. _____ Date Analyzed: 3/8/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC002331.D	Sample Name	5223.05
Operator	Skelton	Field ID	0166MW01
Date Aquired	36593.15069	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
[illegible]3-2	Benzene			not detected	1	0.23 ug/L	
[illegible]06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.35	185323	1.68 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

3/27/00 3:53 PM

D:\HPCHEM\CUSTRPT\VOLATILE\624FY00.CRT

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0166MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5223 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC002331.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: not dec. Date Analyzed: 3/8/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03695.D**	Sample Name	**Sblk353**
Operator	**Bhaskar**	Misc Info	**Sblk353 A 000309**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.96	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA03695.D**	Sample Name	**Sblk353**
Operator	**Bhaskar**	Misc Info	**Sblk353 A 000309**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Sblk353**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5223 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk353

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03695.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/9/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.05	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03701.D**	Sample Name	**5223.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.96	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA03701.D**	Sample Name	**5223.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	26.64	167528	5.49 ug/L	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5223 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03701.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/9/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.05	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03702.D**	Sample Name	**5223.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.96	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA03702.D**	Sample Name	**5223.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5223 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03702.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/9/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.05	6	J
2.	unknown	11.91	5	J
3. 000057-10-3	Hexadecanoic acid	22.25	10	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03703.D**	Sample Name	**5223.04**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene	10.89	24958	1.25 ug/L	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.96	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene	17.81	29922	1.10 ug/L	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA03703.D**	Sample Name	**5223.04**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene	18.96	32059	1.01 ug/L	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0080MW01

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5223 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03703.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/9/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 027133-93-3	2,3-Dihydro-1-methylindene	12.84	5	JN
2. 000264-09-5	Benzocycloheptatriene	15.39	8	JN
3.	unknown	19.05	4	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03706.D**	Sample Name	**5223.05**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.96	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA03706.D**	Sample Name	**5223.05**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**14-Mar-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0166MW01**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5223 Location 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5223.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03706.D

Level: (low/med) LOW Date Received: 3/6/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/9/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.05	4	J
2.	unknown	11.91	6	J

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK489
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	3/9/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/16/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5223.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/6/00
	Bldg. 173	**Extraction Date:**	3/9/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5223.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	4/18/14
	Bldg. 173	**Extraction Date:**	3/9/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5223.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/6/00
	Bldg. 173	**Extraction Date:**	3/9/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5223.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/6/00
	Bldg. 173	**Extraction Date:**	3/9/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0030	ND
beta-BHC	1		0.20	0.0024	ND
gamma-BHC	1		0.20	0.0015	ND
delta-BHC	1		NLE	0.0019	ND
Heptachlor	1		0.40	0.0020	ND
Aldrin	1		0.04	0.0010	ND
Heptachlor Epoxide	1		0.20	0.0009	ND
Endosulfan I	1		0.40	0.0057	ND
4,4'-DDE	1		0.10	0.0009	ND
Dieldrin	1		0.03	0.0016	ND
Endrin	1		2.00	0.0020	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0033	ND
4,4'-DDD	1		0.10	0.0022	ND
4,4'-DDT	1		0.10	0.0013	ND
Endosulfan-Sulfate	1		0.40	0.0027	ND
Methoxychlor	1		40.00	0.0038	ND
Alpha-chlordane	1		0.50	0.0011	ND
Gamma-chlordane	1		0.50	0.0009	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0640	ND
Arochlor 1221	1		0.50	0.0500	ND
Arochlor 1232	1		0.50	0.0500	ND
Arochlor 1242	1		0.50	0.0280	ND
Arochlor 1248	1		0.50	0.0500	ND
Arochlor 1254	1		0.50	0.0500	ND
Arochlor 1260	1		0.50	0.0680	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5223
Sample Prepared: 04/05/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	04/06/00	50.3	200	10.0
Antimony	04/06/00	ND	20	2.0
Arsenic	04/06/00	ND	8	2.0
Barium	04/06/00	1.79	2000	0.5
Beryllium	04/06/00	ND	20	0.5
Cadmium	04/06/00	ND	4	0.5
Calcium	04/06/00	135	NLE	20.0
Chromium	04/06/00	1.12	100	0.5
Cobalt	04/06/00	ND	NLE	0.5
Copper	04/06/00	ND	1000	3.0
Iron	04/06/00	22.6	300	10.0
Lead	04/06/00	ND	10	2.0
Magnesium	04/06/00	36.4	NLE	20.0
Manganese	04/06/00	ND	50	0.5
Mercury	03/24/00	ND	2	0.1
Nickel	04/06/00	1.49	100	0.5
Potassium	04/06/00	152	NLE	20.0
Selenium	04/06/00	ND	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	281	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	ND	NLE	1.0
Zinc	04/06/00	5.26	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5223.02
Sample Received: 03/06/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	04/06/00	ND	200	10.0
Antimony	04/06/00	ND	20	2.0
Arsenic	04/06/00	ND	8	2.0
Barium	04/06/00	ND	2000	0.5
Beryllium	04/06/00	ND	20	0.5
Cadmium	04/06/00	ND	4	0.5
Calcium	04/06/00	28.9	NLE	20.0
Chromium	04/06/00	ND	100	0.5
Cobalt	04/06/00	ND	NLE	0.5
Copper	04/06/00	ND	1000	3.0
Iron	04/06/00	ND	300	10.0
Lead	04/06/00	ND	10	2.0
Magnesium	04/06/00	ND	NLE	20.0
Manganese	04/06/00	ND	50	0.5
Mercury	03/24/00	ND	2	0.1
Nickel	04/06/00	ND	100	0.5
Potassium	04/06/00	88.8	NLE	20.0
Selenium	04/06/00	ND	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	89.6	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	1.48	NLE	1.0
Zinc	04/06/00	3.14	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5223.03
Sample Received: 03/06/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	04/06/00	217	200	10.0
Antimony	04/06/00	ND	20	2.0
Arsenic	04/06/00	ND	8	2.0
Barium	04/06/00	ND	2000	0.5
Beryllium	04/06/00	ND	20	0.5
Cadmium	04/06/00	2.14	4	0.5
Calcium	04/06/00	93000	NLE	20.0
Chromium	04/06/00	6.46	100	0.5
Cobalt	04/06/00	ND	NLE	0.5
Copper	04/06/00	8.32	1000	3.0
Iron	04/06/00	22100	300	10.0
Lead	04/06/00	2.93	10	2.0
Magnesium	04/06/00	22900	NLE	20.0
Manganese	04/06/00	582	50	0.5
Mercury	03/24/00	ND	2	0.1
Nickel	04/06/00	8.99	100	0.5
Potassium	04/06/00	4550	NLE	20.0
Selenium	04/06/00	ND	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	59900	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	4.19	NLE	1.0
Zinc	04/06/00	144	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5223.04
Sample Received: 03/06/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	04/06/00	2070	200	10.0
Antimony	04/06/00	ND	20	2.0
Arsenic	04/06/00	17.9	8	2.0
Barium	04/06/00	97.0	2000	0.5
Beryllium	04/06/00	ND	20	0.5
Cadmium	04/06/00	0.585	4	0.5
Calcium	04/06/00	71100	NLE	20.0
Chromium	04/06/00	15.6	100	0.5
Cobalt	04/06/00	0.783	NLE	0.5
Copper	04/06/00	ND	1000	3.0
Iron	04/06/00	52900	300	10.0
Lead	04/06/00	3.67	10	2.0
Magnesium	04/06/00	13500	NLE	20.0
Manganese	04/06/00	529	50	0.5
Mercury	03/24/00	ND	2	0.1
Nickel	04/06/00	4.90	100	0.5
Potassium	04/06/00	6520	NLE	20.0
Selenium	04/06/00	3.46	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	315000	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	11.0	NLE	1.0
Zinc	04/06/00	42.1	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5223.05
Sample Received: 03/06/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	04/06/00	274	200	10.0
Antimony	04/06/00	ND	20	2.0
Arsenic	04/06/00	2.83	8	2.0
Barium	04/06/00	36.8	2000	0.5
Beryllium	04/06/00	ND	20	0.5
Cadmium	04/06/00	1.25	4	0.5
Calcium	04/06/00	95200	NLE	20.0
Chromium	04/06/00	6.79	100	0.5
Cobalt	04/06/00	ND	NLE	0.5
Copper	04/06/00	13.8	1000	3.0
Iron	04/06/00	18300	300	10.0
Lead	04/06/00	4.21	10	2.0
Magnesium	04/06/00	23100	NLE	20.0
Manganese	04/06/00	603	50	0.5
Mercury	03/24/00	ND	2	0.1
Nickel	04/06/00	7.07	100	0.5
Potassium	04/06/00	4690	NLE	20.0
Selenium	04/06/00	ND	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	66500	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	3.63	NLE	1.0
Zinc	04/06/00	126	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	Acetone	2-Butanone	Benzene	Chlorobenzene	4,4'-DDD	Cadmium	Chromium	Iron	Manganese	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	1	4	0.1	4	100	300	50	-
08/20/1997	FMETL	ND	ND	1.38	2.61	ND	-	-	-	-	V,Pb
08/20/1997	FMETL	ND	ND	ND	ND	ND	8.0	148	7490	136	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	2.26	ND	ND	1.2	9062	553	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	3.26	ND	8.0	1.3	70680	456	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	3.9	ND	8409	117	V,S,P,M
08/24/1998	FMETL	10.27	3.32	ND	5.20	0.059	4.49	3.12	67400	605	V,S,P,M
11/20/1998	FMETL	ND	ND	ND	4.88	0.093	1.96	9.77	68800	647	V,S,P,M
02/09/1999	FMETL	ND	ND	1.26	5.71	0.090	24.6	8.00	17600	407	V,S,P,M
05/26/1999	FMETL	2.28	ND	1.31	5.58	0.148	3.64	5.70	56700	564	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	ND	3.31	4.65	10500	228	V,S,P,M
12/17/1999	FMETL	ND	ND	ND	1.95	0.04	6.69	2.82	28500	424	V,S,P,M
03/06/2000	FMETL	ND	ND	ND	3.83	ND	0.585	15.6	52900	529	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 03/06/2000

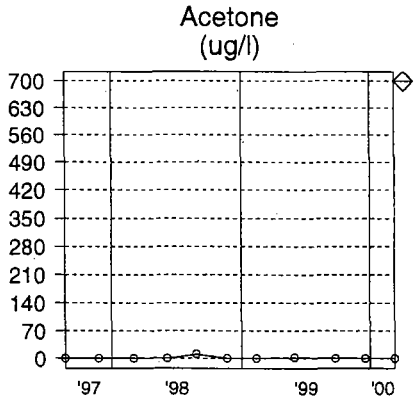
NOTES:

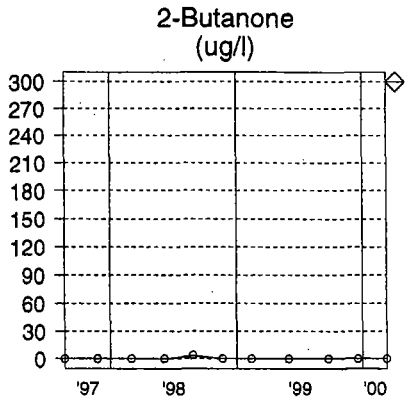
FORT MONMOUTH

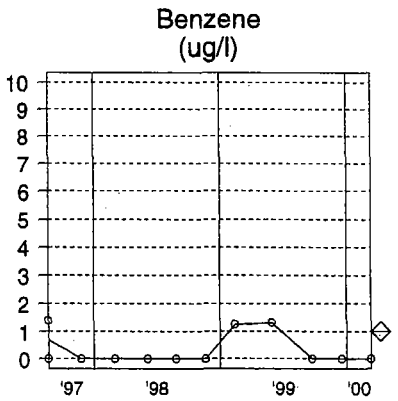
GW MONITORING
Bldg. 80

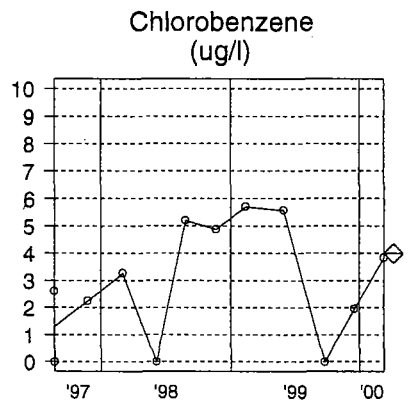
Well 1 of 1

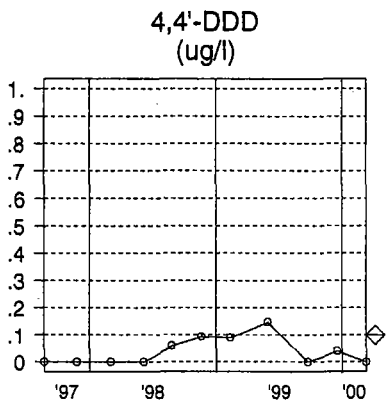
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

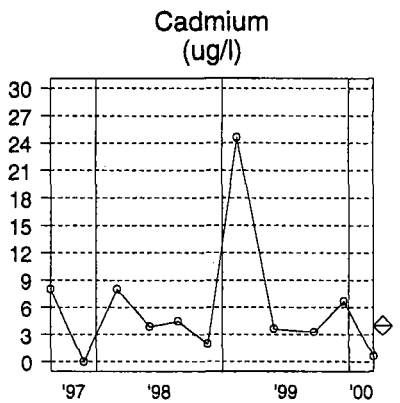


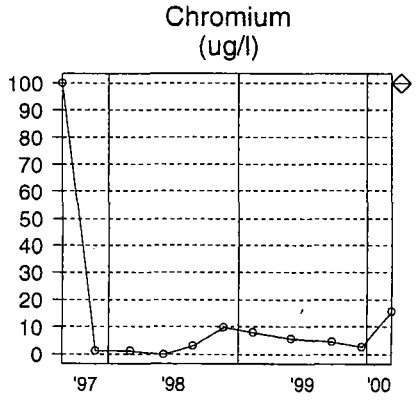


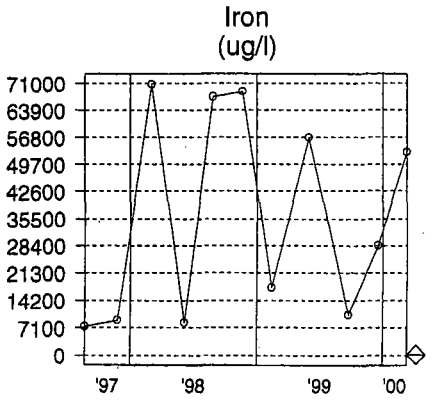


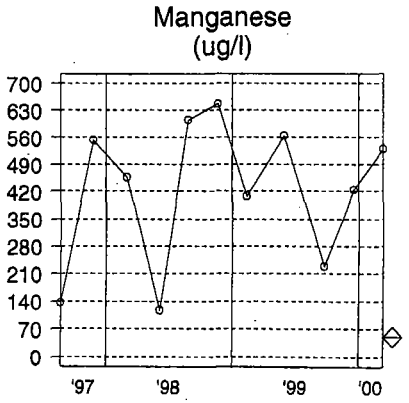












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 03/06/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-28-2000 x:\mtech46\fm\80\gw\8C

	Lab	Sodium	Lead	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:	-	50000	10	-							-
08/20/1997	FMETL	-	2.5	2.60							V,Pb
08/20/1997	FMETL	110750	4.0	3.20							V,S,P,M
11/24/1997	FMETL	97380	14	2.40							V,S,P,M
02/27/1998	FMETL	279400	6.0	1.40							V,S,P,M
06/02/1998	FMETL	147200	3.3	2.09							V,S,P,M
08/24/1998	FMETL	533000	10.4	3.43							V,S,P,M
11/20/1998	FMETL	530000	2.86	4.04							V,S,P,M
02/09/1999	FMETL	306000	ND	3.84							V,S,P,M
05/26/1999	FMETL	457000	5.34	2.61							V,S,P,M
09/22/1999	FMETL	181000	5.15	2.73							V,S,P,M
12/17/1999	FMETL	359000	ND	2.52							V,S,P,M
03/06/2000	FMETL	315000	3.67	2.76							V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 03/06/2000

NOTES:

Page 2 of 2.

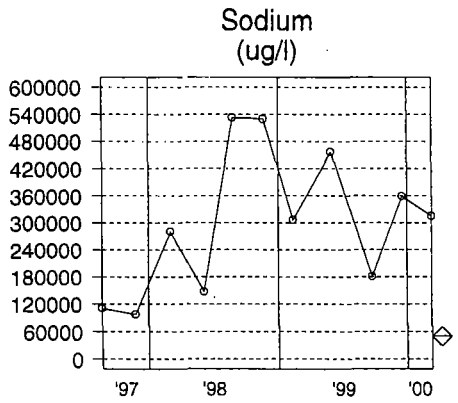
FORT MONMOUTH

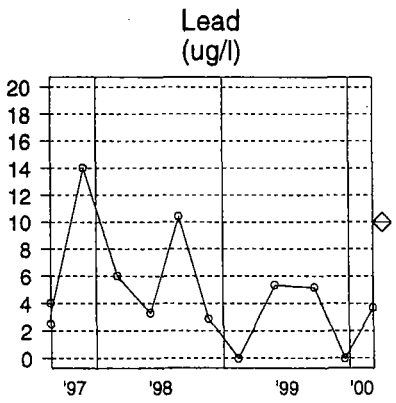
GW MONITORING
Bldg. 80

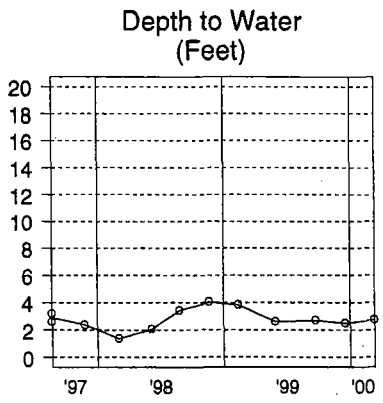
Well 1 of 1

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-28-2000 x:\mtech46\fm\80\gw\8







SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 03/06/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-28-2000 x:\mtech46\fm\80\gw\b

	Lab	Acetone	2-Butanone	Chlorobenzene	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Silver	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	0.5	0.5	4.0	100	300	20	-
04/16/1997	FMETL	ND	ND	ND	-	-	-	-	-	-	2.51
08/20/1997	FMETL	ND	ND	ND	ND	ND	5.0	121	4750	26	3.20
11/24/1997	FMETL	ND	ND	ND	ND	ND	1.6	3.0	31700	ND	2.25
02/27/1998	FMETL	ND	ND	ND	ND	ND	1.4	1.5	5976	ND	1.00
06/02/1998	FMETL	ND	ND	ND	ND	ND	1.4	ND	6776	ND	1.97
08/24/1998	FMETL	13.03	3.19	ND	0.052	0.05	4.35	9.58	11500	ND	3.42
11/20/1998	FMETL	ND	ND	1.88	ND	ND	2.31	9.49	13300	ND	3.99
02/09/1999	FMETL	ND	ND	ND	ND	ND	3.51	8.3	6510	ND	2.73
05/26/1999	FMETL	ND	ND	ND	ND	ND	3.04	9.16	9880	ND	2.90
09/22/1999	FMETL	ND	ND	ND	0.048	0.049	2.44	4.56	2310	ND	2.71
12/17/1999	FMETL	ND	ND	1.28	ND	ND	2.95	4.75	10300	ND	2.57
03/06/2000	FMETL	ND	ND	1.68	ND	ND	1.25	6.79	18300	ND	2.61
03/06/2000D	FMETL	ND	ND	1.13	ND	ND	2.14	6.46	22100	ND	2.61

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 03/06/2000

NOTES:

Page 1 of 2.

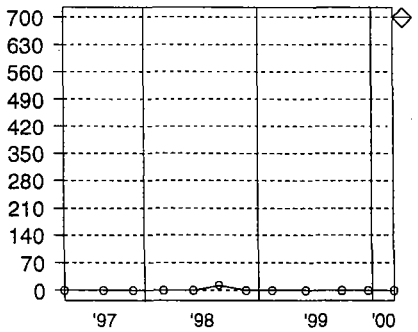
FORT MONMOUTH

GW MONITORING
Bldg. 166

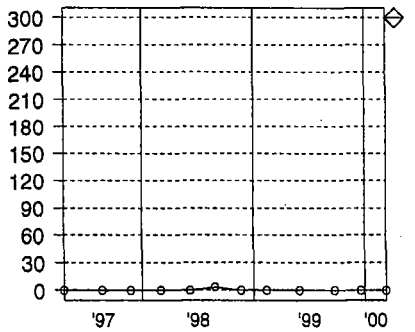
Well 1 of 1

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

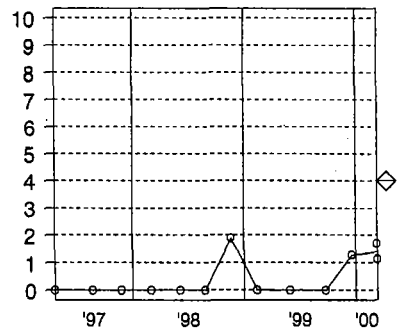
Acetone
(ug/l)



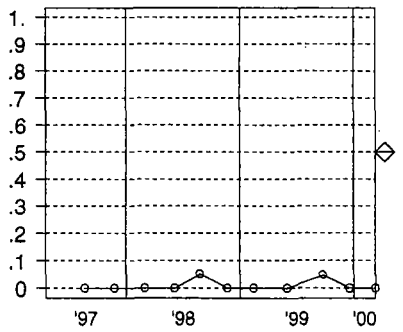
2-Butanone
(ug/l)



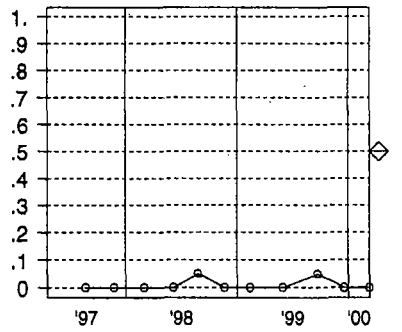
Chlorobenzene
(ug/l)



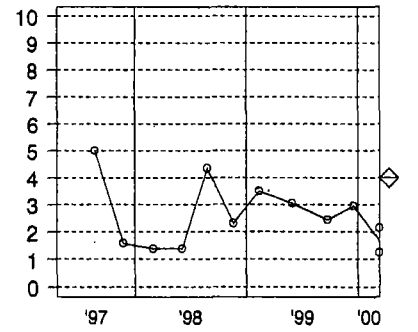
alpha-Chlordane
(ug/l)



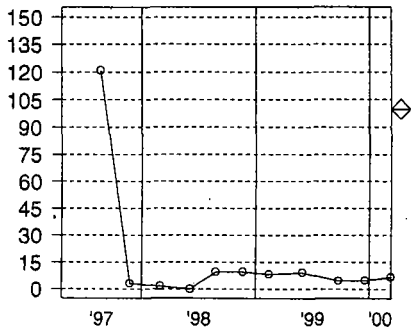
gamma-Chlordane
(ug/l)



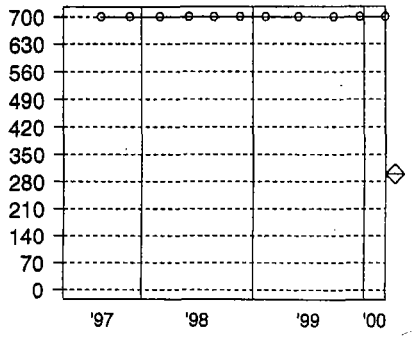
Cadmium
(ug/l)



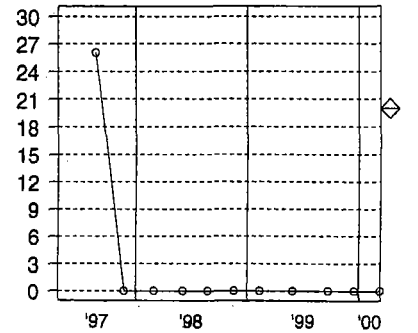
Chromium
(ug/l)



Iron
(ug/l)



Silver
(ug/l)



SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 03/06/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-28-2000 x:\mtech46\fm\166\gw\1

	Lab	Sodium	Lead	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:	-	50000	10	-							-
04/16/1997	FMETL	-	2.10	2.51							2.51
08/20/1997	FMETL	83750	1.6	3.20							3.20
11/24/1997	FMETL	200200	15.0	2.25							2.25
02/27/1998	FMETL	29310	ND	1.00							1.00
06/02/1998	FMETL	27800	2.3	1.97							1.97
08/24/1998	FMETL	58200	12.4	3.42							3.42
11/20/1998	FMETL	114000	4.23	3.99							3.99
02/09/1999	FMETL	108000	ND	2.73							2.73
05/26/1999	FMETL	72900	11.4	2.90							2.90
09/22/1999	FMETL	46500	7.95	2.71							2.71
12/17/1999	FMETL	60300	ND	2.57							2.57
03/06/2000	FMETL	66500	4.21	2.61							2.61
03/06/2000D	FMETL	59900	2.93	2.61							2.61

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 03/06/2000

NOTES:

Page 2 of 2.

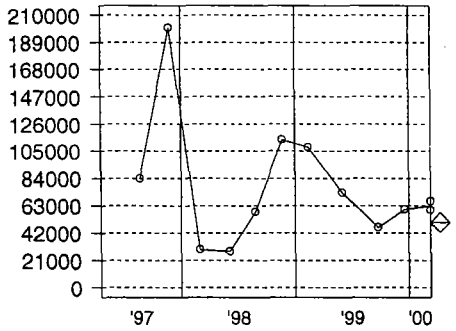
FORT MONMOUTH

GW MONITORING
Bldg. 166

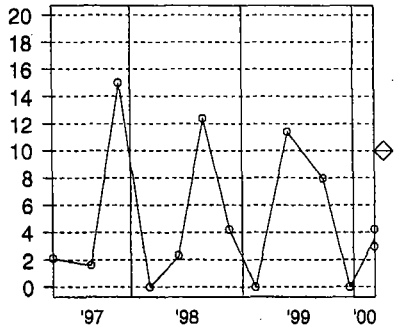
Well 1 of 1

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

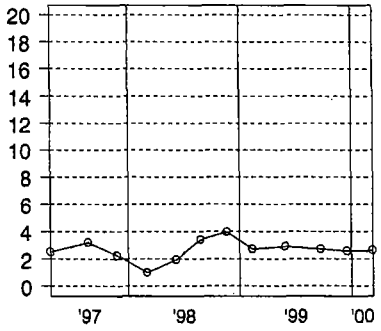
Sodium
(ug/l)



Lead
(ug/l)



Depth to Water
(Feet)



SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 03/06/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

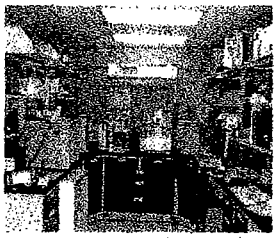
Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-28-2000 x:\mtech46\fm\166\gw\1e...sf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/ Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5406.01	0080MW01	29-31774	05/09/00
5406.02	0166MW01	29-31773	05/09/00

NJDEP Laboratory Certification # 13461

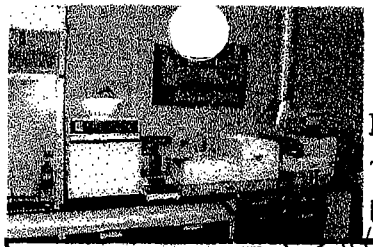
6-20-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallow
Phone #: 426223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 80/166 wells 2nd Qtr '00

Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL MTLS	Pest PCB	BNA+25				Hnu Read	Remarks / Preservation Method
54060-01	0080 MW01	5/9/00	1156	AQ	5	✓	✓	✓	✓				0.0	29-31774
-02	0166 MW01	↓	1129	↓	~~5~~ 3	✓	✓	✓	✓				0.0	29-31773

Comments: HCL/HNO_3 / <4°C

Analysis Parameters

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	5/9/00 1300	J. Wright			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks: Shows Trip/FB/Dupe from 108 Sum dtd. cpm
Tide: L→I

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/09/00
WEATHER: Sunny, hot.
TIDE: Low-Incoming.

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.91 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.36 ft
DEPTH OF WELL: 12.26 ft
DEPTH TO TOP OF SCREEN: 3.00 ft
HEIGHT OF WATER: 9.90 ft
(9.90) X .65 X 3 = 19.30
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 10:33
pH 6.29 su — TEMP 13.4 °C
DISSOLVED O_2 5.91 ppm — SPECIFIC CONDUCTIVITY 801 us/cm

PURGE END TIME: 11:55
pH 6.31 su — TEMP 13.1 °C
DISSOLVED O_2 5.10 ppm — SPECIFIC CONDUCTIVITY 804 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.04 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 19 gal

SAMPLE START TIME: 11:56
pH 6.33 su — TEMP 13.1 °C
DISSOLVED O_2 5.04 ppm — SPECIFIC CONDUCTIVITY 805 us/cm

SAMPLE END TIME: 11:59

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/09/00
WEATHER: Sunny, hot.
TIDE: Low-Incoming.

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.96 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.31 ft
DEPTH OF WELL: 7.75 ft
DEPTH TO TOP OF SCREEN: 6.00 ft
HEIGHT OF WATER: 5.44 ft
(5.44) X .65 X 3 = 10.60
GALLONS OF H2O TO BE PURGED: 11 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 10:40
pH 6.81 su — TEMP 13.4 °C
DISSOLVED O_2 5.91 ppm — SPECIFIC CONDUCTIVITY 427 us/cm

PURGE END TIME: 11:28
pH 6.83 su — TEMP 13.1 °C
DISSOLVED O_2 5.11 ppm — SPECIFIC CONDUCTIVITY 431 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.39 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 11 gal

SAMPLE START TIME: 11:29
pH 6.84 su — TEMP 13.1 °C
DISSOLVED O_2 5.07 ppm — SPECIFIC CONDUCTIVITY 432 us/cm

SAMPLE END TIME: 11:35

COMMENTS:

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound Identified Below Detection Limit
B	: Compound is in Both Sample and Blank
D	: Results are from a Dilution of the Sample
U	: Compound Searched for but not Detected
E	: Compound Exceeds Calibration Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB006815.D	Sample Name	Vblk208
Operator	Skelton	Field ID	Vblk208
Date Acquired	9 May 2000 2:30 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/18/00 12:14 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk208**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5406 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk208

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006815.D

Level: (low/med) LOW Date Received: 5/9/00

% Moisture: not dec. Date Analyzed: 5/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB006846.D	Sample Name	5406.01
Operator	Skelton	Field ID	0080MW01
Date Acquired	10 May 2000 11:15 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	217312	4.49 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/18/00 12:16 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5406 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5406.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006846.D

Level: (low/med) LOW Date Received: 5/9/00

% Moisture: not dec. Date Analyzed: 5/10/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	33.97	17	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006847.D**	Sample Name	**5406.02**
Operator	**Skelton**	Field ID	**0166MW01**
Date Acquired	**10 May 2000 11:55 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/18/00 12:16 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0166MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5406 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5406.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006847.D

Level: (low/med) LOW Date Received: 5/9/00

% Moisture: not dec. Date Analyzed: 5/10/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 027133-93-3	2,3-Dihydro-1-methylindene	28.47	20	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04326.D**	Sample Name	**Sblk370**
Operator	**Bhaskar**	Misc Info	**Sblk370 A 000515**
Date Acquired	**16-May-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04326.D**	Sample Name	**Sblk370**
Operator	**Bhaskar**	Misc Info	**Sblk370 A 000515**
Date Acquired	**16-May-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Sblk370**

Lab Name: FMETL Lab Code 13461

Project: 100004 Case No.: 5406 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: Sblk370

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04326.D

Level: (low/med) LOW Date Received: 5/9/00

% Moisture: decanted: (Y/N) N Date Extracted: 5/15/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/16/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04334.D**	Sample Name	**5406.01**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**16-May-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene	19.82	58940	1.75 ug/L	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran	20.27	58171	1.24 ug/L	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04334.D**	Sample Name	**5406.01**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**16-May-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene	21.17	76379	2.12 ug/L	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0080MW01**

Lab Name: FMETL Lab Code 13461

Project: 100004 Case No.: 5406 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5406.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04334.D

Level: (low/med) LOW Date Received: 5/9/00

% Moisture: decanted: (Y/N) N Date Extracted: 5/15/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/16/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 12 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		unknown	6.91	12	J
2.		unknown	11.05	9	J
3.	000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	12.07	7	JN
4.	000767-58-8	Indan, 1-methyl-	13.74	12	JN
5.	017057-82-8	1H-Indene, 2,3-dihydro-1,2-dimet	16.08	5	JN
6.		unknown	16.66	5	J
7.	000090-12-0	Naphthalene, 1-methyl-	17.09	27	JN
8.	000581-42-0	Naphthalene, 2,6-dimethyl-	18.60	5	JN
9.	000575-37-1	Naphthalene, 1,7-dimethyl-	18.81	11	JN
10.	000581-40-8	Naphthalene, 2,3-dimethyl-	19.12	4	JN
11.		unknown	21.75	19	J
12.	000057-10-3	Hexadecanoic acid	24.93	5	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04335.D**	Sample Name	**5406.02**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**16-May-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.83	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.91	ug/L	
62-53-3	Aniline			not detected	NLE	1.63	ug/L	
108-95-2	Phenol			not detected	4000	0.82	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.28	ug/L	
95-57-8	2-Chlorophenol			not detected	40	2.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.21	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.19	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.02	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.13	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.17	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.39	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.35	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.80	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.50	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.97	ug/L	
78-59-1	Isophorone			not detected	100	1.01	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.92	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	2.62	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.21	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.33	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.22	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.27	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.09	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.71	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.39	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.08	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.32	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.78	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.28	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.01	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.52	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.96	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.81	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.79	ug/L	
83-32-9	Acenaphthene			not detected	400	1.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.44	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.06	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04335.D**	Sample Name	**5406.02**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**16-May-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.87	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.62	ug/L	
86-73-7	Fluorene			not detected	300	0.99	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.10	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.05	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.98	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.01	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.67	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.76	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.94	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.42	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.23	ug/L	
120-12-7	Anthracene			not detected	2000	1.12	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.70	ug/L	
206-44-0	Fluoranthene			not detected	300	1.64	ug/L	
92-87-5	Benzidine			not detected	50	4.18	ug/L	
129-00-0	Pyrene			not detected	200	1.25	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.05	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.19	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.75	ug/L	
218-01-9	Chrysene			not detected	20	1.38	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.74	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.25	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.29	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.05	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.83	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.64	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.84	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **0166MW01**

Lab Name: FMETL Lab Code 13461

Project: 100004 Case No.: 5406 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5406.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04335.D

Level: (low/med) LOW Date Received: 5/9/00

% Moisture: decanted: (Y/N) N Date Extracted: 5/15/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/16/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.91	15	J

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK522
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	5/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/15/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0007	ND
beta-BHC	1		0.20	0.0014	ND
gamma-BHC	1		0.20	0.0012	ND
delta-BHC	1		NLE	0.0021	ND
Heptachlor	1		0.40	0.0016	ND
Aldrin	1		0.04	0.0014	ND
Heptachlor Epoxide	1		0.20	0.0008	ND
Endosulfan I	1		0.40	0.0014	ND
4,4'-DDE	1		0.10	0.0014	ND
Dieldrin	1		0.03	0.0011	ND
Endrin	1		2.00	0.0012	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0006	ND
4,4'-DDD	1		0.10	0.0012	ND
4,4'-DDT	1		0.10	0.0019	ND
Endosulfan-Sulfate	1		0.40	0.0018	ND
Methoxychlor	1		40.00	0.0022	ND
Alpha-chlordane	1		0.50	0.0007	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5406.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/9/00
	Bldg. 173	**Extraction Date:**	5/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/15/00
Analysis:	EPA Method 608	**Location :**	80/166 Wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0007	ND
beta-BHC	1		0.20	0.0014	ND
gamma-BHC	1		0.20	0.0012	ND
delta-BHC	1		NLE	0.0021	ND
Heptachlor	1		0.40	0.0016	ND
Aldrin	1		0.04	0.0014	ND
Heptachlor Epoxide	1		0.20	0.0008	ND
Endosulfan I	1		0.40	0.0014	ND
4,4'-DDE	1		0.10	0.0014	ND
Dieldrin	1		0.03	0.0011	ND
Endrin	1		2.00	0.0012	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0006	ND
4,4'-DDD	1	16.88	0.10	0.0012	**0.176**
4,4'-DDT	1		0.10	0.0019	ND
Endosulfan-Sulfate	1		0.40	0.0018	ND
Methoxychlor	1		40.00	0.0022	ND
Alpha-chlordane	1		0.50	0.0007	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5406.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/9/00
	Bldg. 173	**Extraction Date:**	5/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/15/00
Analysis:	EPA Method 608	**Location :**	80/166 Wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0007	ND
beta-BHC	1		0.20	0.0014	ND
gamma-BHC	1		0.20	0.0012	ND
delta-BHC	1		NLE	0.0021	ND
Heptachlor	1		0.40	0.0016	ND
Aldrin	1		0.04	0.0014	ND
Heptachlor Epoxide	1		0.20	0.0008	ND
Endosulfan I	1		0.40	0.0014	ND
4,4'-DDE	1		0.10	0.0014	ND
Dieldrin	1		0.03	0.0011	ND
Endrin	1		2.00	0.0012	ND
Endrin Ketone	1		NLE	0.0012	ND
Endosulfan II	1		0.40	0.0006	ND
4,4'-DDD	1		0.10	0.0012	ND
4,4'-DDT	1		0.10	0.0019	ND
Endosulfan-Sulfate	1		0.40	0.0018	ND
Methoxychlor	1		40.00	0.0022	ND
Alpha-chlordane	1		0.50	0.0007	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.0273	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5406
Sample Prepared: 06/01/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/00	15.3	200	10.0
Antimony	06/01/00	ND	20	2.0
Arsenic	06/01/00	ND	8	2.0
Barium	06/01/00	ND	2000	0.5
Beryllium	06/01/00	ND	20	0.5
Cadmium	06/01/00	ND	4	0.5
Calcium	06/01/00	189	NLE	20.0
Chromium	06/01/00	ND	100	0.5
Cobalt	06/01/00	ND	NLE	0.5
Copper	06/01/00	ND	1000	3.0
Iron	06/01/00	25.4	300	10.0
Lead	06/01/00	ND	10	2.0
Magnesium	06/01/00	25.6	NLE	20.0
Manganese	06/01/00	0.661	50	0.5
Mercury	05/15/00	ND	2	0.1
Nickel	06/01/00	ND	100	0.5
Potassium	06/01/00	ND	NLE	20.0
Selenium	06/01/00	ND	50	3.0
Silver	06/01/00	ND	20	3.0
Sodium	06/01/00	43.1	50000	20.0
Thallium	06/05/00	ND	10	1.0
Vanadium	06/01/00	ND	NLE	1.0
Zinc	06/01/00	3.20	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5406.01
Sample Received: 05/09/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/00	750	200	10.0
Antimony	06/01/00	ND	20	2.0
Arsenic	06/01/00	11.3	8	2.0
Barium	06/01/00	118	2000	0.5
Beryllium	06/01/00	ND	20	0.5
Cadmium	06/01/00	4.44	4	0.5
Calcium	06/01/00	79400	NLE	20.0
Chromium	06/01/00	11.0	100	0.5
Cobalt	06/01/00	ND	NLE	0.5
Copper	06/01/00	197	1000	3.0
Iron	06/01/00	22200	300	10.0
Lead	06/01/00	26.7	10	2.0
Magnesium	06/01/00	10000	NLE	20.0
Manganese	06/01/00	318	50	0.5
Mercury	05/15/00	ND	2	0.1
Nickel	06/01/00	2.30	100	0.5
Potassium	06/01/00	7570	NLE	20.0
Selenium	06/01/00	ND	50	3.0
Silver	06/01/00	ND	20	3.0
Sodium	06/01/00	648000	50000	20.0
Thallium	06/01/00	ND	10	3.0
Vanadium	06/01/00	3.55	NLE	1.0
Zinc	06/01/00	103	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5406.02
Sample Received: 05/09/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/00	422	200	10.0
Antimony	06/01/00	ND	20	2.0
Arsenic	06/01/00	ND	8	2.0
Barium	06/01/00	32.2	2000	0.5
Beryllium	06/01/00	ND	20	0.5
Cadmium	06/01/00	2.79	4	0.5
Calcium	06/01/00	93600	NLE	20.0
Chromium	06/01/00	11.3	100	0.5
Cobalt	06/01/00	0.710	NLE	0.5
Copper	06/01/00	98.4	1000	3.0
Iron	06/01/00	9300	300	10.0
Lead	06/01/00	17.3	10	2.0
Magnesium	06/01/00	25500	NLE	20.0
Manganese	06/01/00	239	50	0.5
Mercury	05/15/00	ND	2	0.1
Nickel	06/01/00	4.93	100	0.5
Potassium	06/01/00	6460	NLE	20.0
Selenium	06/01/00	ND	50	3.0
Silver	06/01/00	ND	20	3.0
Sodium	06/01/00	62300	50000	20.0
Thallium	06/01/00	ND	10	3.0
Vanadium	06/01/00	3.56	NLE	1.0
Zinc	06/01/00	289	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	2-Butanone	Carbon Disulfide	Benzene	Chloro benzene	Unknown	4,4'-DDD	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	300	NLE	1	4	-	0.1	4	100	300	-
08/20/1997	FMETL	ND	2.31	1.38	2.61	115	ND	-	-	-	V,Pb
08/20/1997	FMETL	ND	ND	ND	ND	ND	ND	8.0	148	7490	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	2.26	ND	ND	ND	1.2	9062	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	3.26	10	ND	8.0	1.3	70680	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	ND	3.9	ND	8409	V,S,P,M
08/24/1998	FMETL	3.32	ND	ND	5.20	ND	0.059	4.49	3.12	67400	V,S,P,M
11/20/1998	FMETL	ND	ND	ND	4.88	73	0.093	1.96	9.77	68800	V,S,P,M
02/09/1999	FMETL	ND	ND	1.26	5.71	24	0.090	24.6	8.00	17600	V,S,P,M
05/26/1999	FMETL	ND	ND	1.31	5.58	ND	0.148	3.64	5.70	56700	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	ND	ND	3.31	4.65	10500	V,S,P,M
12/17/1999	FMETL	ND	ND	ND	1.95	ND	0.04	6.69	2.82	28500	V,S,P,M
03/06/2000	FMETL	ND	ND	ND	3.83	ND	ND	0.585	15.6	52900	V,S,P,M
05/09/2000	FMETL	ND	ND	ND	4.49	ND	0.176	4.44	11.0	22200	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 05/09/2000

NOTES:

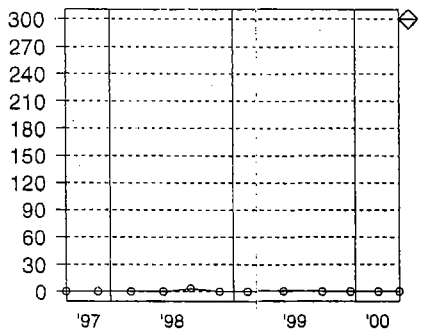
Page 1 of 2.

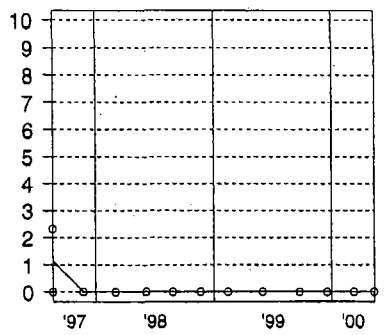
FORT MONMOUTH

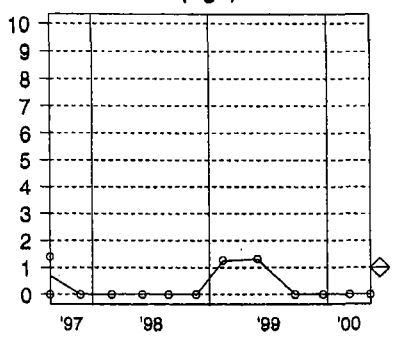
GW MONITORING
Bldg. 80

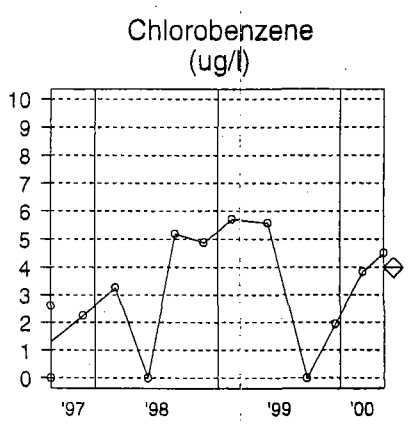
Well 1 of 1

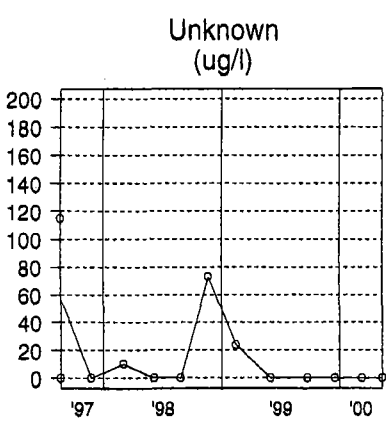
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

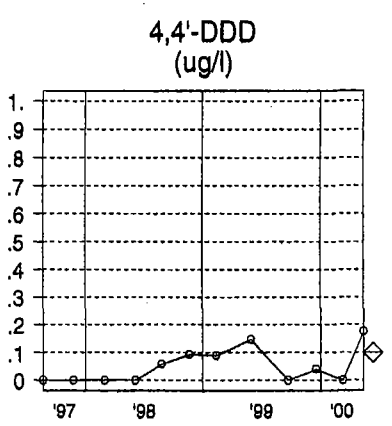


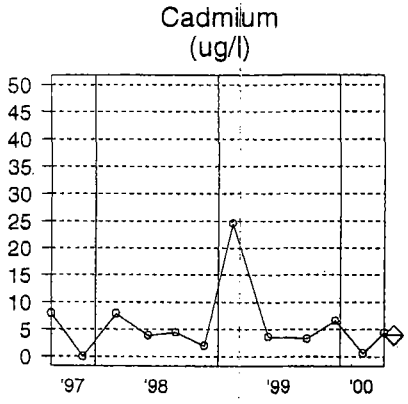


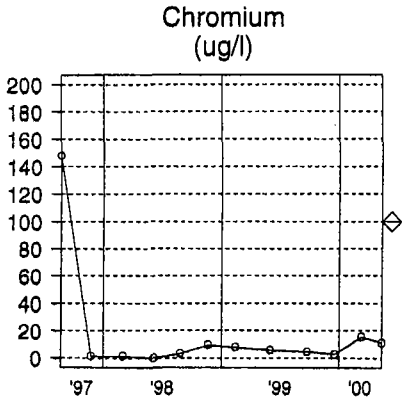


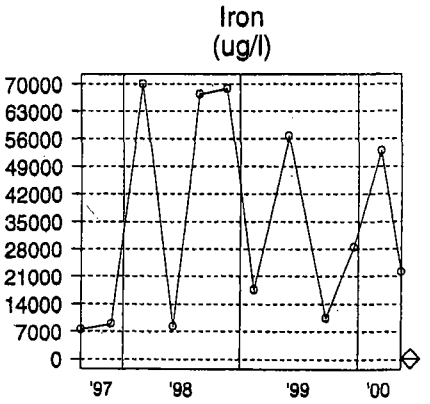












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 05/09/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-20-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	Manganese	silver	Sodium	Lead	Acenaphthene	Dibenzofuran	Fluorene	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	700	50	20	50000	10	400	NLE	300	-	-
08/20/1997	FMETL	ND	-	-	-	2.5	-	-	-	2.60	V,Pb
08/20/1997	FMETL	ND	136	8.0	110750	4.0	-	-	-	3.20	V,S,P,M
11/24/1997	FMETL	ND	553	ND	97380	14	-	-	-	2.40	V,S,P,M
02/27/1998	FMETL	ND	456	ND	279400	6.0	-	-	-	1.40	V,S,P,M
06/02/1998	FMETL	ND	117	ND	147200	3.3	-	-	-	2.09	V,S,P,M
08/24/1998	FMETL	10.27	605	ND	533000	10.4	-	-	-	3.43	V,S,P,M
11/20/1998	FMETL	ND	647	ND	530000	2.86	-	-	-	4.04	V,S,P,M
02/09/1999	FMETL	ND	407	ND	306000	ND	-	-	-	3.84	V,S,P,M
05/26/1999	FMETL	2.28	564	ND	457000	5.34	-	-	-	2.61	V,S,P,M
09/22/1999	FMETL	ND	228	ND	181000	5.15	-	-	-	2.73	V,S,P,M
12/17/1999	FMETL	ND	424	ND	359000	ND	-	-	-	2.52	V,S,P,M
03/06/2000	FMETL	ND	529	ND	315000	3.67	-	-	-	2.76	V,S,P,M
05/09/2000	FMETL	ND	318	ND	648000	26.7	1.75	1.24	2.12	2.36	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 05/09/2000

NOTES:

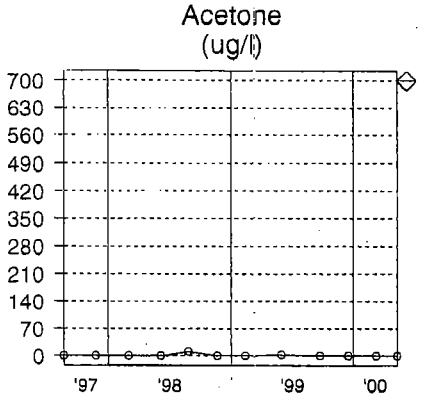
Page 2 of 2.

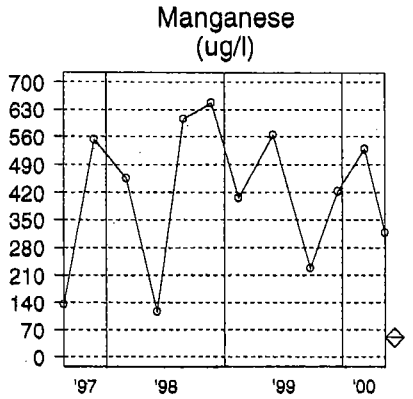
FORT MONMOUTH

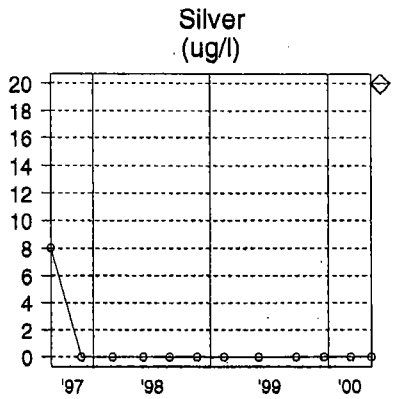
GW MONITORING
Bldg. 80

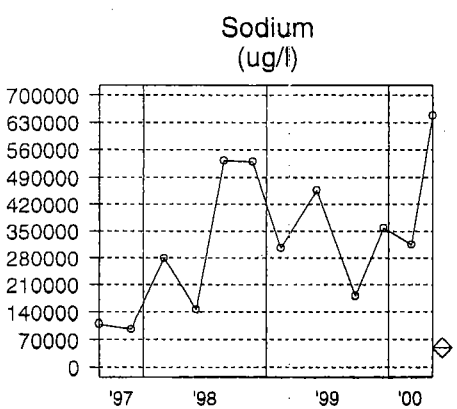
Well 1 of 1

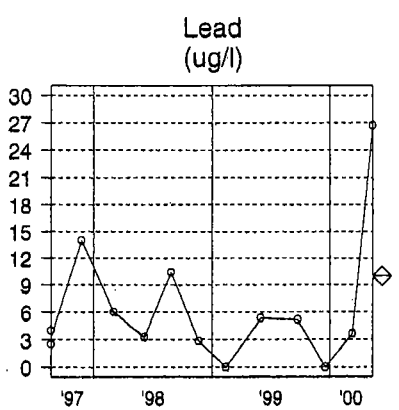
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

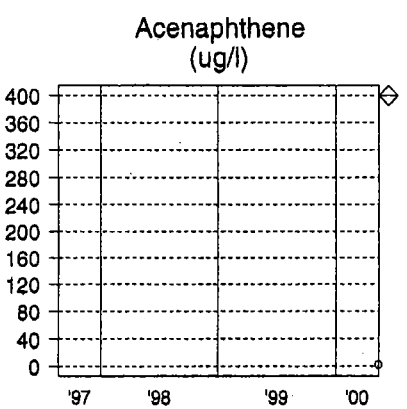


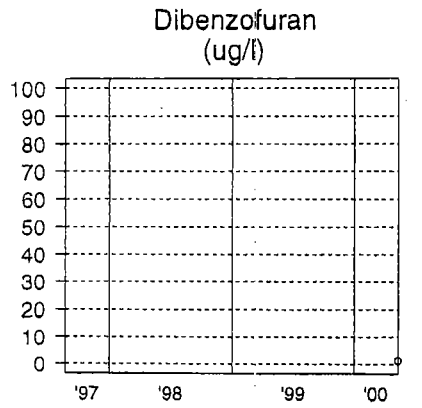


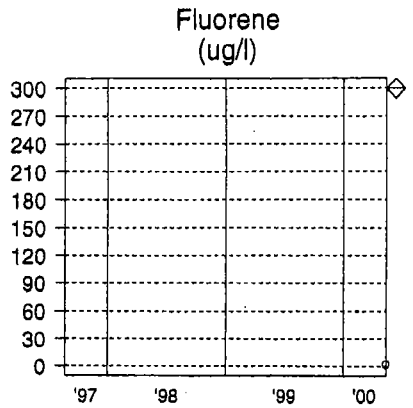


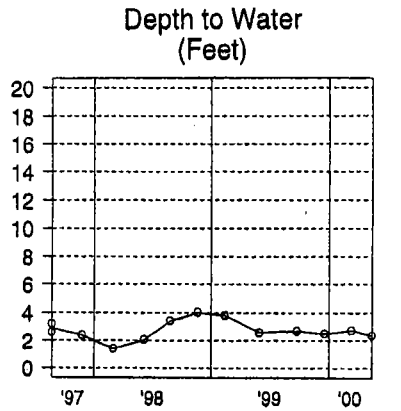












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 05/09/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-20-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chlorobenzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/1997	FMETL	ND	ND	ND	2.40	-	-	-	-	-	2.51
08/20/1997	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	3.20
11/24/1997	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	2.25
02/27/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	1.00
06/02/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	1.97
08/24/1998	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	3.42
11/20/1998	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	3.99
02/09/1999	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	2.73
05/26/1999	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	2.90
09/22/1999	FMETL	ND	ND	ND	ND	0.048	0.049	2.44	4.56	2310	2.71
12/17/1999	FMETL	ND	ND	1.28	ND	ND	ND	2.95	4.75	10300	2.57
03/06/2000	FMETL	ND	ND	1.68	ND	ND	ND	1.25	6.79	18300	2.61
03/06/2000D	FMETL	ND	ND	1.13	ND	ND	ND	2.14	6.46	22100	2.61
05/09/2000	FMETL	ND	ND	ND	ND	ND	ND	2.79	11.3	9300	2.31

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 05/09/2000

NOTES:

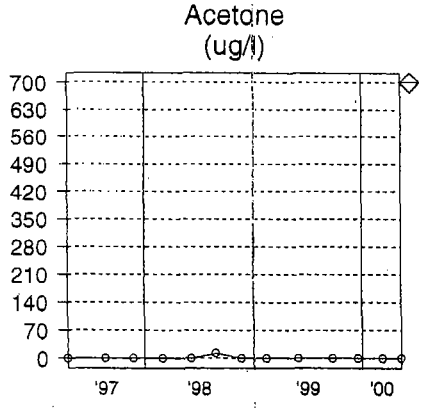
Page 1 of 2.

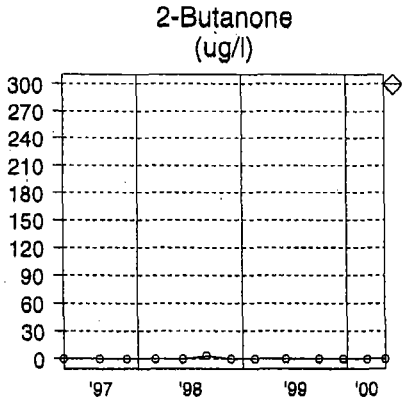
FORT MONMOUTH

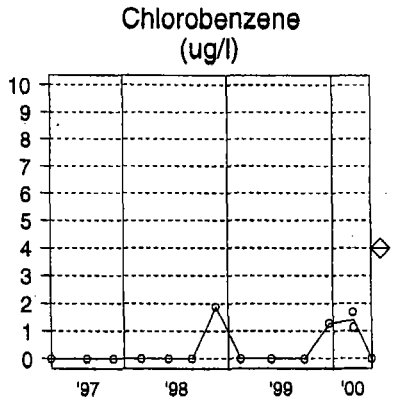
GW MONITORING
Bldg. 166

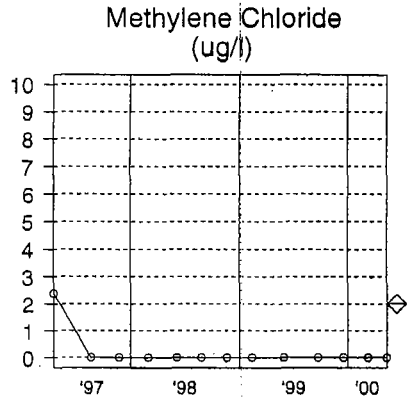
Well 1 of 1

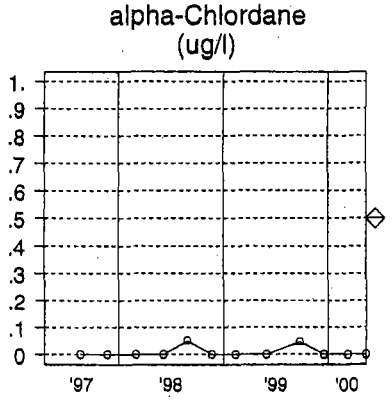
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

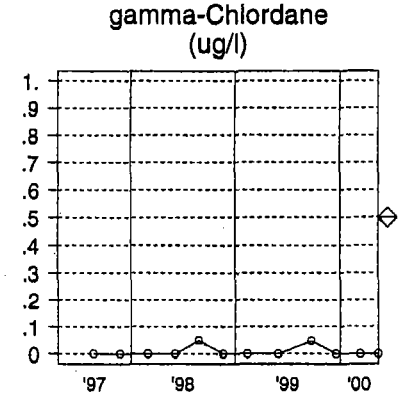


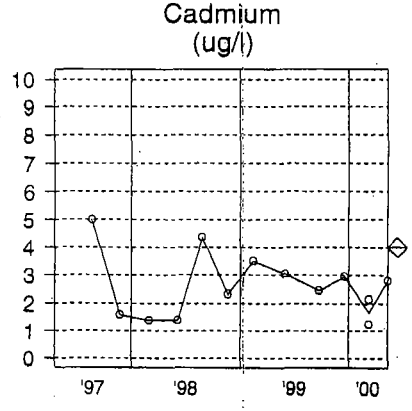


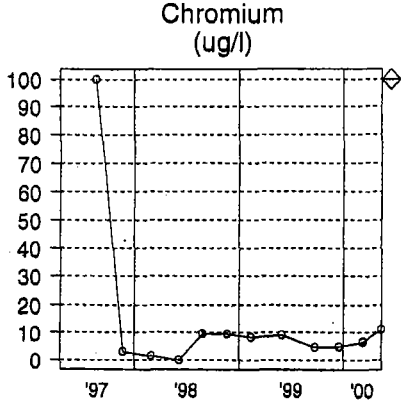


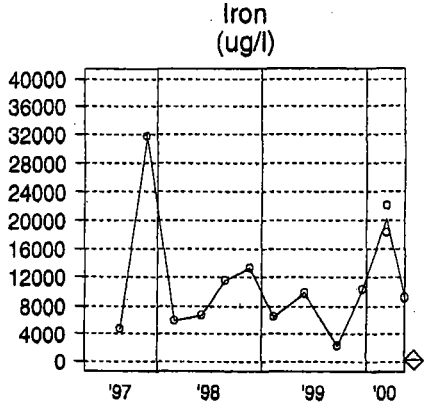












SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 05/09/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-20-2000 x:\mtech46\fm\166\gw\166.wsf

	Lab	Manganese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/1997	FMETL	-	-	-	2.10	2.51					2.51
08/20/1997	FMETL	336	26	83750	1.6	3.20					3.20
11/24/1997	FMETL	287	ND	200200	15.0	2.25					2.25
02/27/1998	FMETL	246	ND	29310	ND	1.00					1.00
06/02/1998	FMETL	235	ND	27800	2.3	1.97					1.97
08/24/1998	FMETL	397	ND	58200	12.4	3.42					3.42
11/20/1998	FMETL	669	ND	114000	4.23	3.99					3.99
02/09/1999	FMETL	413	ND	108000	ND	2.73					2.73
05/26/1999	FMETL	368	ND	72900	11.4	2.90					2.90
09/22/1999	FMETL	214	ND	46500	7.95	2.71					2.71
12/17/1999	FMETL	377	ND	60300	ND	2.57					2.57
03/06/2000	FMETL	603	ND	66500	4.21	2.61					2.61
03/06/2000D	FMETL	582	ND	59900	2.93	2.61					2.61
05/09/2000	FMETL	239	ND	62300	17.3	2.31					2.31

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 05/09/2000

NOTES:

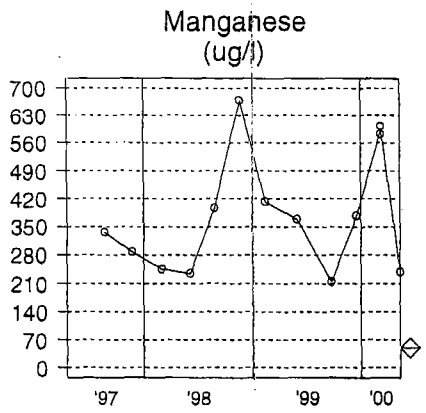
Page 2 of 2.

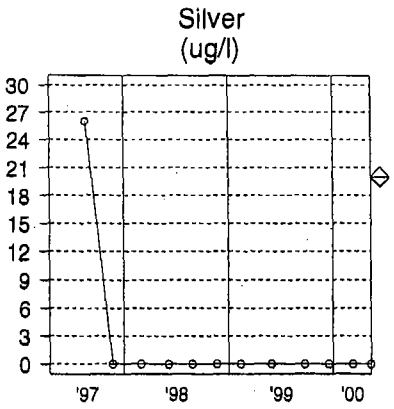
FORT MONMOUTH

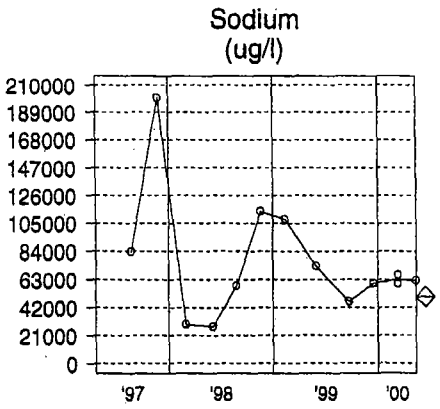
GW MONITORING
Bldg. 166

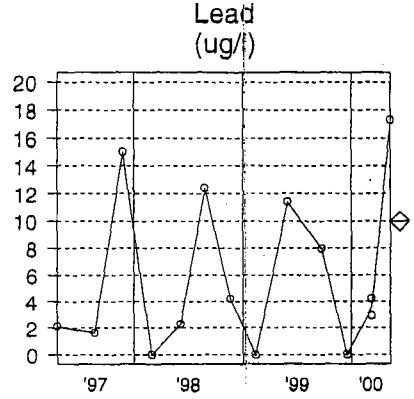
Well 1 of 1

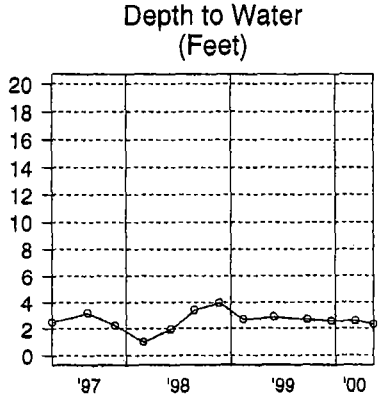
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 05/09/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-20-2000 x:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program/New Wells
Round I

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5636.04	0080MW02	29-43199	08/16/00
5636.05	0080MW03	29-43201	08/16/00
5636.06	0080MW04	29-43200	08/16/00
5636.07	0080MW05	29-43202	08/16/00

NJDEP Laboratory Certification # 13461

8-5-0

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon UST DERA
Phone #: 726223
(X)DERA ( )OMA ( )Other:_____
Project No:
Location: 80/166 New Wells Rnd 1
Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOTIS	TAL MTLS	Pest/PCB	BNA+25				Hnu Read	Remarks / Preservation Method
57436 .01	Trip	8/16/00	0735	AQ	2	✓							—	
.02	Field Blank		1130		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	80 mw02 *		1428		5	✓	✓	✓	✓				0.0	29-43199
.05	80 mw03		1410			✓	✓	✓	✓				0.0	29-43201
.06	80 mw04		1422			✓	✓	✓	✓				0.0	29-43200
.07	80 mw05		1434			✓	✓	✓	✓				0.0	29-43202

Analysis Parameters: HCL/HNO_3/4°C

Comments:
MW04 MTLS bottle turned yellow when sample added. cpm.
MW05 yellow color cpm

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/16/00 1535	J. Wright			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Shows T/FB/D w/ 80/166 Grdy same date. cpm
Tide: N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW02
NJDEP ID #: 29-43199
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/16/00
WEATHER: Sunny, hot.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.44 ft
DEPTH OF WELL: 12.35 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 9.91 ft
(9.91) X .65 X 3 =19.32
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 13:05
pH 5.03 su
TEMP 25.8 °C
DISSOLVED O_2 5.33 ppm
SPECIFIC CONDUCTIVITY 869 us/cm

PURGE END TIME: 14:27
pH 4.91 su
TEMP 25.6 °C
DISSOLVED O_2 3.77 ppm
SPECIFIC CONDUCTIVITY 865 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.48 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 19 gal

SAMPLE START TIME: 14:28
pH. 4.90 su
TEMP 25.6 °C
DISSOLVED O_2 3.71 ppm
SPECIFIC CONDUCTIVITY 865 us/cm

SAMPLE END TIME: 14:33

COMMENTS: Low drain down. Cloudy, Dup. Here.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW03
NJDEP ID #: 29-431201
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/16/00
WEATHER: Sunny, hot.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.81 ft
DEPTH OF WELL: 11:25 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.44 ft
(8.44) X .65 X 3 =16.45
GALLONS OF H2O TO BE PURGED: 16 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 13:00
pH 6.03 su
DISSOLVED O_2 5.76 ppm
TEMP 28.1 °C
SPECIFIC CONDUCTIVITY 584 us/cm

PURGE END TIME: 14:09
pH 5.98 su
DISSOLVED O_2 3.24 ppm
TEMP 27.3 °C
SPECIFIC CONDUCTIVITY 582 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.11 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 16 gal

SAMPLE START TIME: 14:10
pH. 5.98 su
DISSOLVED O_2 3.21 ppm
TEMP 27.3 °C
SPECIFIC CONDUCTIVITY 582 us/cm

SAMPLE END TIME: 14:15

COMMENTS: Slightly cloudy.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW04
NJDEP ID #: 29-431200
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/16/00
WEATHER: Sunny, hot.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.76 ft
DEPTH OF WELL: 12.08 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 9.32 ft
(9.32) X .65 X 3 =18.17
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 13:03
pH 5.57 su
TEMP 26.2 °C
DISSOLVED O_2 5.91 ppm
SPECIFIC CONDUCTIVITY 3371 us/cm

PURGE END TIME: 14:21
pH 5.42 su
TEMP 25.3 °C
DISSOLVED O_2 3.78 ppm
SPECIFIC CONDUCTIVITY 3260 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.96 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 14:22
pH. 5.41 su
TEMP 25.3 °C
DISSOLVED O_2 3.76 ppm
SPECIFIC CONDUCTIVITY 3260 us/cm

SAMPLE END TIME: 14:27

COMMENTS: High Specific conductivity.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW05
NJDEP ID #: 29-431202
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/16/00
WEATHER: Sunny, hot.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.26 ft
DEPTH OF WELL: 11.76 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 9.50 ft
(9.50) X .65 X 3 =18.52
GALLONS OF H2O TO BE PURGED: 19 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 13:08
pH 5.37 su
TEMP 23.7 °C
DISSOLVED O_2 5.71 ppm
SPECIFIC CONDUCTIVITY 4193 us/cm

PURGE END TIME: 14:30
pH 5.31 su
TEMP 22.5 °C
DISSOLVED O_2 3.45 ppm
SPECIFIC CONDUCTIVITY 4160 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 9.00 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 19 gal

SAMPLE START TIME: 14:34
pH. 5.31 su
TEMP 22.4 °C
DISSOLVED O_2 3.41 ppm
SPECIFIC CONDUCTIVITY 4160 us/cm

SAMPLE END TIME: 14:39

COMMENTS: Low drain down. High Specific Conductivity. Yellow color.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound Identified Below Detection Limit
B	: Compound is in Both Sample and Blank
D	: Results are from a Dilution of the Sample
U	: Compound Searched for but not Detected
E	: Compound Exceeds Calibration Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007917.D**	Sample Name	**Vblk237**
Operator	**Skelton**	Field ID	**Vblk237**
Date Acquired	**23 Aug 2000 6:58 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk237**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk237

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007917.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007930.D**	Sample Name	**5636.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**24 Aug 2000 3:38 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane	4.93	316449	8.09 ug/L	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.08	109205	8.64 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.40	101298	2.49 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Trip Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007930.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007931.D**	Sample Name	**5636.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**24 Aug 2000 4:18 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane	4.95	148557	3.63 ug/L	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.09	78488	5.94 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.41	97552	2.30 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007931.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007932.D	Sample Name	5636.03
Operator	Skelton	Field ID	Dupe
Date Acquired	24 Aug 2000 4:58 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Dupe**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007932.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007933.D**	Sample Name	**5636.04**
Operator	**Skelton**	Field ID	**0080MW02**
Date Acquired	**24 Aug 2000 5:38 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007933.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007934.D**	Sample Name	**5636.05**
Operator	**Skelton**	Field ID	**0080MW03**
Date Acquired	**24 Aug 2000 6:18 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007934.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007939.D	Sample Name	5636.06
Operator	Skelton	Field ID	0080MW04
Date Acquired	24 Aug 2000 11:50 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 0080MW04

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007939.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007940.D	Sample Name	5636.07
Operator	Skelton	Field ID	0080MW05
Date Acquired	24 Aug 2000 12:30 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW05**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.07

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007940.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04389.D**	Sample Name	**Sblk412**
Operator	**Bhaskar**	Misc Info	**Sblk412 A 000817**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04389.D**	Sample Name	**Sblk412**
Operator	**Bhaskar**	Misc Info	**Sblk412 A 000817**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Sblk412**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk412

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04389.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04397.D**	Sample Name	**5636.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04397.D**	Sample Name	**5636.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04397.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.88	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04398.D**	Sample Name	**5636.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04398.D**	Sample Name	**5636.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04398.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	7	J
2. 000105-60-2	Caprolactam	14.21	10	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04399.D**	Sample Name	**5636.04**
Operator	**Bhaskar**	Misc Info	**80MW02**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04399.D**	Sample Name	**5636.04**
Operator	**Bhaskar**	Misc Info	**80MW02**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04399.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	6	J
2.	unknown	14.20	10	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04400.D**	Sample Name	**5636.05**
Operator	**Bhaskar**	Misc Info	**80MW03**
Date Acquired	**18-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene	13.22	163394	4.34 ug/L	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene	17.61	79913	3.44 ug/L	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran	17.99	38207	1.09 ug/L	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04400.D**	Sample Name	**5636.05**
Operator	**Bhaskar**	Misc Info	**80MW03**
Date Acquired	**18-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene	18.78	28491	1.04 ug/L	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate	22.20	184244	3.90 ug/L	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04400.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/18/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	7	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04401.D**	Sample Name	**5636.06**
Operator	**Bhaskar**	Misc Info	**80MW04**
Date Acquired	**18-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04401.D**	Sample Name	**5636.06**
Operator	**Bhaskar**	Misc Info	**80MW04**
Date Acquired	**18-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate	22.21	151564	3.31 ug/L	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW04**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04401.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/18/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	8	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04402.D**	Sample Name	**5636.07**
Operator	**Bhaskar**	Misc Info	**80MW05**
Date Acquired	**18-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04402.D**	Sample Name	**5636.07**
Operator	**Bhaskar**	Misc Info	**80MW05**
Date Acquired	**18-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW05**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.07

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04402.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/18/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	7	J

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK564
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1	16.68	0.50	0.0036	**0.474**
Gamma-chlordane	1	16.73	0.50	0.0007	**0.199**
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW02
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1	16.68	0.50	0.0036	0.453
Gamma-chlordane	1	16.73	0.50	0.0007	0.197
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW03
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.06
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW04
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.07
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW05
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636
Sample Prepared: 08/29/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	ND	200	10.0
Antimony	08/30/00	3.86	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	ND	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	ND	NLE	20.0
Chromium	08/30/00	ND	100	0.5
Cobalt	08/30/00	ND	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	ND	300	10.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	20.0
Manganese	08/30/00	ND	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	ND	100	0.5
Potassium	08/30/00	ND	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	109	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	ND	NLE	1.0
Zinc	08/30/00	8.85	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.02
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	ND	200	10.0
Antimony	08/30/00	ND	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	ND	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	ND	NLE	20.0
Chromium	08/30/00	ND	100	0.5
Cobalt	08/30/00	ND	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	ND	300	10.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	20.0
Manganese	08/30/00	ND	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	ND	100	0.5
Potassium	08/30/00	ND	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	ND	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	ND	NLE	1.0
Zinc	08/30/00	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.03
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	640	200	10.0
Antimony	08/30/00	3.80	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	75.6	2000	0.5
Beryllium	08/30/00	0.671	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	15100	NLE	20.0
Chromium	08/30/00	1.11	100	0.5
Cobalt	08/30/00	12.6	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	831	300	10.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	7420	NLE	20.0
Manganese	08/30/00	456	50	0.5
Mercury	09/06/00	0.8	2	0.1
Nickel	08/30/00	5.61	100	0.5
Potassium	08/30/00	2860	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	76500	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	1.94	NLE	1.0
Zinc	08/30/00	55.3	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.04
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	1770	200	10.0
Antimony	08/30/00	5.60	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	82.2	2000	0.5
Beryllium	08/30/00	0.726	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	18100	NLE	20.0
Chromium	08/30/00	6.56	100	0.5
Cobalt	08/30/00	13.1	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	3420	300	10.0
Lead	08/30/00	2.64	10	2.0
Magnesium	08/30/00	8390	NLE	20.0
Manganese	08/30/00	479	50	0.5
Mercury	09/06/00	0.1	2	0.1
Nickel	08/30/00	6.66	100	0.5
Potassium	08/30/00	3240	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	116000	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	5.87	NLE	1.0
Zinc	08/30/00	80.7	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.05
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	292	200	10.0
Antimony	08/30/00	4.86	20	2.0
Arsenic	08/30/00	3.36	8	2.0
Barium	08/30/00	27.2	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	39200	NLE	20.0
Chromium	08/30/00	2.59	100	0.5
Cobalt	08/30/00	0.704	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	2890	300	10.0
Lead	08/30/00	1.70	10	2.0
Magnesium	08/30/00	8870	NLE	20.0
Manganese	08/30/00	87.8	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	ND	100	0.5
Potassium	08/30/00	9660	NLE	20.0
Selenium	08/30/00	5.71	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	27100	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	2.18	NLE	1.0
Zinc	08/30/00	17.2	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.06
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW04

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	4020	200	10.0
Antimony	08/30/00	4.04	20	2.0
Arsenic	08/30/00	6.28	8	2.0
Barium	08/30/00	269	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	213000	NLE	20.0
Chromium	08/30/00	25.2	100	0.5
Cobalt	08/30/00	34.6	NLE	0.5
Copper	08/30/00	359	1000	3.0
Iron	08/30/00	256000	300	10.0
Lead	08/30/00	70.4	10	2.0
Magnesium	08/30/00	129000	NLE	20.0
Manganese	08/30/00	2320	50	0.5
Mercury	09/06/00	0.3	2	0.1
Nickel	08/30/00	54.6	100	0.5
Potassium	08/30/00	10600	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	1500000	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	5.13	NLE	1.0
Zinc	08/30/00	666	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.07
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW05

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	5580	200	10.0
Antimony	08/30/00	7.72	20	2.0
Arsenic	08/30/00	11.2	8	2.0
Barium	08/30/00	257	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	239000	NLE	20.0
Chromium	08/30/00	36.5	100	0.5
Cobalt	08/30/00	15.0	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	82600	300	10.0
Lead	08/30/00	11.1	10	2.0
Magnesium	08/30/00	61300	NLE	20.0
Manganese	08/30/00	1020	50	0.5
Mercury	09/06/00	0.2	2	0.1
Nickel	08/30/00	25.9	100	0.5
Potassium	08/30/00	27700	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	3830000	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	19.9	NLE	1.0
Zinc	08/30/00	137	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5635.01	0080MW01	29-31774	08/16/00
5635.02	0166MW01	29-31773	08/16/00

NJDEP Laboratory Certification # 13461

9-12-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: T. Fallon / DERA UST
Phone #: X246223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: 80/166 wells 3rd Qrtr '00

Samplers Name / Company: Corey McCormack, TVS

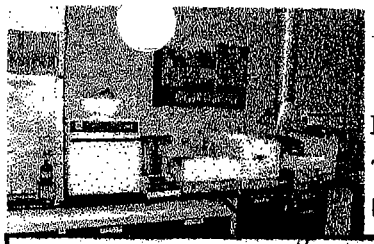
Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	Analysis Parameters: VOA+15	TAL MTLS	Pest/PCB	BNA+35				HNu Read	Comments: Remarks / Preservation Method
51635 .01	80 mw 01	8/16/00	1044	AQ	5	✓	✓	✓	✓				0.0	29-31774
↓ .02	166 mw 01	↓	1024	↓	5	✓	✓	✓	✓				0.0	29-31773

HCL/HNO_3/4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/16/00 1535				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks: Shares T/F B/D from 80/166 New wells same date. Tide: N/A



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon UST DERA
Phone #: 732 6223
(X)DERA ( )OMA ( )Other:
Project No:
Location: 80/166 New wells Rnd 1
Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOTIS	TAL MTLS	Pest/ABN	BNA+25				Hex Cr	Remarks / Preservation Method
57436 .01	Trip	8/16/06	0735	AQ	2	✓							—	
.02	Field Blank		1130		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	80 MW02 *		1428		5	✓	✓	✓	✓				0.0	29-43199
.05	80 MW03		1410			✓	✓	✓	✓				0.0	29-43201
.06	80 MW04		1422			✓	✓	✓	✓				0.0	29-43200
.07	80 MW05	↓	1434	↓	↓	✓	✓	✓	✓				0.0	29-43202

Comments: HCL/HNO_3/ 4°C

MW04 MTLs bottle turned yellow when sample added. cpm.
MW05 yellow color. cpm

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/16/06 1535				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Shes T/FB/D w/ 80/166 Qtly Same date. cpm
Tide: N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/16/00
WEATHER: Sunny, hot.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.91 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 1.80 ft
DEPTH OF WELL: 12.40 ft
DEPTH TO TOP OF SCREEN: 3.00 ft
HEIGHT OF WATER: 10.60 ft
(10.60) X .65 X 3 =20.67
GALLONS OF H2O TO BE PURGED: 21 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 09:12
pH 6.07 su
TEMP 29.3 °C
DISSOLVED O_2 5.21 ppm
SPECIFIC CONDUCTIVITY 148.3 us/cm

PURGE END TIME: 10:43
pH 5.99 su
TEMP 28.2 °C
DISSOLVED O_2 3.79 ppm
SPECIFIC CONDUCTIVITY 147.2 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.37 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 21 gal

SAMPLE START TIME: 10:44
pH 5.99 su
TEMP 28.1 °C
DISSOLVED O_2 3.77 ppm
SPECIFIC CONDUCTIVITY 147.1 us/cm

SAMPLE END TIME: 10:50

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/16/00
WEATHER: Sunny, hot.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.96 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 1.54 ft
DEPTH OF WELL: 7.90 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 6.36 ft
(6.36) X .65 X 3 =12.40
GALLONS OF H2O TO BE PURGED: 12 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 09:25
pH 6.23 su
TEMP 27.3 °C
DISSOLVED O_2 4.91 ppm
SPECIFIC CONDUCTIVITY 520 us/cm

PURGE END TIME: 10:17
pH 6.18 su
TEMP 26.7 °C
DISSOLVED O_2 3.98 ppm
SPECIFIC CONDUCTIVITY 520 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 1.61 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 12 gal

SAMPLE START TIME: 10:18
pH 6.18 su
TEMP 26.7 °C
DISSOLVED O_2 3.97 ppm
SPECIFIC CONDUCTIVITY 520 us/cm

SAMPLE END TIME: 10:24

COMMENTS: Low drain down, cloudy.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound Identified Below Detection Limit
B	: Compound is in Both Sample and Blank
D	: Results are from a Dilution of the Sample
U	: Compound Searched for but not Detected
E	: Compound Exceeds Calibration Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007917.D	Sample Name	Vblk237
Operator	Skelton	Field ID	Vblk237
Date Acquired	23 Aug 2000 6:58 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:23 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk237**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5635 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk237

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007917.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007930.D	Sample Name	5636.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	24 Aug 2000 3:38 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane	4.93	316449	8.09 ug/L	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.08	109205	8.64 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.40	101298	2.49 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 F

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Trip Blank**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007930.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007931.D**	Sample Name	**5636.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**24 Aug 2000 4:18 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane	4.95	148557	3.63 ug/L	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.09	78488	5.94 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.41	97552	2.30 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:34 F

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Field Blank**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007931.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007928.D	Sample Name	5635.01
Operator	Skelton	Field ID	0080MW01
Date Acquired	24 Aug 2000 2:18 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.52	388109	5.90 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	34.12	73524	1.81 ug/L	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:23 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5635 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5635.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007928.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	33.92	8	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007929.D**	Sample Name	**5635.02**
Operator	**Skelton**	Field ID	**0166MW01**
Date Acquired	**24 Aug 2000 2:58 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

8/31/00 2:23 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0166MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5635 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5635.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007929.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: not dec. Date Analyzed: 8/24/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04389.D**	Sample Name	**Sblk412**
Operator	**Bhaskar**	Misc Info	**Sblk412 A 000817**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04389.D**	Sample Name	**Sblk412**
Operator	**Bhaskar**	Misc Info	**Sblk412 A 000817**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Sblk412**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5635 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk412

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04389.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04397.D**	Sample Name	**5636.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04397.D**	Sample Name	**5636.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5636 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5636.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04397.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.88	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04395.D**	Sample Name	**5635.01**
Operator	**Bhaskar**	Misc Info	**80MW01**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene	14.89	77902	2.91 ug/L	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene	17.61	36397	1.54 ug/L	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran	17.99	42349	1.19 ug/L	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04395.D**	Sample Name	**5635.01**
Operator	**Bhaskar**	Misc Info	**80MW01**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene	18.78	55361	1.98 ug/L	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5635 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5635.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04395.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	8	J
2.	unknown	10.71	7	J
3. 027133-93-3	2,3-Dihydro-1-methylindene	12.65	8	JN
4. 000105-60-2	Caprolactam	14.23	8	JN
5. 000264-09-5	Benzocycloheptatriene	15.17	17	JN
6. 000581-42-0	Naphthalene, 2,6-dimethyl-	16.51	4	JN
7. 000581-40-8	Naphthalene, 2,3-dimethyl-	16.72	8	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04396.D**	Sample Name	**5635.02**
Operator	**Bhaskar**	Misc Info	**166MW01**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04396.D**	Sample Name	**5635.02**
Operator	**Bhaskar**	Misc Info	**166MW01**
Date Acquired	**17-Aug-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **166MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5635 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5635.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04396.D

Level: (low/med) LOW Date Received: 8/16/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/17/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/17/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.87	6	J
2. 000105-60-2	Caprolactam	14.21	8	JN

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK564
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5636.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/16/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 New wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5635.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	816/00
	Bldg. 173	**Extraction Date:**	8/18/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/31/00
Analysis:	EPA Method 608	**Location :**	80/166 Wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0080MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636
Sample Prepared: 08/29/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	ND	200	10.0
Antimony	08/30/00	3.86	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	ND	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	ND	NLE	20.0
Chromium	08/30/00	ND	100	0.5
Cobalt	08/30/00	ND	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	ND	300	10.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	20.0
Manganese	08/30/00	ND	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	ND	100	0.5
Potassium	08/30/00	ND	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	109	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	ND	NLE	1.0
Zinc	08/30/00	8.85	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5636.02
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	ND	200	10.0
Antimony	08/30/00	ND	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	ND	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	ND	NLE	20.0
Chromium	08/30/00	ND	100	0.5
Cobalt	08/30/00	ND	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	ND	300	10.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	20.0
Manganese	08/30/00	ND	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	ND	100	0.5
Potassium	08/30/00	ND	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	ND	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	ND	NLE	1.0
Zinc	08/30/00	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5635.01
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	267	200	10.0
Antimony	08/30/00	5.85	20	2.0
Arsenic	08/30/00	28.8	8	2.0
Barium	08/30/00	75.1	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	49800	NLE	20.0
Chromium	08/30/00	4.05	100	0.5
Cobalt	08/30/00	1.86	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	48600	300	10.0
Lead	08/30/00	2.63	10	2.0
Magnesium	08/30/00	11200	NLE	20.0
Manganese	08/30/00	444	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	9.42	100	0.5
Potassium	08/30/00	4590	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	331000	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	2.56	NLE	1.0
Zinc	08/30/00	29.0	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5635.02
Sample Received: 08/16/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	272	200	10.0
Antimony	08/30/00	3.91	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	19.1	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	1.21	4	0.5
Calcium	08/30/00	49200	NLE	20.0
Chromium	08/30/00	3.11	100	0.5
Cobalt	08/30/00	0.796	NLE	0.5
Copper	08/30/00	ND	1000	3.0
Iron	08/30/00	6260	300	10.0
Lead	08/30/00	5.12	10	2.0
Magnesium	08/30/00	13000	NLE	20.0
Manganese	08/30/00	204	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	08/30/00	3.72	100	0.5
Potassium	08/30/00	5000	NLE	20.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	3.0
Sodium	08/30/00	33600	50000	20.0
Thallium	08/30/00	ND	10	3.0
Vanadium	08/30/00	1.74	NLE	1.0
Zinc	08/30/00	161	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	Acetone	2-Butanone	Benzene	Chlorobenzene	4,4'-DDD	Cadmium	Chromium	Iron	Manganese	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	1	4	0.1	4	100	300	50	-
08/20/1997	FMETL	ND	ND	ND	ND	ND	8.0	148	7490	136	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	2.26	ND	ND	1.2	9062	553	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	3.26	ND	8.0	1.3	70680	456	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	3.9	ND	8409	117	V,S,P,M
08/24/1998	FMETL	10.27	3.32	ND	5.20	0.059	4.49	3.12	67400	605	V,S,P,M
11/20/1998	FMETL	ND	ND	ND	4.88	0.093	1.96	9.77	68800	647	V,S,P,M
02/09/1999	FMETL	ND	ND	1.26	5.71	0.090	24.6	8.00	17600	407	V,S,P,M
05/26/1999	FMETL	2.28	ND	1.31	5.58	0.148	3.64	5.70	56700	564	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	ND	3.31	4.65	10500	228	V,S,P,M
12/17/1999	FMETL	ND	ND	ND	1.95	0.04	6.69	2.82	28500	424	V,S,P,M
03/06/2000	FMETL	ND	ND	ND	3.83	ND	0.585	15.6	52900	529	V,S,P,M
05/09/2000	FMETL	ND	ND	ND	4.49	0.176	4.44	11.0	22200	318	V,S,P,M
08/16/2000	FMETL	ND	ND	ND	5.90	ND	ND	4.05	48600	444	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 08/16/2000

NOTES:

Page 1 of 2.

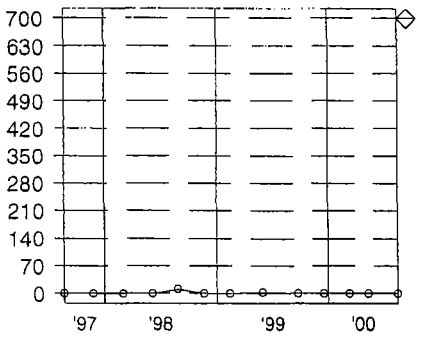
FORT MONMOUTH

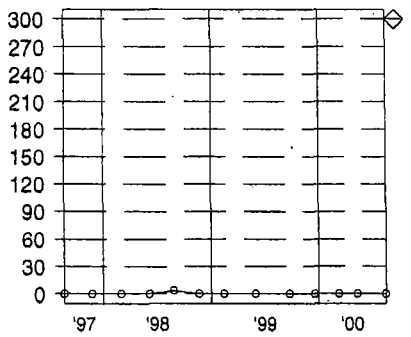
GW MONITORING
Bldg. 80

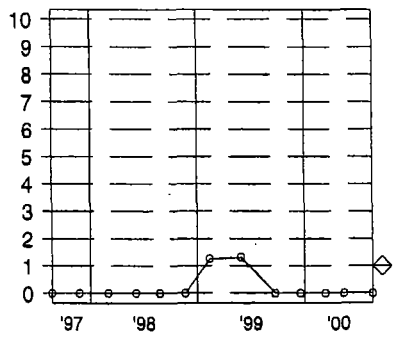
Source 1 of 1

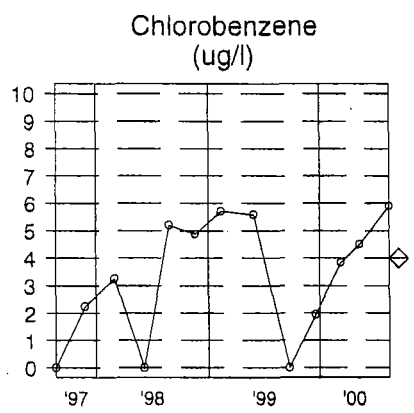


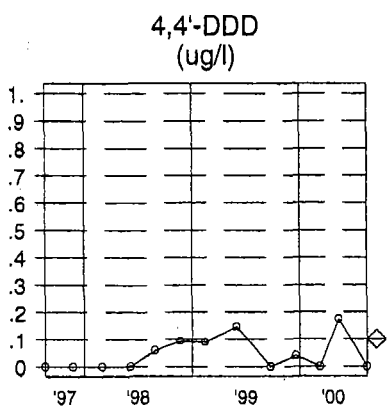
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

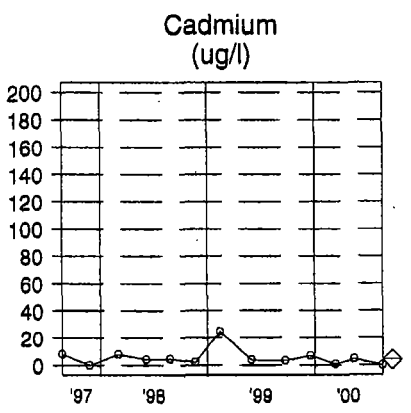


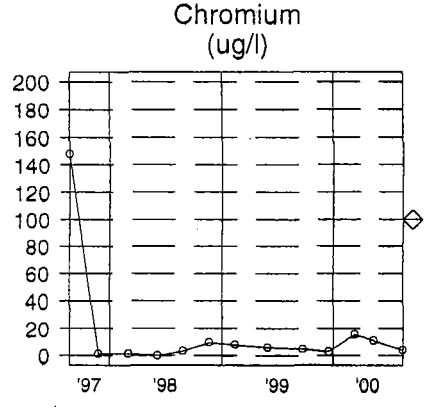


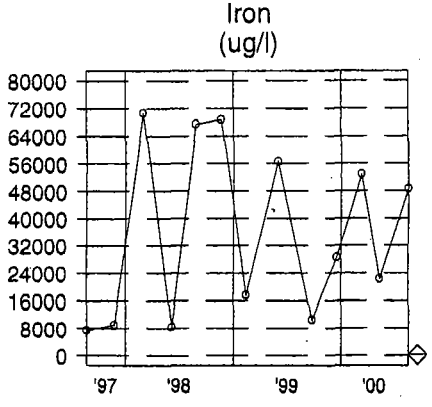


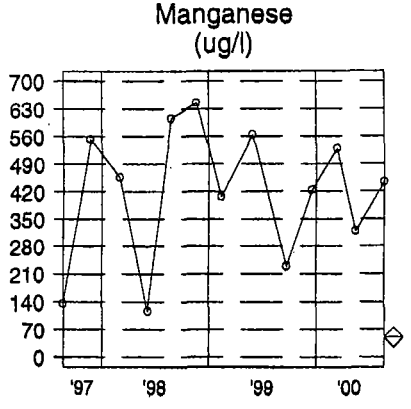












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 08/16/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-08-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	silver	Sodium	Lead	Acenaph thene	Dibenzo furan	Fluorene	2-Methyl naph thalene	1,2-Di chloro benzene	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	20	50000	10	400	NLE	300	NLE	600	-	-
08/20/1997	FMETL	8.0	110750	4.0	-	-	-	-	-	2.60	V,S,P,M
11/24/1997	FMETL	ND	97380	14	-	-	-	-	-	2.40	V,S,P,M
02/27/1998	FMETL	ND	279400	6.0	-	-	-	-	-	1.40	V,S,P,M
06/02/1998	FMETL	ND	147200	3.3	-	-	-	-	-	2.09	V,S,P,M
08/24/1998	FMETL	ND	533000	10.4	-	-	-	-	-	3.43	V,S,P,M
11/20/1998	FMETL	ND	530000	2.86	-	-	-	-	-	4.04	V,S,P,M
02/09/1999	FMETL	ND	306000	ND	-	-	-	-	-	3.84	V,S,P,M
05/26/1999	FMETL	ND	457000	5.34	-	-	-	-	-	2.61	V,S,P,M
09/22/1999	FMETL	ND	181000	5.15	-	-	-	-	-	2.73	V,S,P,M
12/17/1999	FMETL	ND	359000	ND	-	-	-	-	-	2.52	V,S,P,M
03/06/2000	FMETL	ND	315000	3.67	-	-	-	-	-	2.76	V,S,P,M
05/09/2000	FMETL	ND	648000	26.7	1.75	1.24	2.12	ND	-	2.36	V,S,P,M
08/16/2000	FMETL	ND	331000	2.63	1.54	1.19	1.98	2.91	1.81	1.80	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 08/16/2000

NOTES:

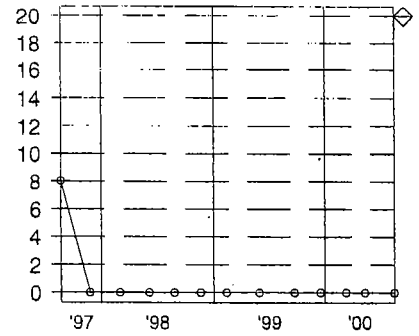
Page 2 of 2.

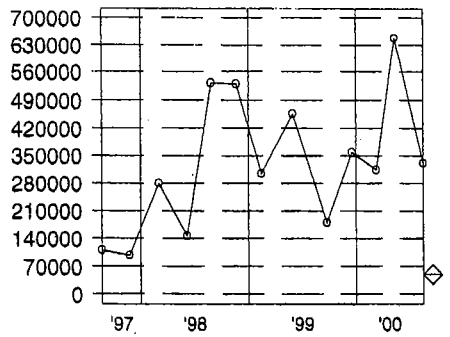
FORT MONMOUTH

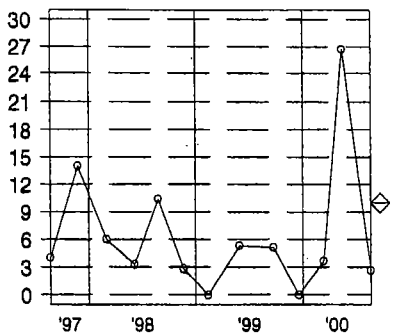
GW MONITORING
Bldg. 80

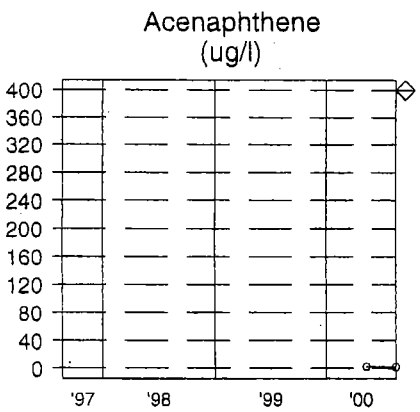
Source 1 of 1

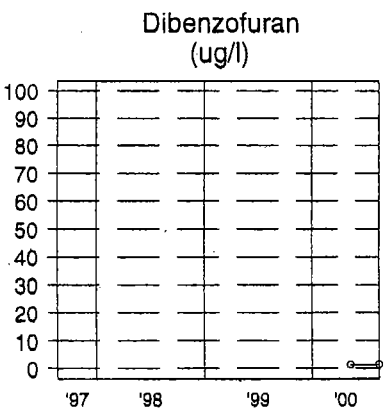
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

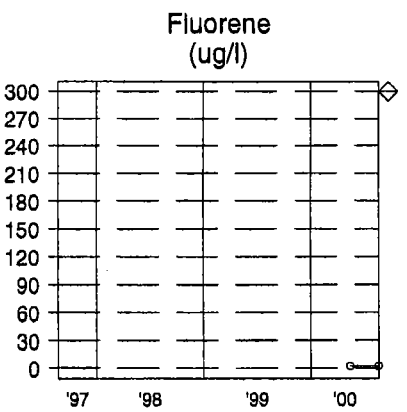


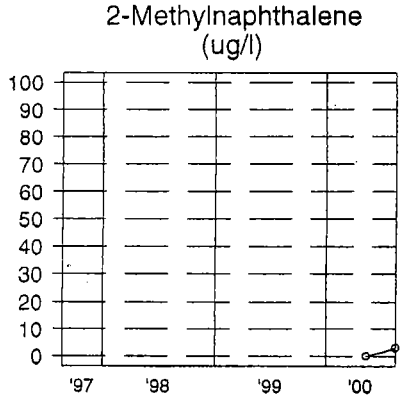


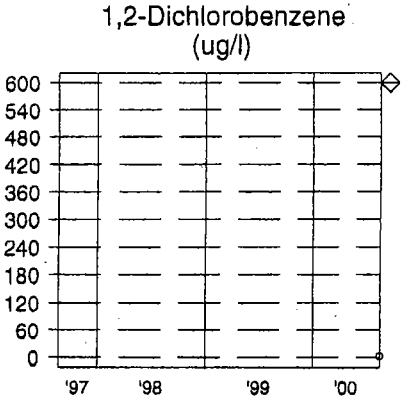


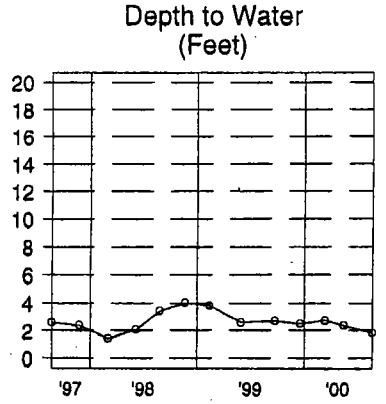












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 08/16/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-08-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chlorobenzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/1997	FMETL	ND	ND	ND	2.40	-	-	-	-	-	2.51
08/20/1997	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	3.20
11/24/1997	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	2.25
02/27/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	1.00
06/02/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	1.97
08/24/1998	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	3.42
11/20/1998	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	3.99
02/09/1999	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	2.73
05/26/1999	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	2.90
09/22/1999	FMETL	ND	ND	ND	ND	0.048	0.049	2.44	4.56	2310	2.71
12/17/1999	FMETL	ND	ND	1.28	ND	ND	ND	2.95	4.75	10300	2.57
03/06/2000	FMETL	ND	ND	1.68	ND	ND	ND	1.25	6.79	18300	2.61
03/06/2000D	FMETL	ND	ND	1.13	ND	ND	ND	2.14	6.46	22100	2.61
05/09/2000	FMETL	ND	ND	ND	ND	ND	ND	2.79	11.3	9300	2.31
08/16/2000	FMETL	ND	ND	ND	ND	ND	ND	1.21	3.11	6260	1.54

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 08/16/2000

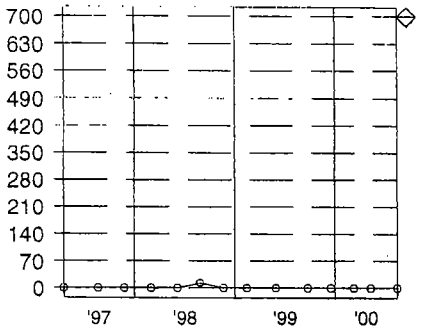
NOTES:

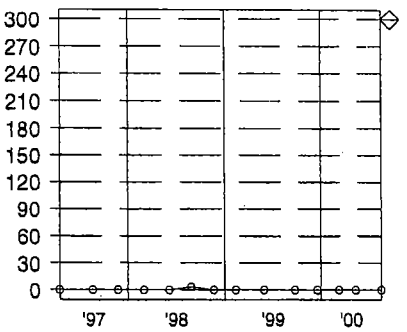
FORT MONMOUTH

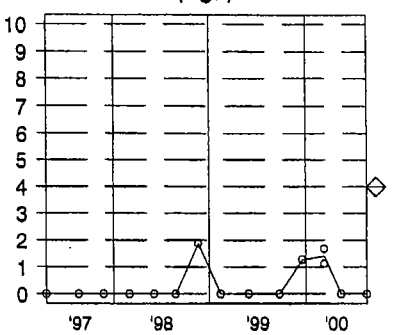
GW MONITORING
Bldg. 166

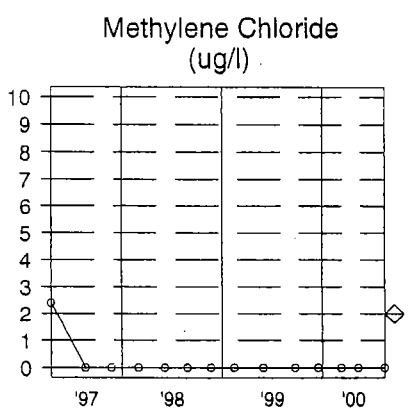
Source 1 of 1

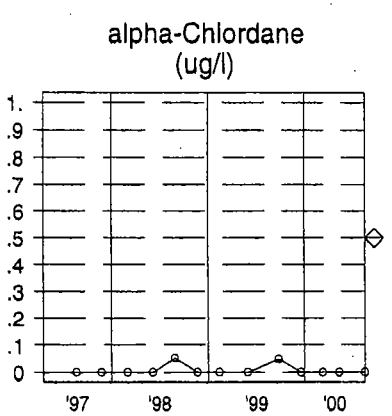
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

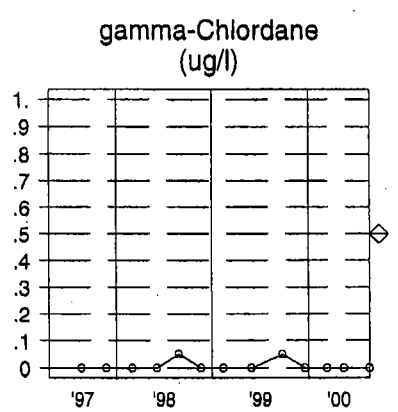


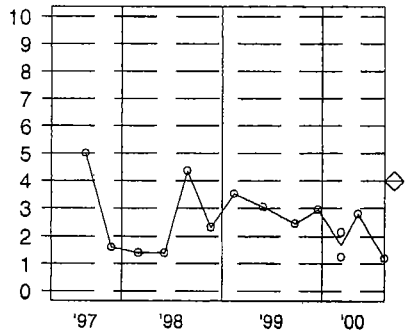


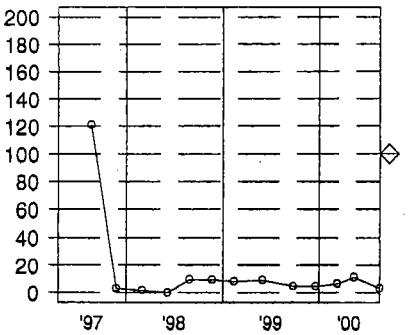


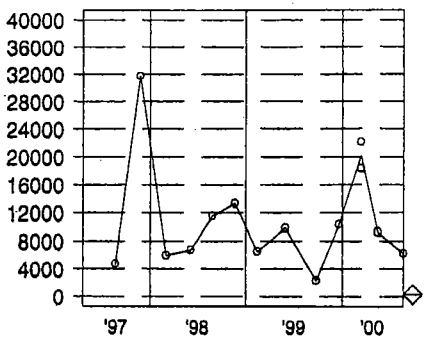












SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 08/16/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-08-2000 x:\mtech46\fm\166\gw\166.wsf

	Lab	Manganese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/1997	FMETL	-	-	-	2.10	2.51					2.51
08/20/1997	FMETL	336	26	83750	1.6	3.20					3.20
11/24/1997	FMETL	287	ND	200200	15.0	2.25					2.25
02/27/1998	FMETL	246	ND	29310	ND	1.00					1.00
06/02/1998	FMETL	235	ND	27800	2.3	1.97					1.97
08/24/1998	FMETL	397	ND	58200	12.4	3.42					3.42
11/20/1998	FMETL	669	ND	114000	4.23	3.99					3.99
02/09/1999	FMETL	413	ND	108000	ND	2.73					2.73
05/26/1999	FMETL	368	ND	72900	11.4	2.90					2.90
09/22/1999	FMETL	214	ND	46500	7.95	2.71					2.71
12/17/1999	FMETL	377	ND	60300	ND	2.57					2.57
03/06/2000	FMETL	603	ND	66500	4.21	2.61					2.61
03/06/2000D	FMETL	582	ND	59900	2.93	2.61					2.61
05/09/2000	FMETL	239	ND	62300	17.3	2.31					2.31
08/16/2000	FMETL	204	ND	33600	5.12	1.54					1.54

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 08/16/2000

NOTES:

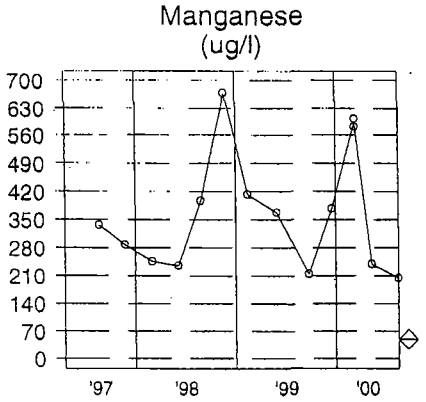
Page 2 of 2.

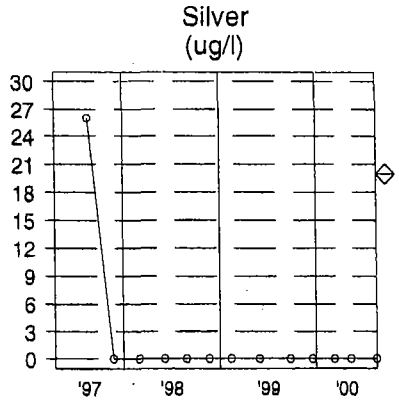
FORT MONMOUTH

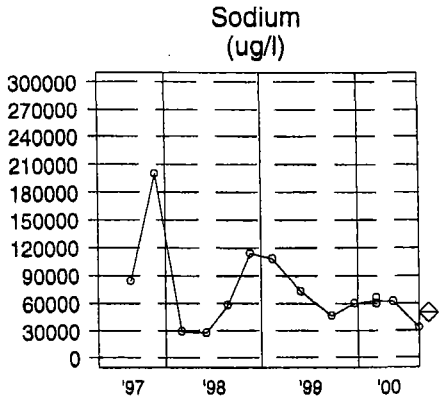
GW MONITORING
Bldg. 166

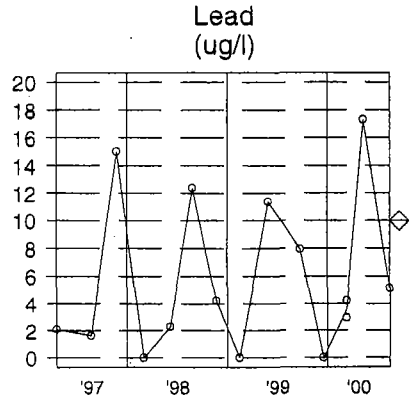
Source 1 of 1

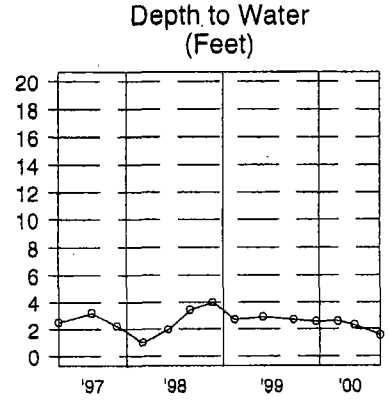
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 08/16/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

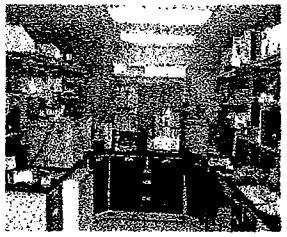
Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-08-2000 x:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program/New Wells
Round II

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5675.04	0080MW02	29-43199	08/30/00
5675.05	0080MW03	29-43201	08/30/00
5675.06	0080MW04	29-43200	08/30/00
5675.07	0080MW05	29-43202	08/30/00

NJDEP Laboratory Certification # 13461

9-18-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: X26223
(X)DERA ( )OMA ( )Other:

Project No:
Location: 80/166 NW Rnd 2

Samplers Name / Company: Corey McCormack, TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL MTLS	Pest / PCB	BNA +35				Hnu Read	Comments: HCl/HNO3/C4°C / Remarks / Preservation Method
J6175.01	Trip	8/30/00	0645	AQ	2	✓							—	
.02	Field Blank		0730		5	✓	✓	✓	✓				—	
.03	Dup		—		5	✓	✓	✓	✓				—	
.04	0080mw02		0822		5	✓	✓	✓	✓				0.0	29-43199
.05	0080mw03		0815			✓	✓	✓	✓				0.0	29-43201
.06	0080mw04		0835			✓	✓	✓	✓				0.0	29-43200
.07	0080mw05		0832			✓	✓	✓	✓				0.0	29-43202
														80MW05 - Turned bleach in bottle again. Foam at tubing discharge point. cpm
														80MW04 - seemed normal this time. cpm

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/30/00 1300	J. Allegretti			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, (X)Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Tide: N/A

Shows T/FB/Dp w/ 2200 sm data cpm

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW02
NJDEP ID #: 29-43199
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/30/00
WEATHER: Overcast, rain.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.22 ft
DEPTH OF WELL: 12.35 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 9.13 ft
(9.13) X .65 X 3 =17.80
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 07:04
pH 5.29 su
TEMP 21.7 °C
DISSOLVED O_2 6.11 ppm
SPECIFIC CONDUCTIVITY 278 us/cm

PURGE END TIME: 08:22
pH 5.21 su
TEMP 20.3 °C
DISSOLVED O_2 3.43 ppm
SPECIFIC CONDUCTIVITY 282 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.26 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 08:22
pH. 5.19 su
TEMP 20.4 °C
DISSOLVED O_2 3.41 ppm
SPECIFIC CONDUCTIVITY 283 us/cm

SAMPLE END TIME: 08:27

COMMENTS: Low drain down.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW03
NJDEP ID #: 29-431201
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/30/00
WEATHER: Overcast, rain.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.37 ft
DEPTH OF WELL: 11:25 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 7.88 ft
(7.88) X .65 X 3 =15.36
GALLONS OF H2O TO BE PURGED: 15 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 07:09
pH 6.07 su — TEMP 21.4 °C
DISSOLVED O_2 5.77 ppm — SPECIFIC CONDUCTIVITY 227 us/cm

PURGE END TIME: 08:14
pH 5.97 su — TEMP 20.1 °C
DISSOLVED O_2 3.17 ppm — SPECIFIC CONDUCTIVITY 231 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.21 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 15 gal

SAMPLE START TIME: 08:15
pH. 5.97 su — TEMP 20.2 °C
DISSOLVED O_2 3.09 ppm — SPECIFIC CONDUCTIVITY 230 us/cm

SAMPLE END TIME: 08:20

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW04
NJDEP ID #: 29-431200
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/30/00
WEATHER: Overcast, rain.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.18 ft
DEPTH OF WELL: 12.08 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.90 ft
(8.90) X .65 X 3 =17.35
GALLONS OF H2O TO BE PURGED: 17 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 07:20
pH 5.63 su — TEMP 21.2 °C
DISSOLVED O_2 5.87 ppm — SPECIFIC CONDUCTIVITY 1000 us/cm

PURGE END TIME: 08:34
pH 5.57 su — TEMP 20.5 °C
DISSOLVED O_2 3.19 ppm — SPECIFIC CONDUCTIVITY 1013 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.69 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 17 gal

SAMPLE START TIME: 08:35
pH. 5.57 su — TEMP 20.6 °C
DISSOLVED O_2 3.17 ppm — SPECIFIC CONDUCTIVITY 1014 us/cm

SAMPLE END TIME: 08:42

COMMENTS: High Specific conductivity.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW05
NJDEP ID #: 29-431202
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/30/00
WEATHER: Overcast, rain.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.05 ft
DEPTH OF WELL: 11.76 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.71 ft
(8.71) X .65 X 3 =16.98
GALLONS OF H2O TO BE PURGED: 17 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 07:17
pH 4.71 su — TEMP 21.3 °C
DISSOLVED O_2 5.98 ppm — SPECIFIC CONDUCTIVITY 2217 us/cm

PURGE END TIME: 08:31
pH 3.80 su — TEMP 19.0 °C
DISSOLVED O_2 3.22 ppm — SPECIFIC CONDUCTIVITY 2231 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 10.98 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 17 gal

SAMPLE START TIME: 08:32
pH. 3.79 su — TEMP 19.0 °C
DISSOLVED O_2 3.21 ppm — SPECIFIC CONDUCTIVITY 2230 us/cm

SAMPLE END TIME: 08:34

COMMENTS: Low drain down into screen. White foam at discharge hose end. Very low pH. Sample turned cloudy, black in metals bottle.

VOLATILE ORGANICS

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound identified below detection limit
B	: Compound in both sample and blank
D	: Results from dilution of sample
U	: Compound searched for but not detected
E	: Compound exceeds calibration limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC003704.D**	Sample Name	**Vblk105**
Operator	**Skelton**	Field ID	**Vblk105**
Date Aquired	**8-Sep-00**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk105**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk105

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003704.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/8/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC003720.D**	Sample Name	**5675.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**9-Sep-00**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.26	244554	2.66 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5675.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003720.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC003721.D**	Sample Name	**5675.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**9-Sep-00**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.26	251500	2.69 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 5675.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003721.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. _____ Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC003722.D**	Sample Name	**5675.03**
Operator	**Skelton**	Field ID	**Dupe**
Date Aquired	**9-Sep-00**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5675.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003722.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC003723.D	Sample Name	5675.04
Operator	Skelton	Field ID	0080MW02
Date Aquired	9-Sep-00	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0080MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5675.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003723.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC003724.D	Sample Name	5675.05
Operator	Skelton	Field ID	0080MW03
Date Aquired	9-Sep-00	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	8.96	288561	16.10 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	15.28	137283	8.15 ug/L	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0080MW03

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5675.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003724.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC003725.D	Sample Name	5675.06
Operator	Skelton	Field ID	0080MW04
Date Aquired	9-Sep-00	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0080MW04**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5675.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003725.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC003726.D	Sample Name	5675.07
Operator	Skelton	Field ID	0080MW05
Date Aquired	9-Sep-00	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

9/12/00 11:45 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 0080MW05

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5675.07

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC003726.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: not dec. Date Analyzed: 9/9/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04505.D**	Sample Name	**Sblk417**
Operator	**Bhaskar**	Misc Info	**Sblk417 A 000905**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04505.D**	Sample Name	**Sblk417**
Operator	**Bhaskar**	Misc Info	**Sblk417 A 000905**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Sblk417**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: Sblk417

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04505.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04509.D**	Sample Name	**5675.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04509.D**	Sample Name	**5675.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	30.63	84128	2.21 ug/L	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5675.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04509.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04510.D**	Sample Name	**5675.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04510.D**	Sample Name	**5675.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5675.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04510.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.65	5	J
2. 000105-60-2	Caprolactam	15.70	11	JN
3.	unknown	32.87	40	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04511.D**	Sample Name	**5675.04**
Operator	**Bhaskar**	Misc Info	**80MW02**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04511.D**	Sample Name	**5675.04**
Operator	**Bhaskar**	Misc Info	**80MW02**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **80MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5675.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04511.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.64	5	J
2. 000105-60-2	Caprolactam	15.70	12	JN
3.	unknown	32.80	40	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04512.D**	Sample Name	**5675.05**
Operator	**Bhaskar**	Misc Info	**80MW03**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol	13.95	18652	1.00 ug/L	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene	14.37	1493544	24.11 ug/L	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene	19.59	265174	7.89 ug/L	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran	20.05	120390	2.41 ug/L	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04512.D**	Sample Name	**5675.05**
Operator	**Bhaskar**	Misc Info	**80MW03**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene	20.95	87021	2.61 ug/L	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **80MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5675.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04512.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.64	4	J
2. 000496-11-7	Indane	10.80	8	JN
3. 000090-12-0	Naphthalene, 1-methyl-	16.84	5	JN
4. 000086-74-8	Carbazole	23.97	4	JN
5. 002906-55-0	Hexadecanoic acid, 9-octadeceny	32.79	40	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04513.D**	Sample Name	**5675.06**
Operator	**Bhaskar**	Misc Info	**80MW04**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04513.D**	Sample Name	**5675.06**
Operator	**Bhaskar**	Misc Info	**80MW04**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **80MW04**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5675.06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04513.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.64	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04514.D**	Sample Name	**5675.07**
Operator	**Bhaskar**	Misc Info	**80MW05**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.79	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04514.D**	Sample Name	**5675.07**
Operator	**Bhaskar**	Misc Info	**80MW05**
Date Acquired	**14-Sep-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **80MW05**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5675 Location: 80/166 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5675.07

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04514.D

Level: (low/med) LOW Date Received: 8/30/00

% Moisture: decanted: (Y/N) N Date Extracted: 9/5/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.64	10	J

PEST/PCB's

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK576
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5675.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/30/00
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	80/166 NW Rnd 2
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5675.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/30/00
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	80/166 NW Rnd 2
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1	16.73	0.50	0.0036	**0.977**
Gamma-chlordane	1	16.39	0.50	0.0007	**0.388**
Toxaphene	1		3.00	0.1517	**ND**
Arochlor 1016	1		0.50	0.0683	**ND**
Arochlor 1221	1		0.50	0.0666	**ND**
Arochlor 1232	1		0.50	0.0648	**ND**
Arochlor 1242	1		0.50	0.0485	**ND**
Arochlor 1248	1		0.50	0.0544	**ND**
Arochlor 1254	1		0.50	0.0608	**ND**
Arochlor 1260	1		0.50	0.0732	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5675.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/30/00
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	80/166 NW Rnd 2
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW02
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1	16.73	0.50	0.0036	**0.779**
Gamma-chlordane	1	16.73	0.50	0.0007	**0.303**
Toxaphene	1		3.00	0.1517	**ND**
Arochlor 1016	1		0.50	0.0683	**ND**
Arochlor 1221	1		0.50	0.0666	**ND**
Arochlor 1232	1		0.50	0.0648	**ND**
Arochlor 1242	1		0.50	0.0485	**ND**
Arochlor 1248	1		0.50	0.0544	**ND**
Arochlor 1254	1		0.50	0.0608	**ND**
Arochlor 1260	1		0.50	0.0732	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5675.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/30/00
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	80/166 NW Rnd 2
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW03
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5675.06
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/30/00
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	80/166 NW Rnd 2
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW04
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5675.07
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/30/00
	Bldg. 173	**Extraction Date:**	9/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/7/00
Analysis:	EPA Method 608	**Location :**	80/166 NW Rnd 2
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW05
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675
Sample Prepared: 09/06/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	30	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	ND	8	2.0
Barium	09/07/00	ND	2000	0.5
Beryllium	09/07/00	ND	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	120	NLE	20.0
Chromium	09/07/00	ND	100	0.5
Cobalt	09/07/00	ND	NLE	0.5
Copper	09/07/00	ND	1000	2.0
Iron	09/07/00	15.0	300	10.0
Lead	09/07/00	ND	10	1.0
Magnesium	09/07/00	ND	NLE	10.0
Manganese	09/07/00	ND	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	09/07/00	ND	100	1.0
Potassium	09/07/00	ND	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	ND	20	1.0
Sodium	09/07/00	890	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	ND	NLE	0.5
Zinc	09/07/00	19.0	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675.02
Sample Received: 08/30/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	ND	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	ND	8	2.0
Barium	09/07/00	ND	2000	0.5
Beryllium	09/07/00	ND	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	ND	NLE	20.0
Chromium	09/07/00	ND	100	0.5
Cobalt	09/07/00	ND	NLE	0.5
Copper	09/07/00	ND	1000	2.0
Iron	09/07/00	ND	300	10.0
Lead	09/07/00	ND	10	1.0
Magnesium	09/07/00	ND	NLE	10.0
Manganese	09/07/00	ND	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	09/07/00	ND	100	1.0
Potassium	09/07/00	ND	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	ND	20	1.0
Sodium	09/07/00	ND	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	ND	NLE	0.5
Zinc	09/07/00	8.47	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675.03
Sample Received: 08/30/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	653	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	ND	8	2.0
Barium	09/07/00	60.4	2000	0.5
Beryllium	09/07/00	0.711	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	13900	NLE	20.0
Chromium	09/07/00	ND	100	0.5
Cobalt	09/07/00	11.4	NLE	0.5
Copper	09/07/00	52.1	1000	2.0
Iron	09/07/00	709	300	10.0
Lead	09/07/00	1.55	10	1.0
Magnesium	09/07/00	6580	NLE	10.0
Manganese	09/07/00	415	50	0.5
Mercury	09/06/00	ND	2	0.1
Nickel	09/07/00	ND	100	1.0
Potassium	09/07/00	2480	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	1.47	20	1.0
Sodium	09/07/00	180000	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	ND	NLE	0.5
Zinc	09/07/00	101	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675.04
Sample Received: 08/30/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	544	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	ND	8	2.0
Barium	09/07/00	59.6	2000	0.5
Beryllium	09/07/00	0.733	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	13800	NLE	20.0
Chromium	09/07/00	ND	100	0.5
Cobalt	09/07/00	11.4	NLE	0.5
Copper	09/07/00	ND	1000	2.0
Iron	09/07/00	578	300	10.0
Lead	09/07/00	1.55	10	1.0
Magnesium	09/07/00	6640	NLE	10.0
Manganese	09/07/00	421	50	0.5
Mercury	09/06/00	0.1	2	0.1
Nickel	09/07/00	ND	100	1.0
Potassium	09/07/00	2440	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	ND	20	1.0
Sodium	09/07/00	178000	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	ND	NLE	0.5
Zinc	09/07/00	70.2	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675.05
Sample Received: 08/30/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	217	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	7.06	8	2.0
Barium	09/07/00	22.3	2000	0.5
Beryllium	09/07/00	ND	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	27600	NLE	20.0
Chromium	09/07/00	ND	100	0.5
Cobalt	09/07/00	0.969	NLE	0.5
Copper	09/07/00	ND	1000	2.0
Iron	09/07/00	12800	300	10.0
Lead	09/07/00	ND	10	1.0
Magnesium	09/07/00	7240	NLE	10.0
Manganese	09/07/00	93.1	50	0.5
Mercury	09/06/00	0.1	2	0.1
Nickel	09/07/00	ND	100	1.0
Potassium	09/07/00	5010	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	ND	20	1.0
Sodium	09/07/00	35000	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	ND	NLE	0.5
Zinc	09/07/00	37.9	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675.06
Sample Received: 08/30/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW04

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	1240	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	5.04	8	2.0
Barium	09/07/00	186	2000	0.5
Beryllium	09/07/00	ND	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	226000	NLE	20.0
Chromium	09/07/00	14.2	100	0.5
Cobalt	09/07/00	14.0	NLE	0.5
Copper	09/07/00	ND	1000	2.0
Iron	09/07/00	297000	300	10.0
Lead	09/07/00	ND	10	1.0
Magnesium	09/07/00	132000	NLE	10.0
Manganese	09/07/00	2130	50	0.5
Mercury	09/06/00	0.1	2	0.1
Nickel	09/07/00	3.61	100	1.0
Potassium	09/07/00	8450	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	2.35	20	1.0
Sodium	09/07/00	1820000	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	0.727	NLE	0.5
Zinc	09/07/00	90.6	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5675.07
Sample Received: 08/30/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW05

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/07/00	97500	200	10.0
Antimony	09/07/00	ND	20	2.0
Arsenic	09/07/00	71.6	8	2.0
Barium	09/07/00	1220	2000	0.5
Beryllium	09/07/00	14.3	20	0.5
Cadmium	09/07/00	ND	4	0.5
Calcium	09/07/00	978000	NLE	20.0
Chromium	09/07/00	75.7	100	0.5
Cobalt	09/07/00	41.9	NLE	0.5
Copper	09/07/00	ND	1000	2.0
Iron	09/07/00	571000	300	10.0
Lead	09/07/00	84.1	10	1.0
Magnesium	09/07/00	386000	NLE	10.0
Manganese	09/07/00	2980	50	0.5
Mercury	09/06/00	0.1	2	0.1
Nickel	09/07/00	73.3	100	1.0
Potassium	09/07/00	119000	NLE	40.0
Selenium	09/07/00	ND	50	3.0
Silver	09/07/00	ND	20	1.0
Sodium	09/07/00	11700000	50000	20.0
Thallium	09/07/00	ND	10	2.0
Vanadium	09/07/00	84.0	NLE	0.5
Zinc	09/07/00	378	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program
Low Flow/Round I

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5694.04	0080MW01	29-31774	09/07/00
5694.03	0080MW02	29-43199	09/07/00
5691.05	0080MW03	29-43201	09/06/00
5691.03	0080MW04	29-43200	09/06/00
5691.04	0080MW05	29-43202	09/06/00
5694.05	0166MW01	29-31773	09/07/00

NJDEP Laboratory Certification # 13461

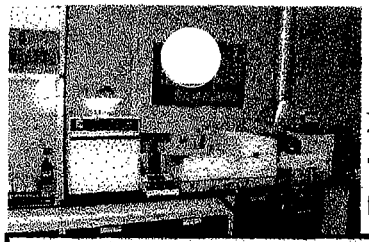
10-03-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: JFALLON | **Project No:** LOW FLOW | **Phone #:** X26223 | **Location:** 80 | (✓)DERA ( )OMA ( )Other:_____

Samplers Name / Company: David Sharp - TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	TAL METALS	PEST							Comments: Remarks / Preservation Method
5691. .01	FB	9/6	0900	AQ	2	✓	✓							HNO_3
.02	FD	"	0955	AQ	2	✓	✓							"
/ .03	80MW04	"	0950	AQ	2	✓	✓							"
.04	80MW05	"	1250	AQ	2	✓	✓							"
.05	80MW03	"	1450	AQ	2	✓	✓							"

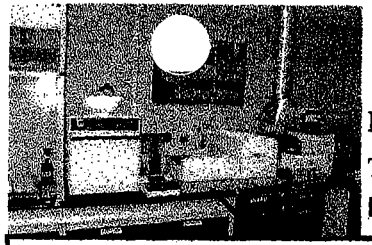
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	9/6/00 1530	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks:

print legibly

Coc.xls8/8/00



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: JFALLON
Phone #: X26223
(✓)DERA ( )OMA ( )Other:_____

Project No: LOW FLOW
Location: 80/166

Samplers Name / Company: David Sharp - TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	TAL METALS	PEST							Comments: Remarks / Preservation Method
5694 .01	FB	9/7/00	0915	AQ	2	✓	✓							HNO_3
.02	FD	"	—	AQ	2	✓	✓							"
.03	80MW02	"	1000	AQ	2	✓	✓							"
.04	80MW01	"	1140	AQ	2	✓	✓							"
.05	166MW01	"	1350	AQ	2	✓	✓							"
.06														

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	9/7/00 14:14	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks:

print legibly

Coc.xls8/16/00

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW01
NJDEP ID#29-31774
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 09/07/00
WEATHER: Sunny
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 2.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp.: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.10 ft
Before Purge Start: 3.10 ft **Previous Day: 3.15 ft** **After Sampling: 3.20 ft**
DEPTH OF WELL: 12.26 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE:10 ft
TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: ft
( ) X .65 / X 3 =
(.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALIC/ 2" REDIFLO 2 GRUNDPHOS SUBMERSIBLE PUMP
Purged at 250 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 10:55
pH 4.76 su
TEMP 22.99 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1057 ms/cm

PURGE END TIME: 11:41
pH 4.64 su
TEMP 23.01 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 932.5 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 3.20 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 11:36
pH 4.65 su
TEMP 22.99 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 930.5 ms/cm

SAMPLE END TIME: 11:40
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

MW:0080MW01
NJDEP ID#: 29-31774
DATE: 9/07/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
10:55	4.76	22.99	1017	1057	0.00	16.7	3.1	250	
11:00	4.7	22.86	966.8	1008	0.00	11.5	3.1	250	
11:05	4.68	23.14	956.3	991.5	0.00	7.25	3.1	250	
11:10	4.66	23.23	953.2	986.6	0.00	6.34	3.1	250	
11:15	4.66	23.21	945.8	979.2	0.00	5.16	3.1	250	
11:20	4.65	23.11	931.1	966	0.00	4.99	3.1	250	
11:25	4.65	22.95	918.5	956	0.00	4.33	3.1	250	
11:30	4.64	23.01	897.1	932.5	0.00	4.55	3.1	250	
11:35	4.65	22.99	894.6	930.5	0.00	4.32	3.1	250	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1055	16.70	3.1	250
1100	11.50	3.1	250
1105	7.25	3.1	250
1110	6.34	3.1	250
1115	5.16	3.1	250
1120	4.99	3.1	250
1125	4.33	3.1	250
1130	4.55	3.1	250
1135	4.32	3.1	250

80mw01

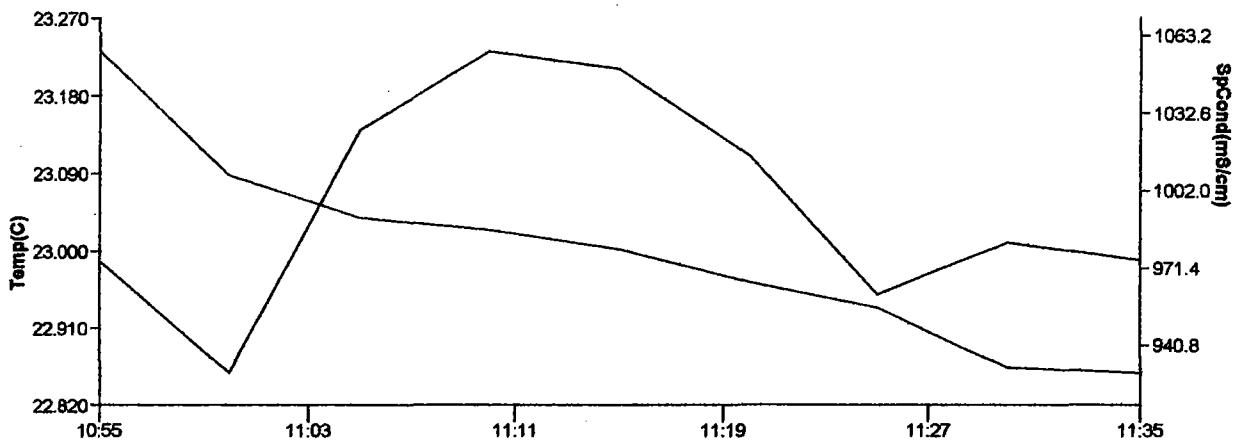
80MW01 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

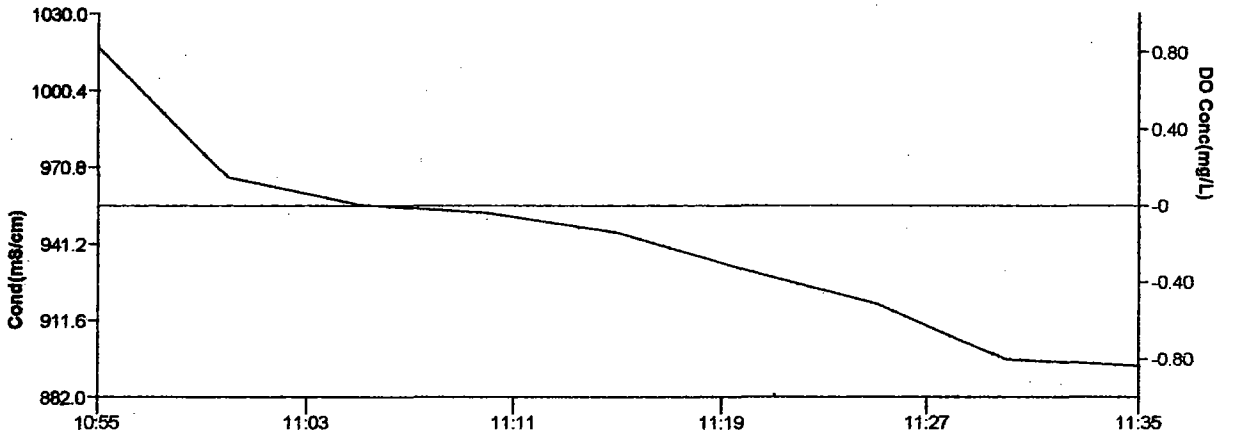
From 09/07/00 10:55 to 09/07/00 11:35
Number of samples: 9

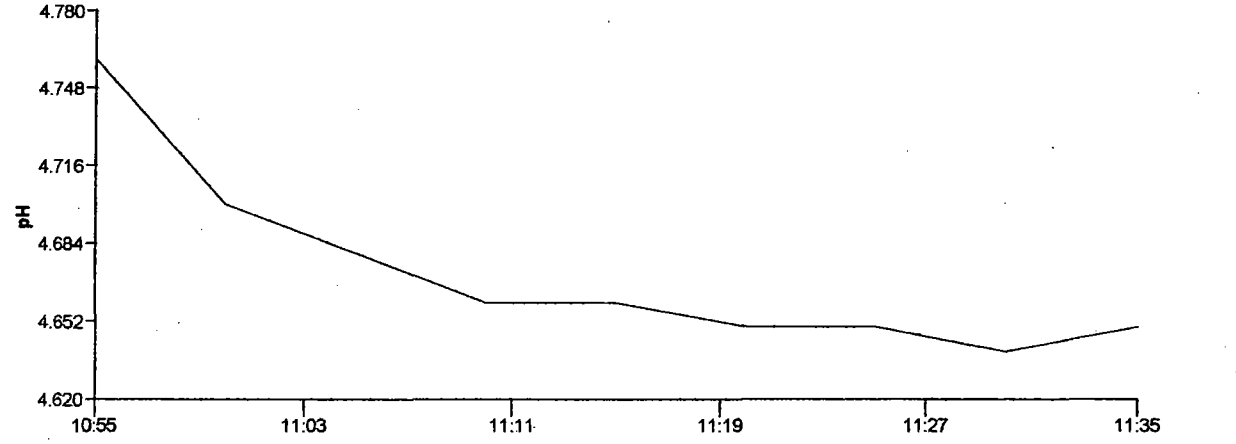
09/07/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
09/07/00 10:55	22.99	1057.000	1017.000	0.00	4.76
09/07/00 11:00	22.86	1008.000	966.800	0.00	4.70
09/07/00 11:05	23.14	991.500	956.300	0.00	4.68
09/07/00 11:10	23.23	986.600	953.200	0.00	4.66
09/07/00 11:15	23.21	979.200	945.800	0.00	4.66
09/07/00 11:20	23.11	966.000	931.100	0.00	4.65
09/07/00 11:25	22.95	956.000	918.500	0.00	4.65
09/07/00 11:30	23.01	932.500	897.100	0.00	4.64
09/07/00 11:35	22.99	930.300	894.600	0.00	4.65

80MW01 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH





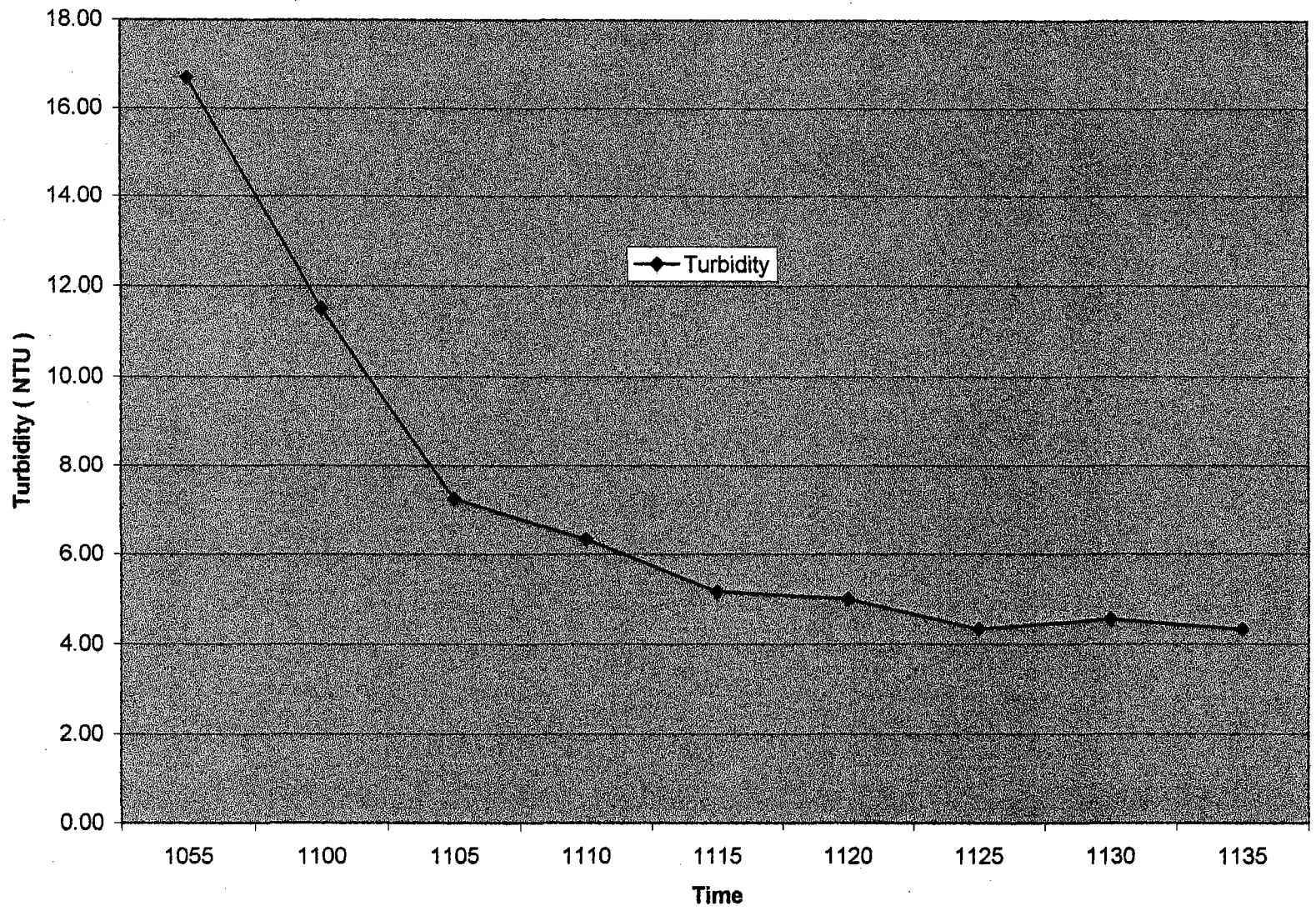


09/07/00 09/07/00 09/07/00 09/07/00 09/07/00 09/07/00

(09/07/00)

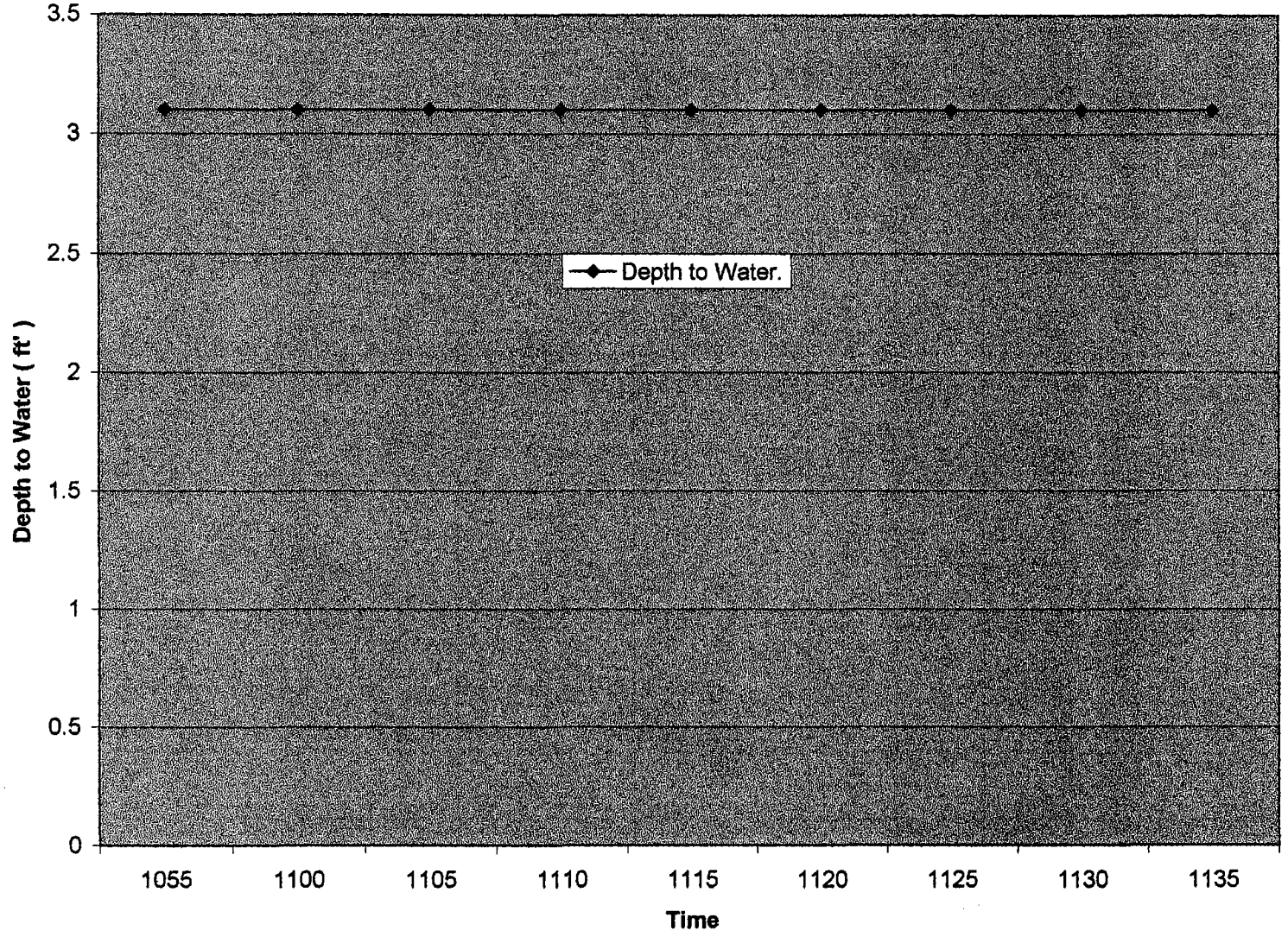
0080MW01
Permit #: 29-31774
09/07/00

Turbidity



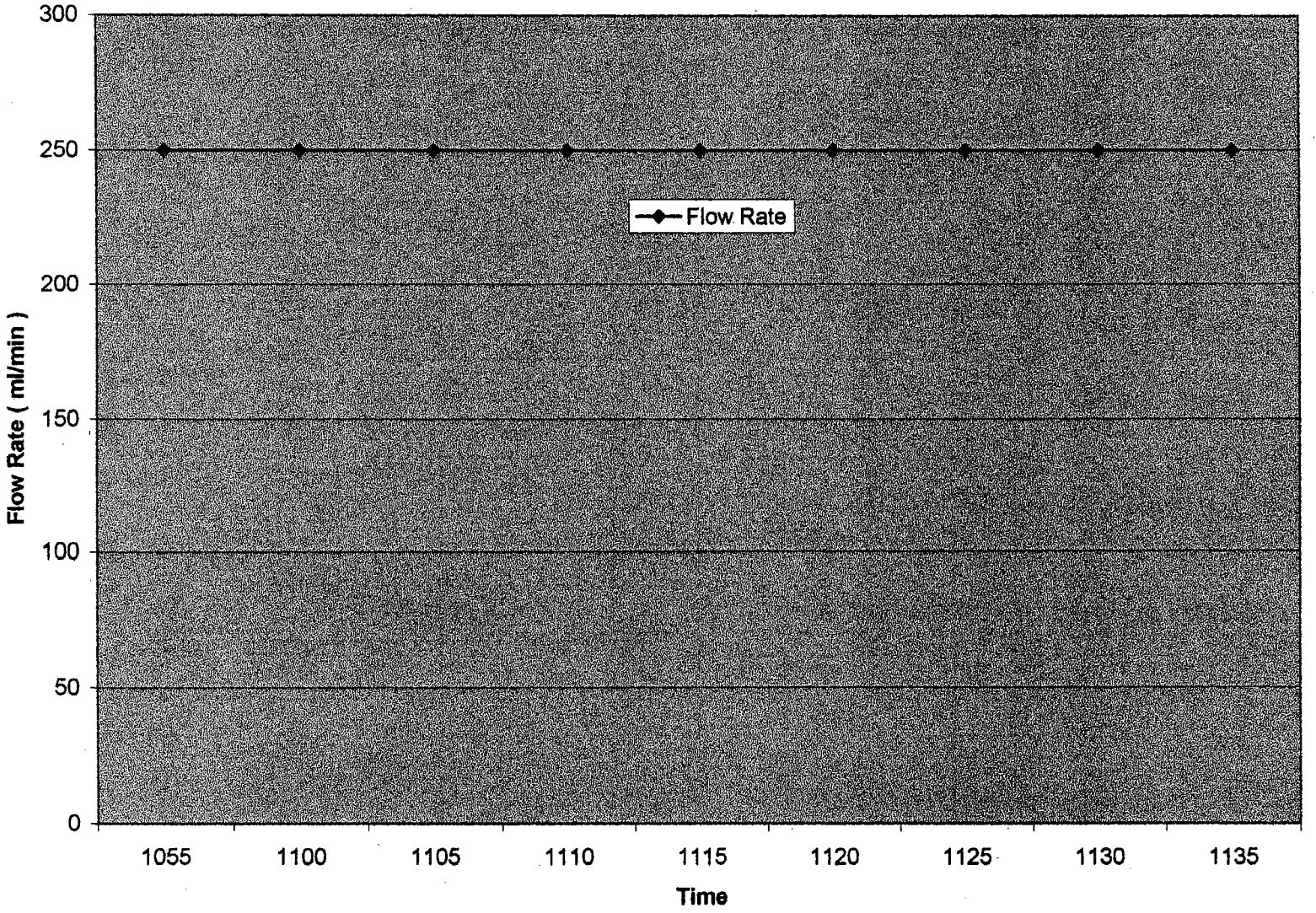
0080MW01
Permit #: 29-31774
09/07/00

Depth to Water.



0080MW01
Permit #: 29-31774
09/07/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW02
NJDEP ID#29-43199
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 09/07/00
WEATHER: Sunny
TIDE: N/A

Hnu Calibration: Span 2.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp.: N/A

WELL CONDITION: Good
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 2.25 ft
Before Purge Start: 2.25 ft **Previous Day: 2.25 ft** **After Sampling: 2.75 ft**
DEPTH OF WELL: 14.40 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 10.40 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: ft
( ) X .65 / X 3 = ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALIC/ 2" REDIFLO 2 GRUNDPHOS SUBMERSIBLE PUMP
Purged at 290 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 09:20
pH 5.80 su
TEMP 22.85 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 4688 ms/cm

PURGE END TIME: 10:10
pH 5.78 su
TEMP 23.48 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 4495 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 2.75 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 10:01
pH 5.77 su
TEMP 23.71 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 4472 ms/cm

SAMPLE END TIME: 10:08
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

MW:0080MW02
NJDEP ID#: 29-43199
DATE: 9/07/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
9:20	5.8	22.85	4496	4688	999.99	3.41	2.25	290	
9:25	5.81	22.92	4439	4623	999.99	2.28	2.35	290	
9:30	5.8	23.13	4414	4577	999.99	2	2.35	290	
9:35	5.79	23.15	4420	4583	999.99	1.95	2.35	290	
9:40	5.79	23.16	4434	4596	999.99	2.54	2.35	290	
9:45	5.79	23.22	4397	4552	999.99	2.32	2.35	290	
9:50	5.78	23.43	4376	4511	999.99	1.86	2.35	290	
9:55	5.78	23.48	4365	4498	999.99	2.02	2.35	290	
10:00	5.77	23.71	4361	4472	999.99	2.09	2.35	290	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
920	3.41	2.25	290
925	2.28	2.35	290
930	2.00	2.35	290
935	1.95	2.35	290
940	2.54	2.35	290
945	2.32	2.35	290
950	1.86	2.35	290
955	2.02	2.35	290
1000	2.09	2.35	290

80mw02

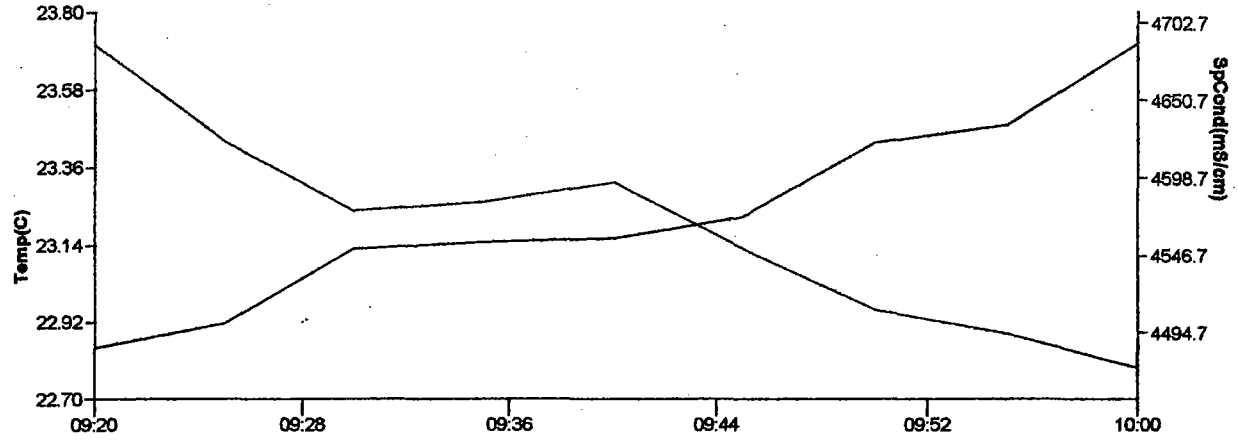
80MW02 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

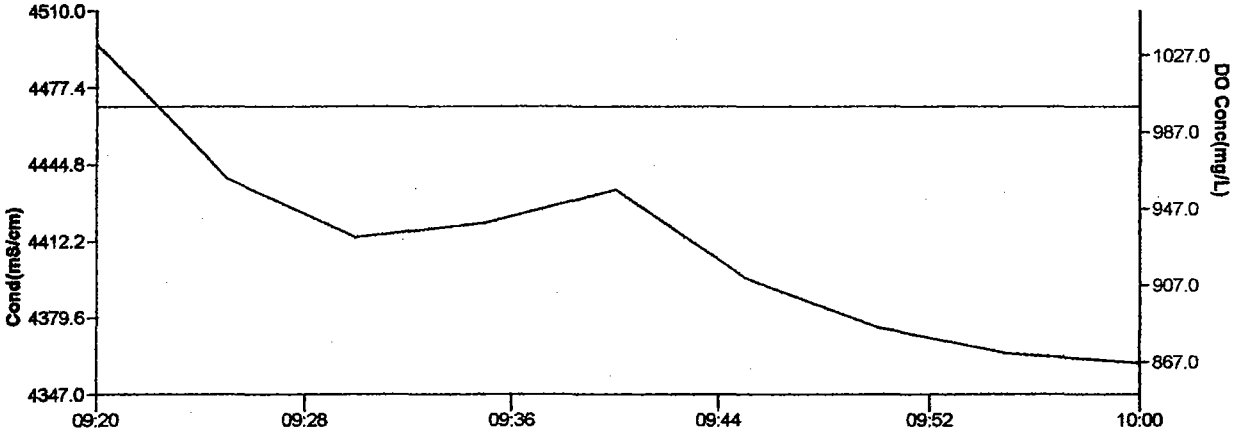
From 09/07/00 09:20 to 09/07/00 10:00
Number of samples: 9

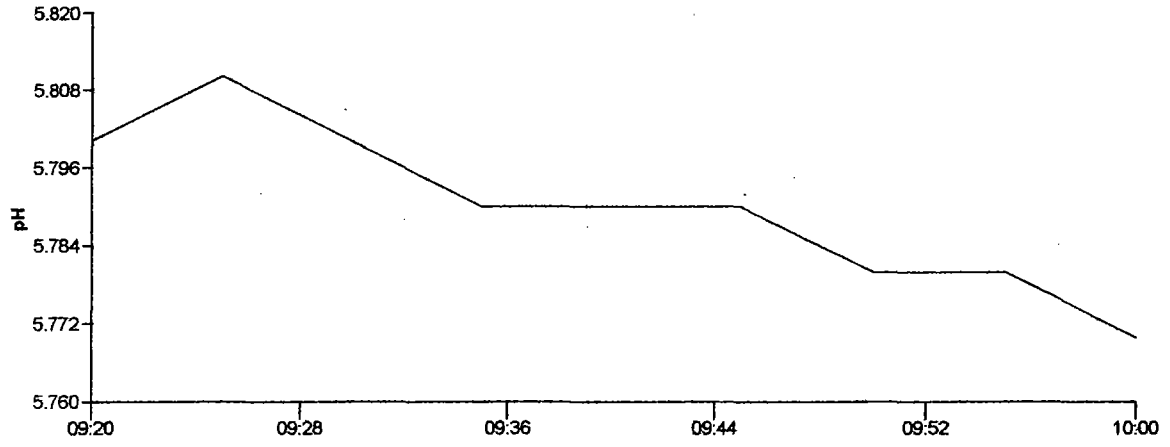
09/07/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
09/07/00 09:20	22.85	4688.000	4496.000	999.99	5.80
09/07/00 09:25	22.92	4623.000	4439.000	999.99	5.81
09/07/00 09:30	23.13	4577.000	4414.000	999.99	5.80
09/07/00 09:35	23.15	4583.000	4420.000	999.99	5.79
09/07/00 09:40	23.16	4596.000	4434.000	999.99	5.79
09/07/00 09:45	23.22	4552.000	4397.000	999.99	5.79
09/07/00 09:50	23.43	4511.000	4376.000	999.99	5.78
09/07/00 09:55	23.48	4495.000	4365.000	999.99	5.78
09/07/00 10:00	23.71	4472.000	4361.000	999.99	5.77

80MW02 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH



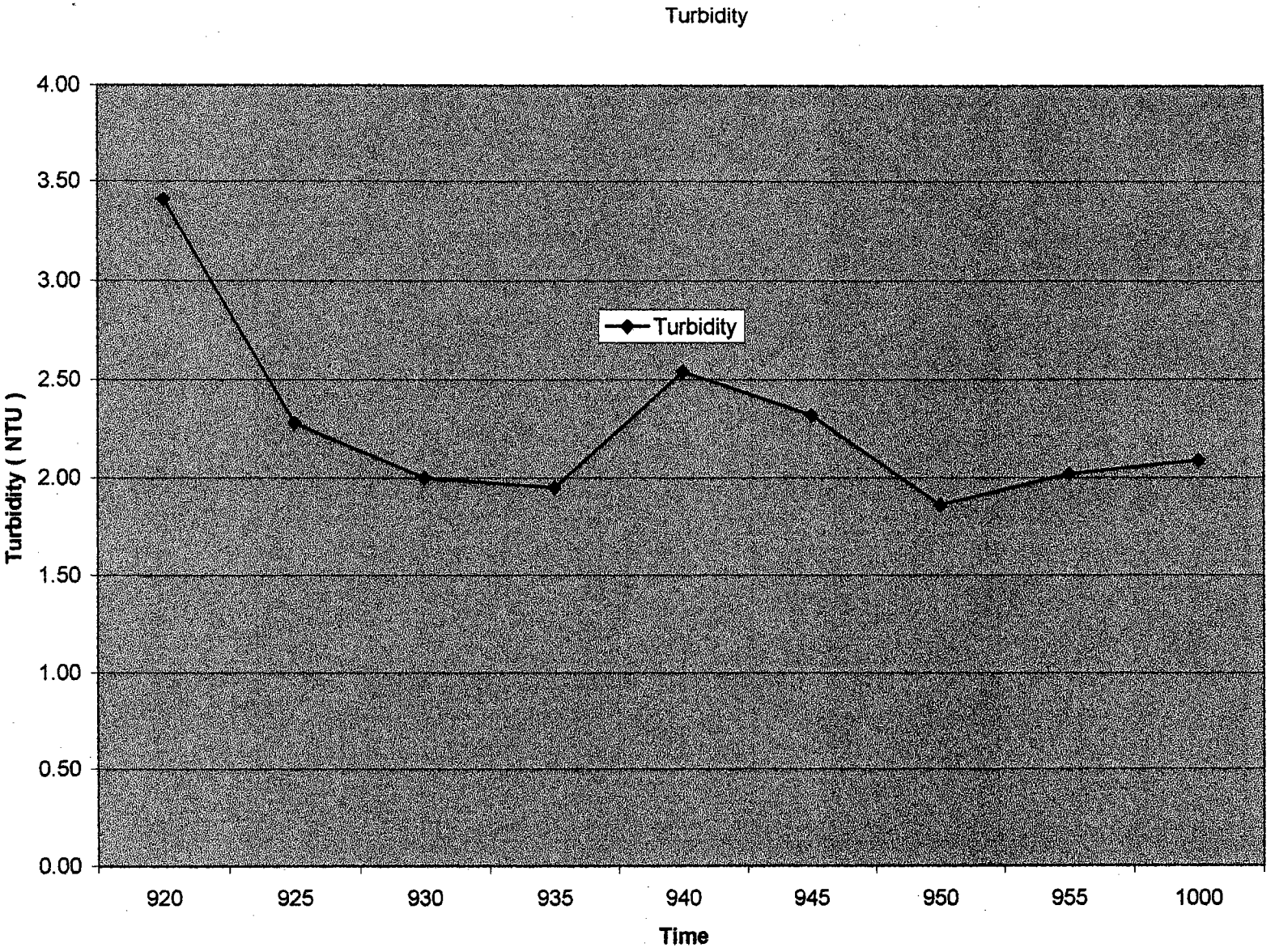




09/07/00 09/07/00 09/07/00 09/07/00 09/07/00 09/07/00

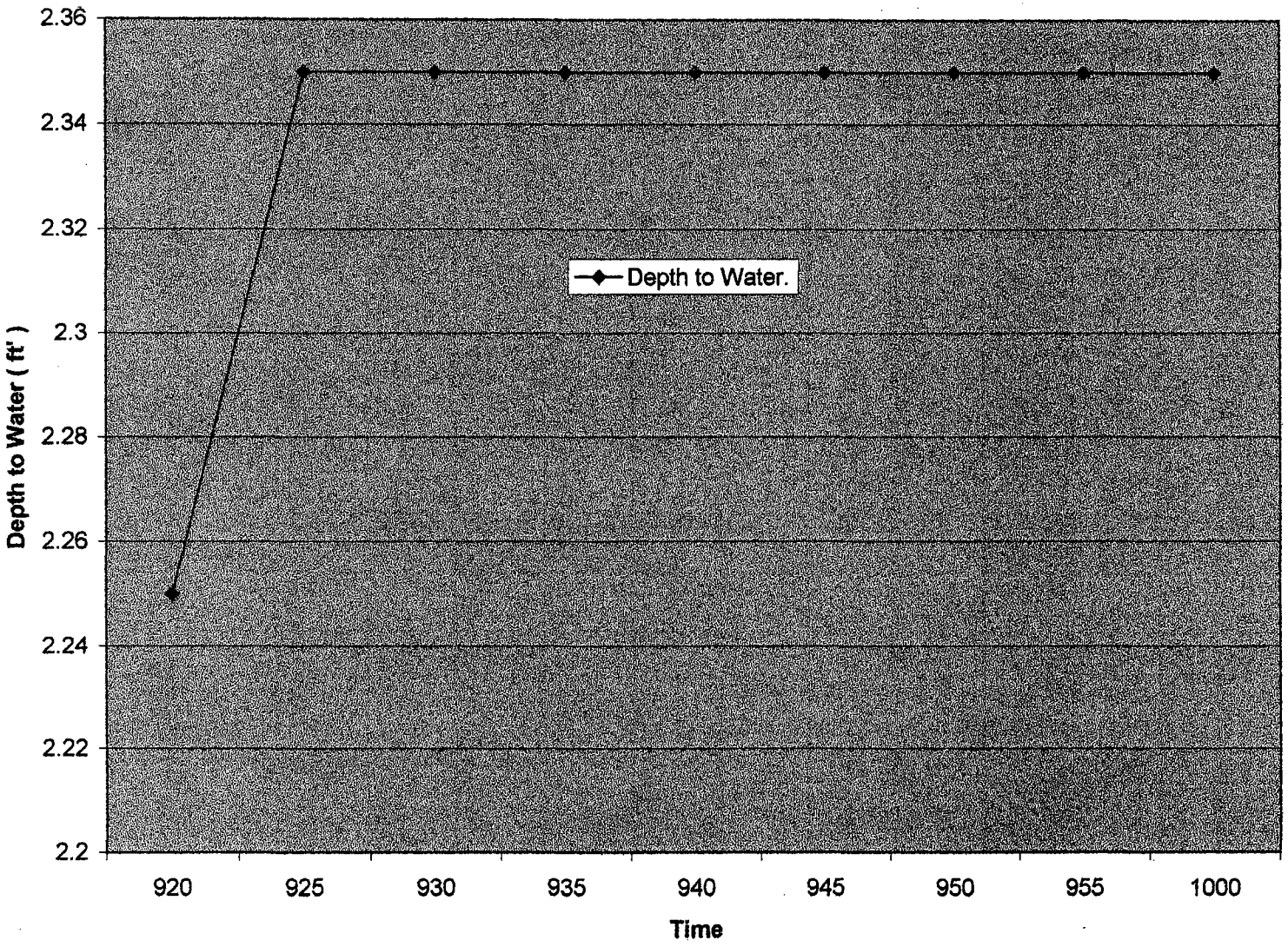
(09/07/00)

0080MW02
Permit #: 29-43199
09/07/00

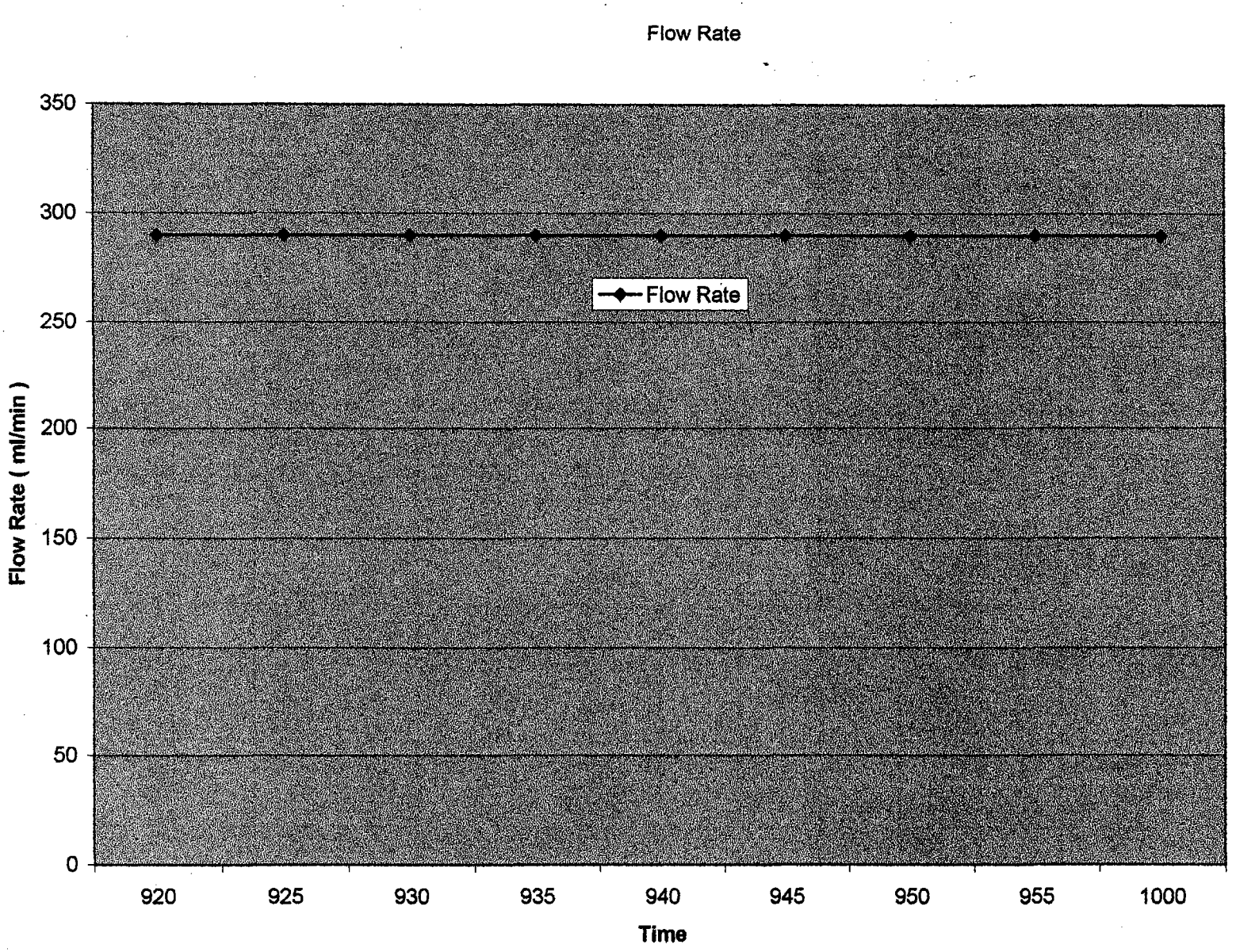


0080MW02
Permit #: 29-43199
09/07/00

Depth to Water.



0080MW02
Permit #: 29-43199
09/07/00



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW03
NJDEP ID#29-43201
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 09/06/00
WEATHER: Sunny
TIDE: N/A

Hnu Calibration: Span 2.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp.: N/A

WELL CONDITION: Good
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.30 ft
Before Purge Start: 3.30 ft **Previous Day: 3.25 ft** **After Sampling: 3.60 ft**
DEPTH OF WELL: 11.15 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE:9.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: ft
( ) X .65 / X 3 = ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC/ 2" REDIFLO 2 GRUNDPHOS SUBMERSIBLE PUMP
Purged at 290 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 14:10
pH 5.98 su
TEMP 22.59 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 762.6 ms/cm

PURGE END TIME: 15:00
pH 5.75 su
TEMP 22.89 °C
DISSOLVED O_2 0.08 mg/L
SPECIFIC CONDUCTIVITY 317.7 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 3.60 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 14:51
pH 5.75 su
TEMP 22.93 °C
DISSOLVED O_2 0.08 mg/L
SPECIFIC CONDUCTIVITY 316.7 ms/cm

SAMPLE END TIME: 14:57
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

MW:0080MW03
NJDEP ID#: 29-43201
DATE: 9/06/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
14:10	5.98	22.59	727.5	762.6	0.00	15.2	3.3	290	
14:15	5.91	22.67	385.8	403.8	0.06	11.5	3.3	290	
14:20	5.87	22.79	306.7	320.2	0.13	10.2	3.3	290	
14:25	5.84	22.75	299.1	312.5	0.11	9.59	3.3	290	
14:30	5.81	22.88	301	313.7	0.11	9.3	3.3	290	
14:35	5.77	22.77	303.5	317	0.09	8.73	3.3	290	
14:40	5.74	23.02	306.8	318.8	0.09	6.84	3.3	290	
14:45	5.75	22.84	304.6	317.7	0.08	6.79	3.3	290	
14:50	5.75	22.93	304.2	316.7	0.08	6.7	3.6	290	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1410	15.20	3.3	290
1415	11.50	3.3	290
1420	10.20	3.3	290
1425	9.59	3.3	290
1430	9.30	3.3	290
1435	8.73	3.3	290
1440	6.84	3.3	290
1445	6.79	3.3	290
1450	6.70	3.6	290

80mw03

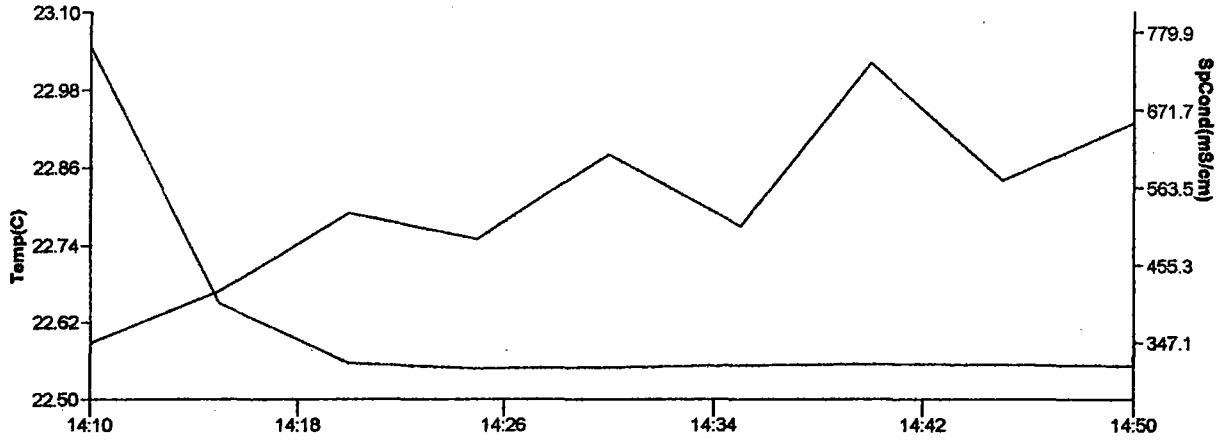
80MW03 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

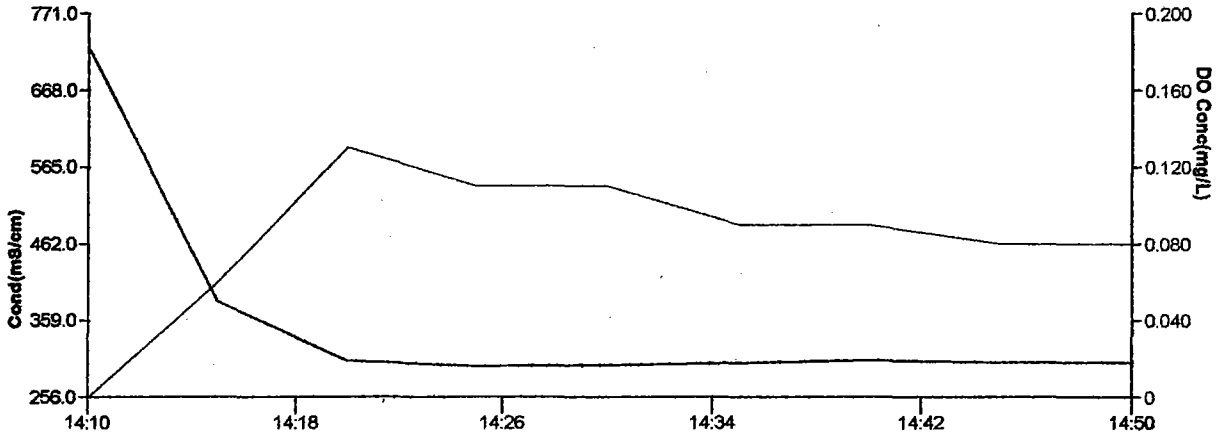
From 09/06/00 14:10 to 09/06/00 14:50
Number of samples: 9

09/06/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
09/06/00 14:10	22.59	762.600	727.500	0.00	5.90
09/06/00 14:15	22.67	403.800	385.800	0.06	5.91
09/06/00 14:20	22.79	320.200	306.700	0.13	5.87
09/06/00 14:25	22.75	312.500	299.100	0.11	5.84
09/06/00 14:30	22.88	313.700	301.000	0.11	5.81
09/06/00 14:35	22.77	317.000	303.500	0.09	5.77
09/06/00 14:40	23.02	318.800	306.800	0.09	5.74
09/06/00 14:45	22.84	317.700	304.600	0.08	5.75
09/06/00 14:50	22.93	316.700	304.200	0.08	5.75

80MW03 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH





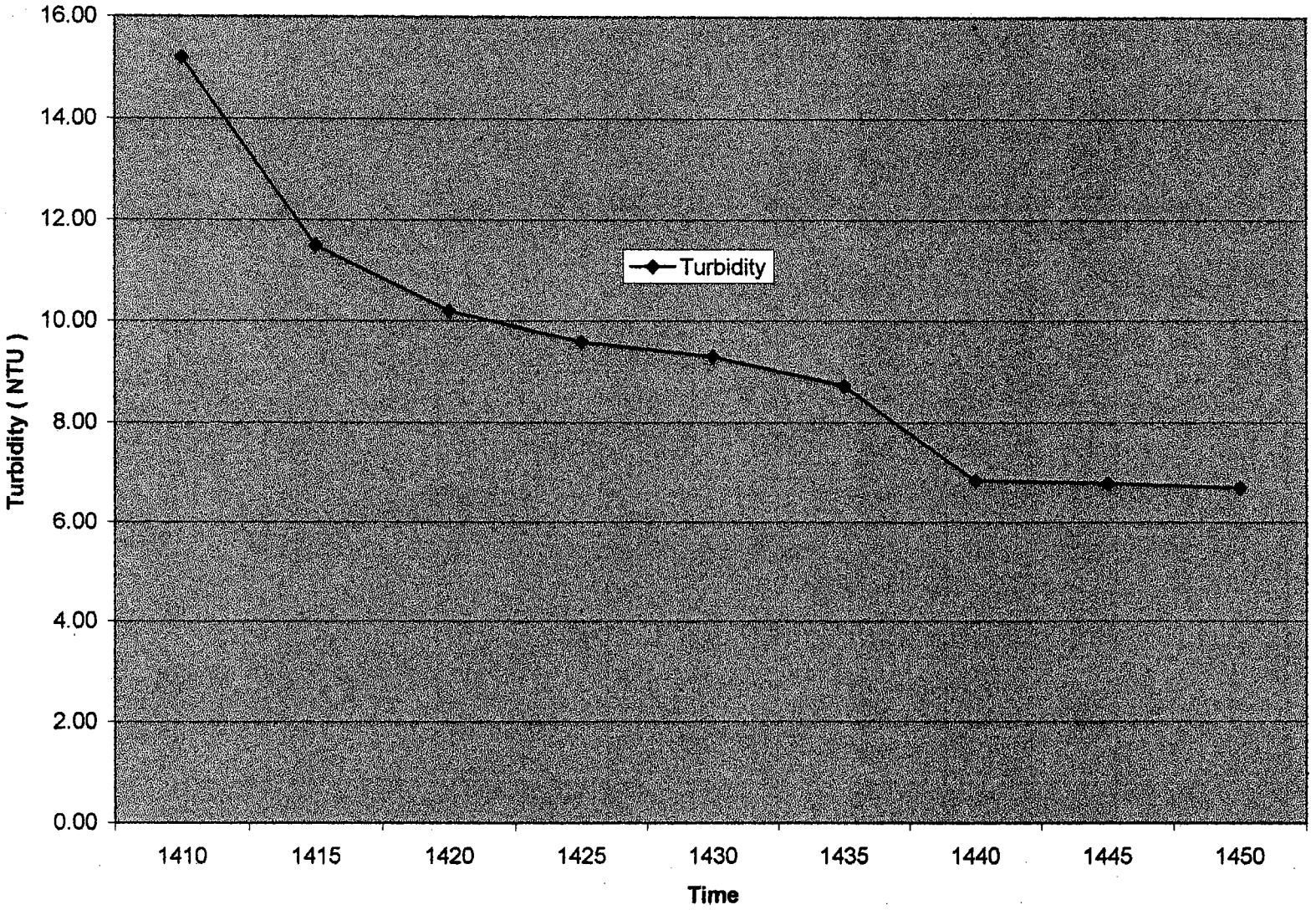


09/06/00 09/06/00 09/06/00 09/06/00 09/06/00 09/06/00

(09/06/00)

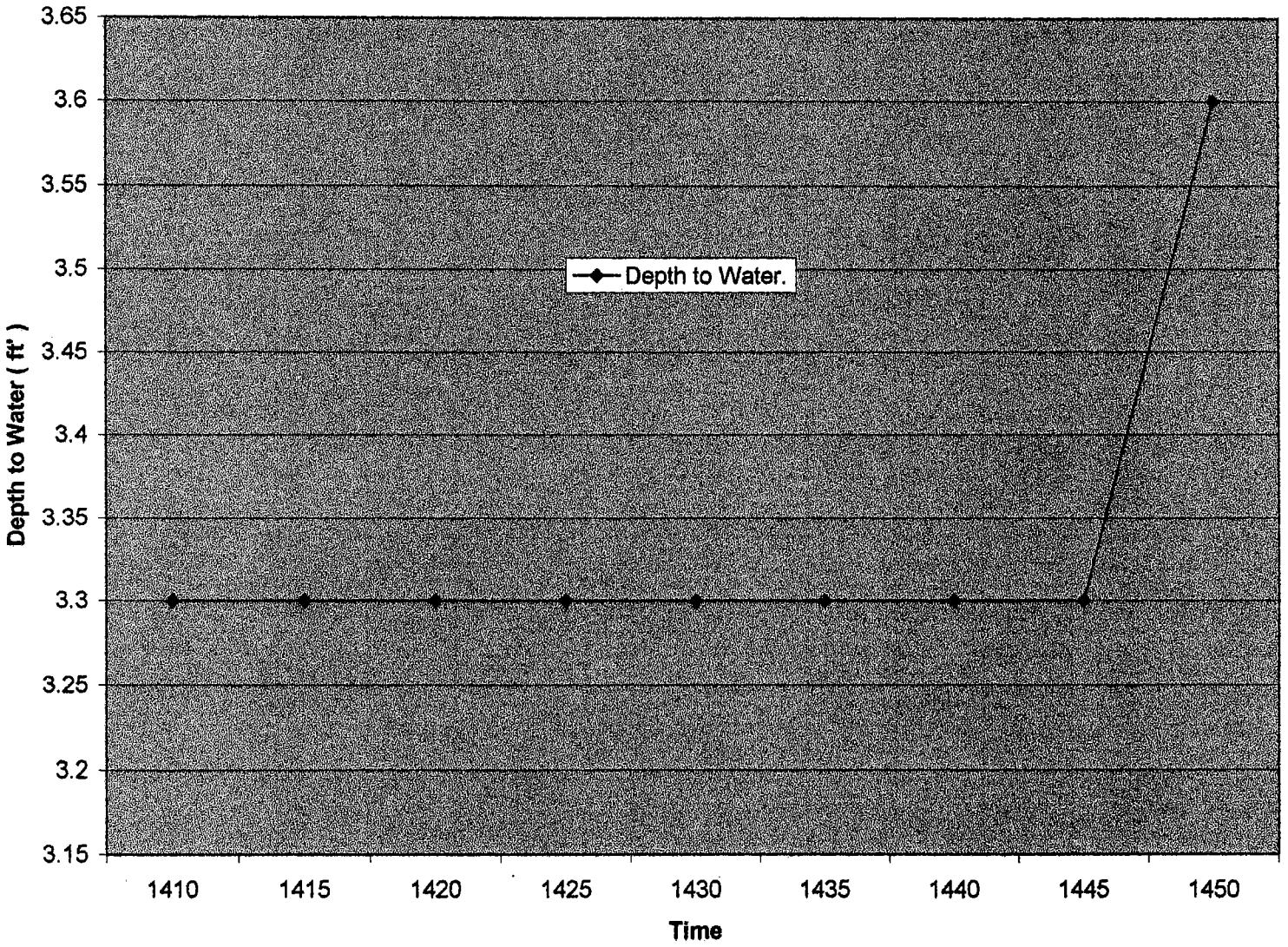
0080MW03
Permit #: 29-43201
09/06/00

Turbidity



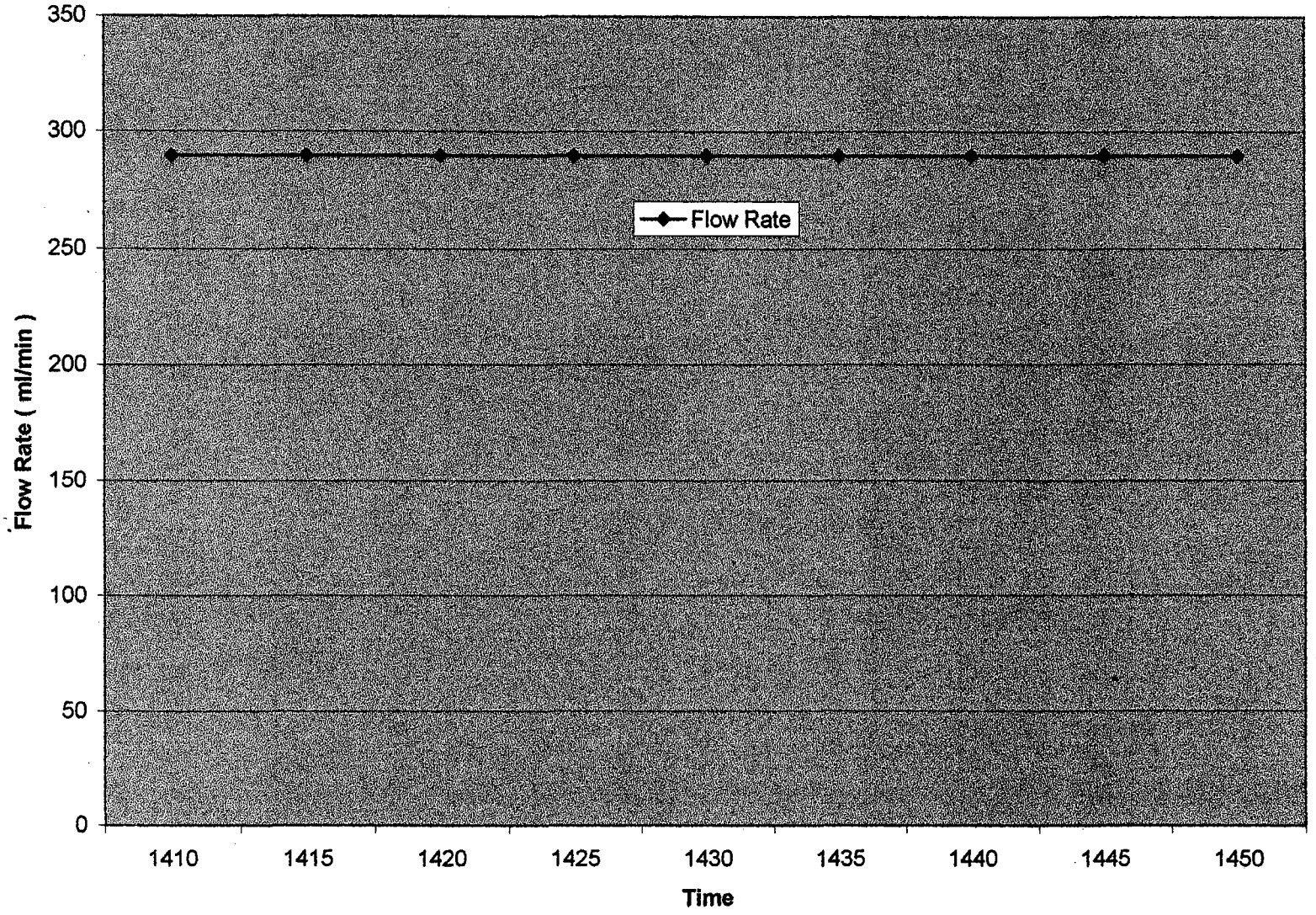
0080MW03
Permit #: 29-43201
09/06/00

Depth to Water.



0080MW03
Permit #: 29-43201
09/06/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW04
NJDEP ID#29-43200
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 09/06/00
WEATHER: Sunny
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 2.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp.: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 2.85 ft
Before Purge Start: 2.85 ft **Previous Day: 2.90 ft** **After Sampling: 3.80 ft**
DEPTH OF WELL: 12.00 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 10.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: ft
( ) X .65 / X 3 = ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALIC/ 2" REDIFLO 2 GRUNDPHOS SUBMERSIBLE PUMP
Purged at 270 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 09:00
pH 4.85 su
TEMP 19.30 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 74365.0 ms/cm

PURGE END TIME: 09:54
pH 5.28 su
TEMP 19.77 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 65732.0 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 3.80 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 09:46
pH 5.31 su
TEMP 19.77 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 65286.0 ms/cm

SAMPLE END TIME: 09:52
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

MW:0080MW04
NJDEP ID#: 29-43200
DATE: 9/06/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
9:00	4.85	19.3	66267	74365	999.99	12.3	2.85	270	
9:05	4.96	19.24	65027	73066	999.99	11.8	2.85	270	
9:10	5.09	19.51	63831	71315	999.99	12.2	2.85	270	
9:15	5.17	19.49	62184	69494	999.99	11.7	2.85	270	
9:20	5.21	19.59	61480	68564	999.99	11	3.7	270	
9:25	5.24	19.68	60777	67650	999.99	10.7	3.7	270	
9:30	5.25	19.75	60202	66910	999.99	9.2	3.7	270	
9:35	5.28	19.82	59643	66189	999.99	8.34	3.7	270	
9:40	5.28	19.77	59169	65732	999.99	7.32	3.8	270	
9:45	5.31	19.86	58871	65280	999.99	6.27	3.8	270	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
900	12.30	2.85	270
905	11.80	2.85	270
910	12.20	2.85	270
915	11.70	2.85	270
920	11.00	3.7	270
925	10.70	3.7	270
930	9.20	3.7	270
935	8.34	3.7	270
940	7.32	3.8	270
945	6.27	3.8	270

80mw04

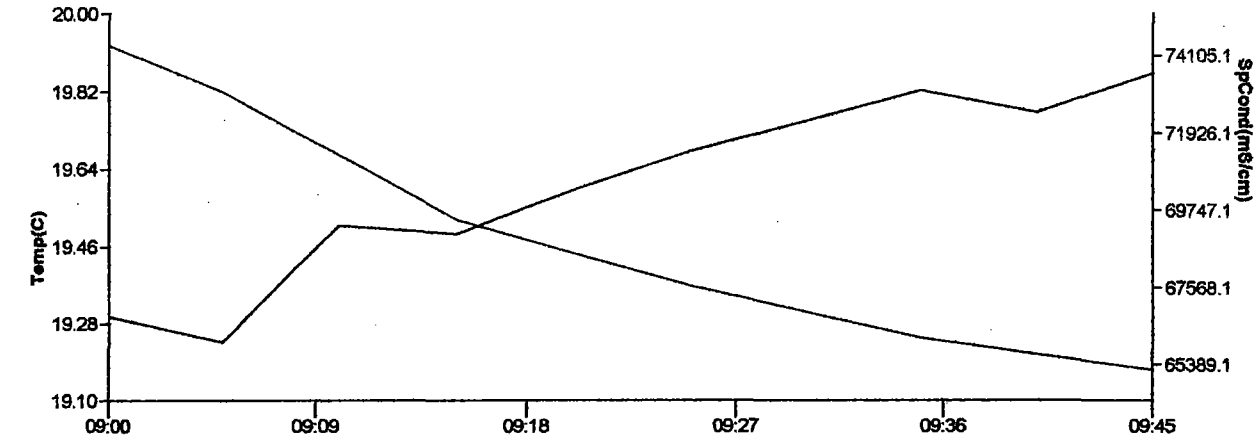
80MW04 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

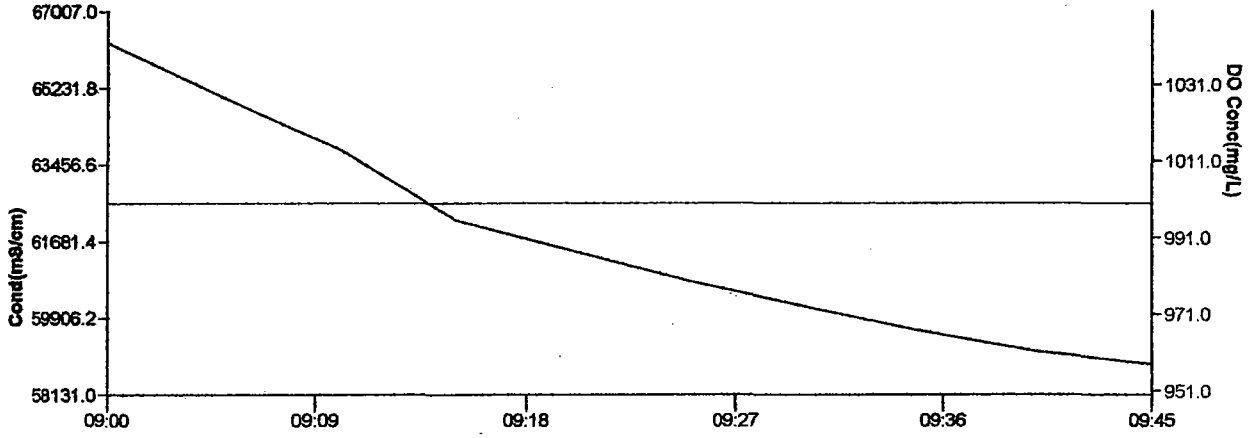
From 09/06/00 09:00 to 09/06/00 09:45
Number of samples: 10

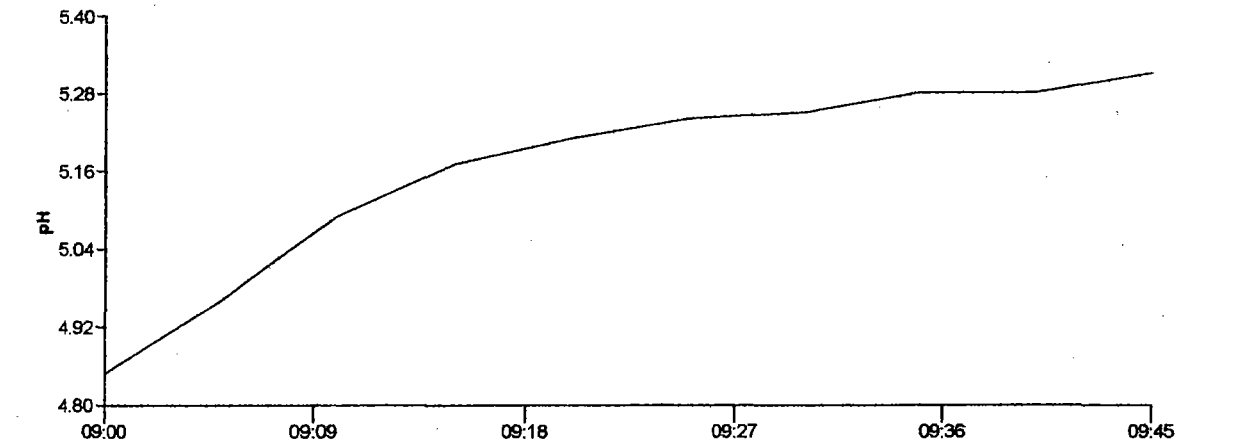
09/06/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
09/06/00 09:00	19.307	4365.00	66267.000	999.99	4.85
09/06/00 09:05	19.247	3066.00	65027.000	999.99	4.96
09/06/00 09:10	19.517	1315.00	63831.000	999.99	5.09
09/06/00 09:15	19.496	9494.00	62184.000	999.99	5.17
09/06/00 09:20	19.596	8564.00	61480.000	999.99	5.21
09/06/00 09:25	19.686	7650.00	60777.000	999.99	5.24
09/06/00 09:30	19.756	6910.00	60203.000	999.99	5.25
09/06/00 09:35	19.826	6189.00	59643.000	999.99	5.28
09/06/00 09:40	19.776	5732.00	59169.000	999.99	5.28
09/06/00 09:45	19.866	5286.00	58871.000	999.99	5.31

80MW04 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH





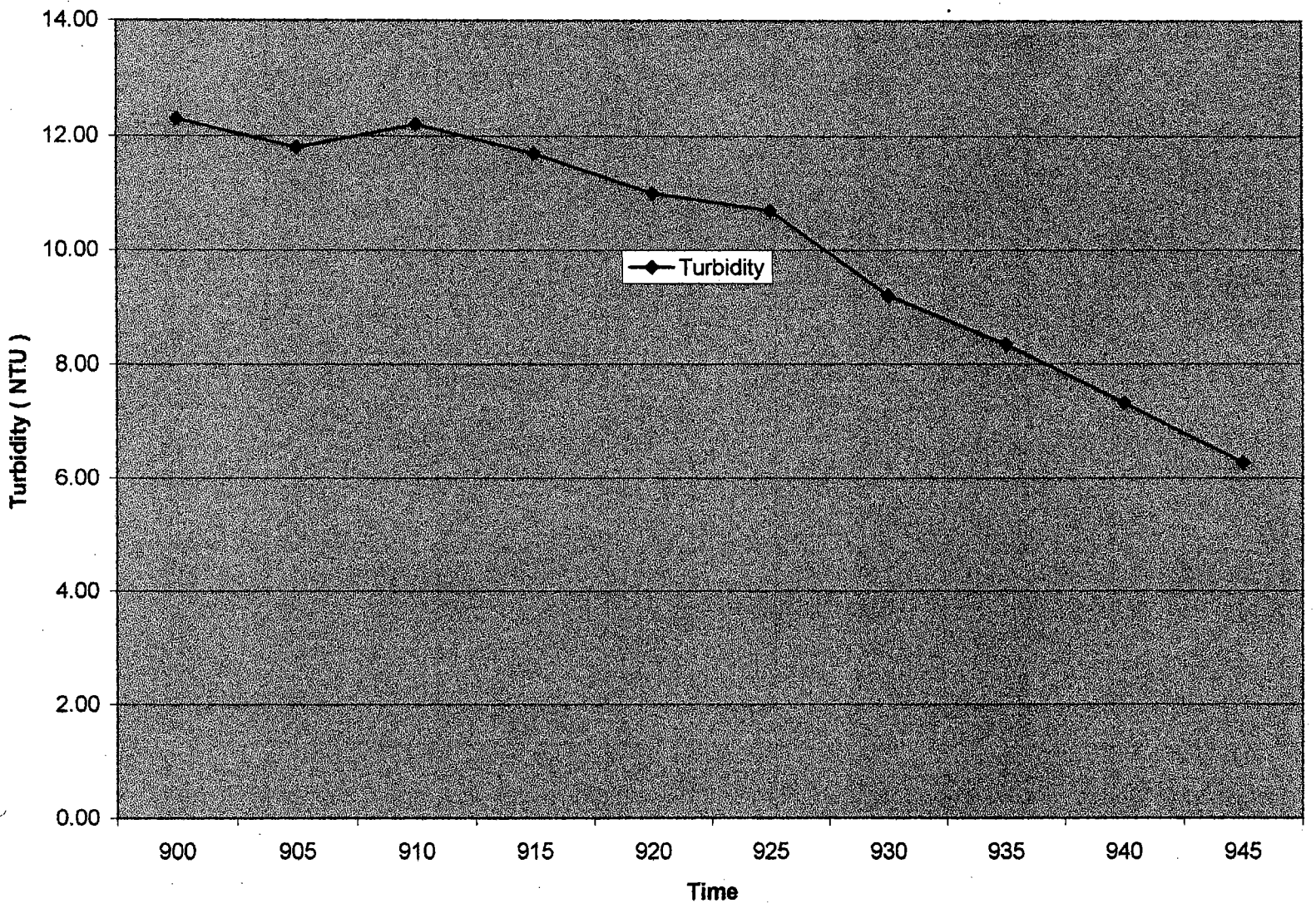


09/06/00 09/06/00 09/06/00 09/06/00 09/06/00 09/06/00

(09/06/00)

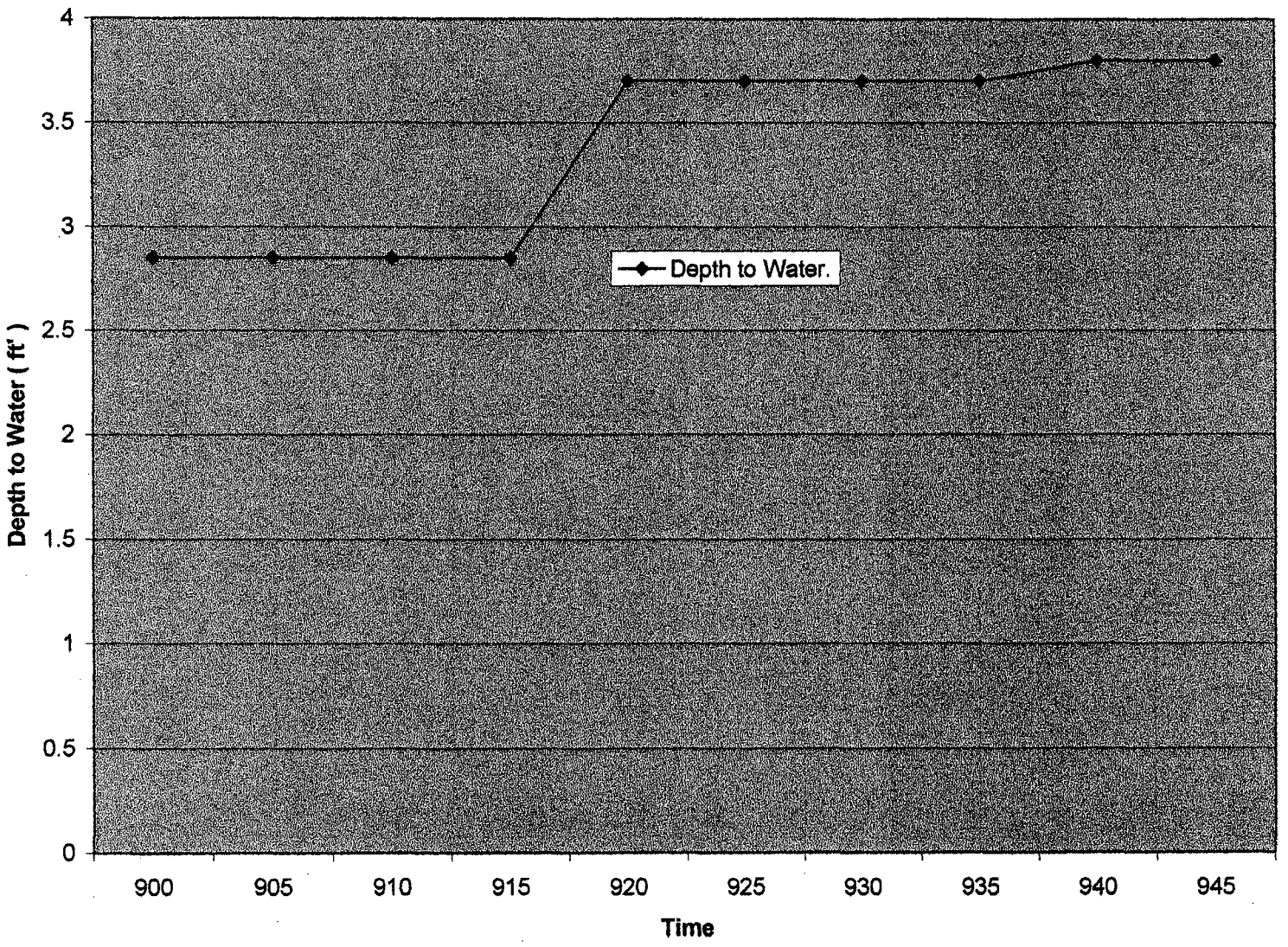
0080MW04
Permit #: 29-43200
09/06/00

Turbidity



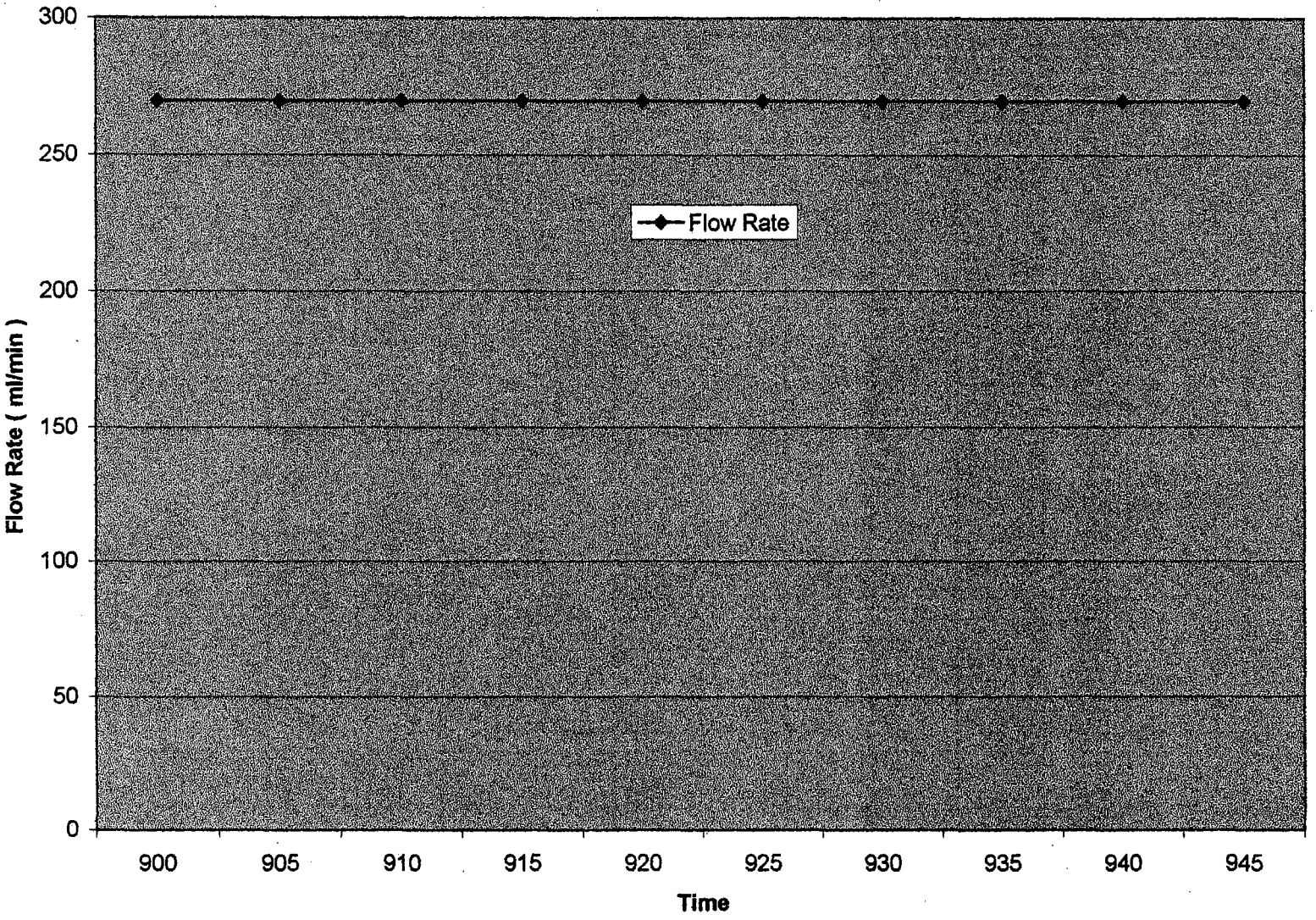
0080MW04
Permit #: 29-43200
09/06/00

Depth to Water.



0080MW04
Permit #: 29-43200
09/06/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW05
NJDEP ID#29-43202
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 09/06/00
WEATHER: Sunny
TIDE: N/A

Hnu Calibration: Span 2.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp.: N/A

WELL CONDITION: Good
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.28 ft
Before Purge Start: 3.28 ft **Previous Day: 3.34 ft** **After Sampling: 5.0 ft**
DEPTH OF WELL: 12.0 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 10.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: ft
( ) X .65 / X 3 = ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALIC/ 2" REDIFLO 2 GRUNDPHOS SUBMERSIBLE PUMP
Purged at 250 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 10:35
pH 3.40 su
TEMP 19.55 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 30868.0 ms/cm

PURGE END TIME: 12:55
pH 4.03 su
TEMP 19.77 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 25960.0 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 5.0 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 12:46
pH 4.05 su
TEMP 19.90 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 25765.0 ms/cm

SAMPLE END TIME: 12:52
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

MW:0080MW05
NJDEP ID#: 29-43202
DATE: 9/06/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
10:35	3.4	19.55	27657	30808	999.99	29.7	3.28	250	
10:40	3.49	20.41	27342	29909	999.99	26.2	3.28	250	
10:45	3.68	20.35	26054	28595	999.99	24.9	3.2	250	
10:50	3.87	20.46	28812	27937	999.99	23.3	3.2	250	
10:55	3.78	19.67	26026	28977	999.99	22	3.2	250	
11:00	3.89	19.93	25983	26768	999.99	21.8	3.2	250	
11:05	4.08	20.19	24514	26994	999.99	22.5	3.2	250	
11:10	4.18	19.98	23976	26516	999.99	21.5	3.2	250	
11:15	4.16	19.98	24349	26932	999.99	20.9	4.25	250	
11:20	4.07	19.9	24515	27160	999.99	19.8	4.25	250	
11:25	4.09	19.99	24122	26673	999.99	18.7	4.25	250	
11:30	4.08	20.04	23845	26340	999.99	18.2	4.25	250	
11:35	4.07	20.05	23753	26230	999.99	17.5	4.25	250	
11:40	4.06	20.12	23691	26127	999.99	16.9	4.25	250	
11:45	4.08	20.22	23579	25947	999.99	17.2	5.4	250	
11:50	4.11	20.31	22839	25195	999.99	17.2	5.4	250	
11:55	4.14	20.25	22842	25123	999.99	16.1	5.4	250	
12:00	4.15	20.19	22464	24737	999.99	15.8	5.4	250	
12:05	4.17	20.23	22089	24303	999.99	15.3	5.4	250	
12:10	4.2	19.85	21856	24239	999.99	14.2	5.4	250	
12:15	4.18	19.85	21895	24282	999.99	12.9	5.4	250	
12:20	4.22	19.91	21289	23582	999.99	13.2	6.05	250	
12:25	4.25	19.9	21130	23408	999.99	12.4	6.05	250	
12:30	3.52	19.48	28920	32329	999.99	12	6.05	250	
12:35	3.85	19.95	24672	27306	999.99	11.2	6.05	250	
12:40	4.03	20.14	23310	25696	999.99	10.7	6.05	250	
12:45	4.05	19.9	23255	25765	999.99	11.9	6.05	250	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1035	29.70	3.28	250
1040	26.20	3.28	250
1045	24.90	3.2	250
1050	23.30	3.2	250
1055	22.00	3.2	250
1100	21.80	3.2	250
1105	22.50	3.2	250
1110	21.50	3.2	250
1115	20.90	4.25	250
1120	19.80	4.25	250
1125	18.70	4.25	250
1130	18.20	4.25	250
1135	17.50	4.25	250
1140	16.90	4.25	250
1145	17.20	5.4	250
1150	17.20	5.4	250
1155	16.10	5.4	250
1200	15.80	5.4	250
1205	15.3	5.4	250
1210	14.2	5.4	250
1215	12.9	5.4	250
1220	13.2	6.05	250
1225	12.4	6.05	250
1230	12	6.05	250
1235	11.2	6.05	250
1240	10.7	6.05	250
1245	11.9	6.05	250

80mw05

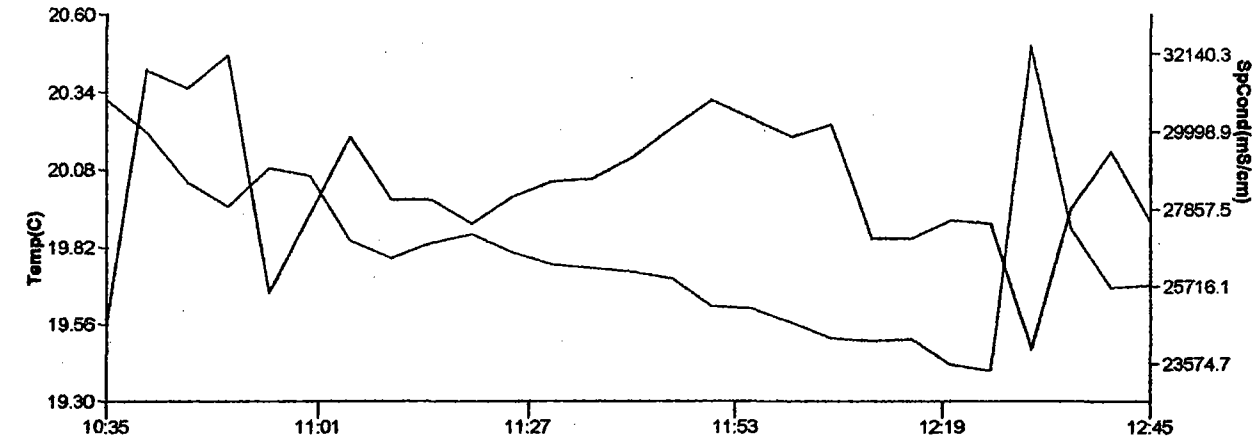
80MW05 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

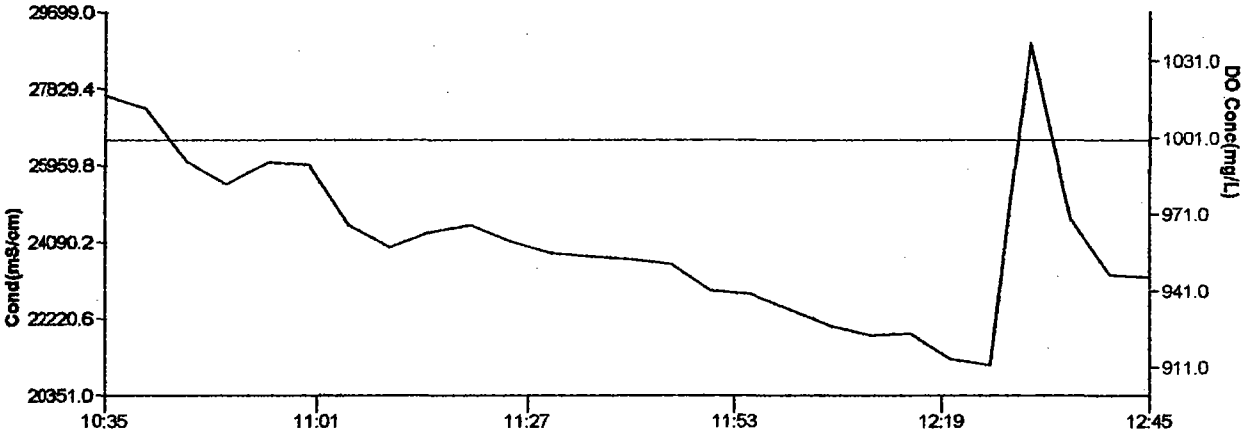
From 09/06/00 10:35 to 09/06/00 12:45
Number of samples: 27

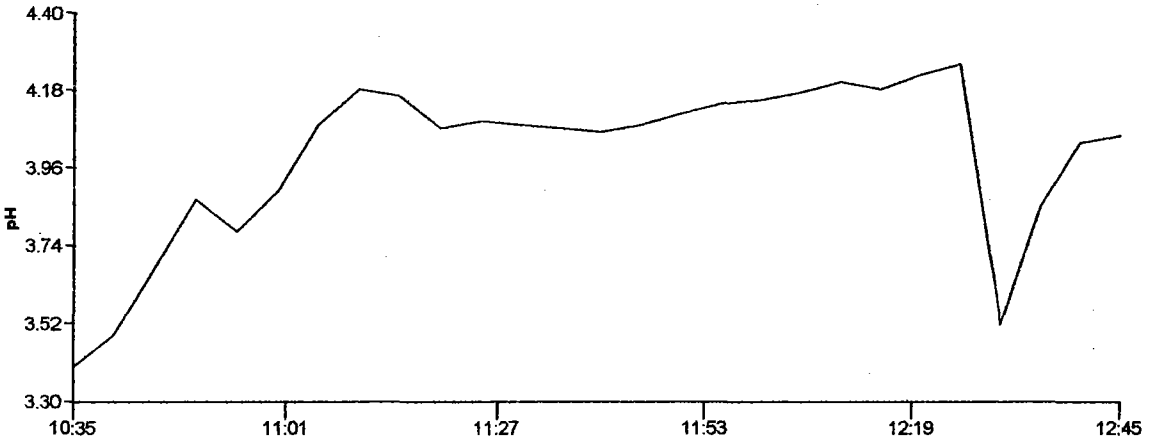
09/06/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
09/06/00 10:35	19.553	0868.00	027657.000	999.99	3.40
09/06/00 10:40	20.412	9969.00	027342.000	999.99	3.49
09/06/00 10:45	20.352	8595.00	026054.000	999.99	3.68
09/06/00 10:50	20.462	7937.00	025512.000	999.99	3.87
09/06/00 10:55	19.672	8977.00	026026.000	999.99	3.78
09/06/00 11:00	19.932	8768.00	025983.000	999.99	3.89
09/06/00 11:05	20.192	6994.00	024514.000	999.99	4.08
09/06/00 11:10	19.982	6516.00	023976.000	999.99	4.18
09/06/00 11:15	19.982	6932.00	024349.000	999.99	4.16
09/06/00 11:20	19.902	7160.00	024515.000	999.99	4.07
09/06/00 11:25	19.992	6673.00	024122.000	999.99	4.09
09/06/00 11:30	20.042	6340.00	023845.000	999.99	4.08
09/06/00 11:35	20.052	6230.00	023753.000	999.99	4.07
09/06/00 11:40	20.122	6127.00	023691.000	999.99	4.06
09/06/00 11:45	20.222	5947.00	023579.000	999.99	4.08
09/06/00 11:50	20.312	5195.00	022939.000	999.99	4.11
09/06/00 11:55	20.252	5123.00	022842.000	999.99	4.14
09/06/00 12:00	20.192	4737.00	022464.000	999.99	4.15
09/06/00 12:05	20.232	4303.00	022089.000	999.99	4.17
09/06/00 12:10	19.852	4239.00	021856.000	999.99	4.20
09/06/00 12:15	19.852	4282.00	021895.000	999.99	4.18
09/06/00 12:20	19.912	3582.00	021289.000	999.99	4.22
09/06/00 12:25	19.902	3408.00	021130.000	999.99	4.25
09/06/00 12:30	19.483	2329.00	028920.000	999.99	3.52
09/06/00 12:35	19.952	7306.00	024672.000	999.99	3.85
09/06/00 12:40	20.142	5696.00	023310.000	999.99	4.03
09/06/00 12:45	19.902	5765.00	023255.000	999.99	4.05

80MW05 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH





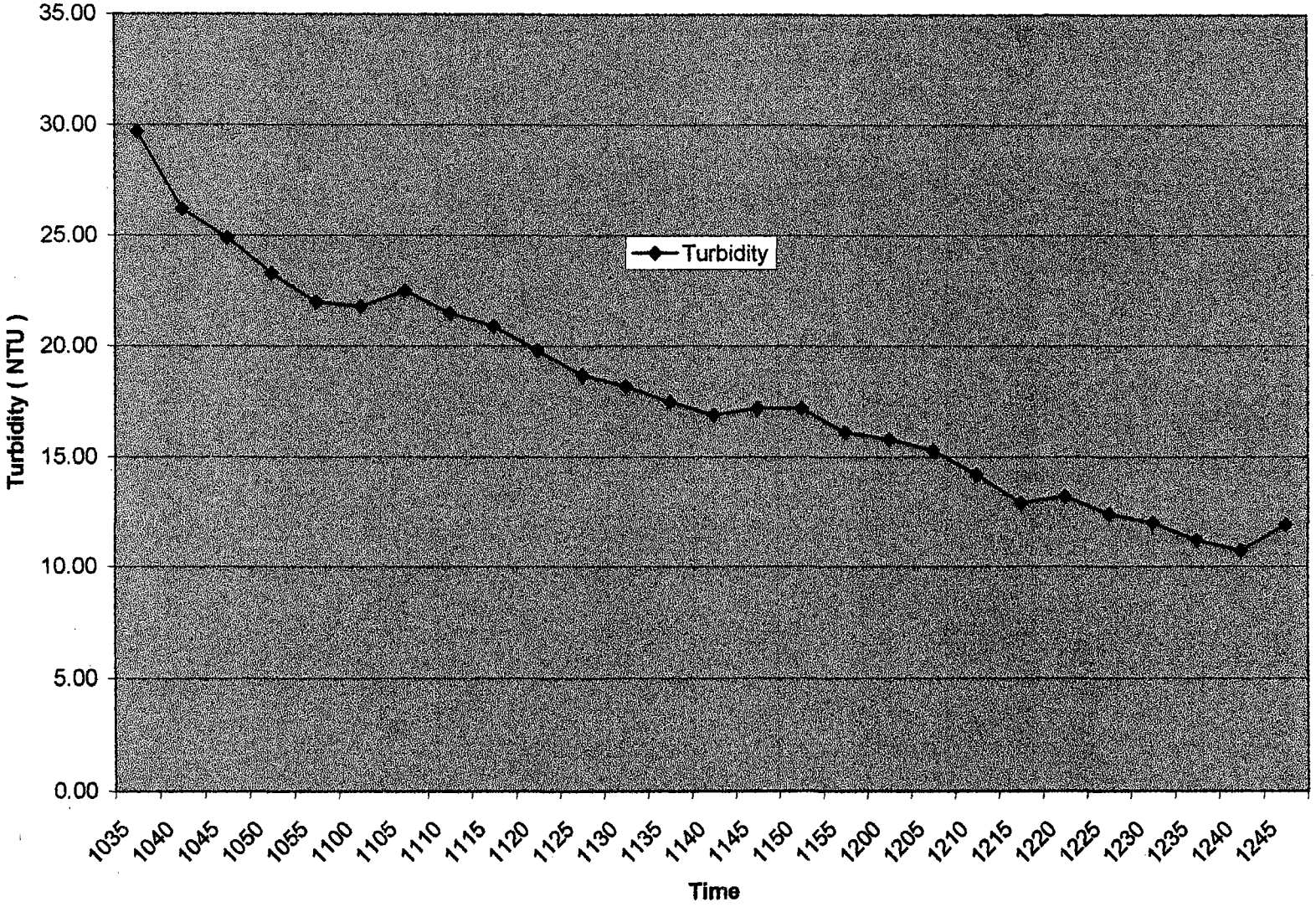


09/06/00 09/06/00 09/06/00 09/06/00 09/06/00 09/06/00

(09/06/00)

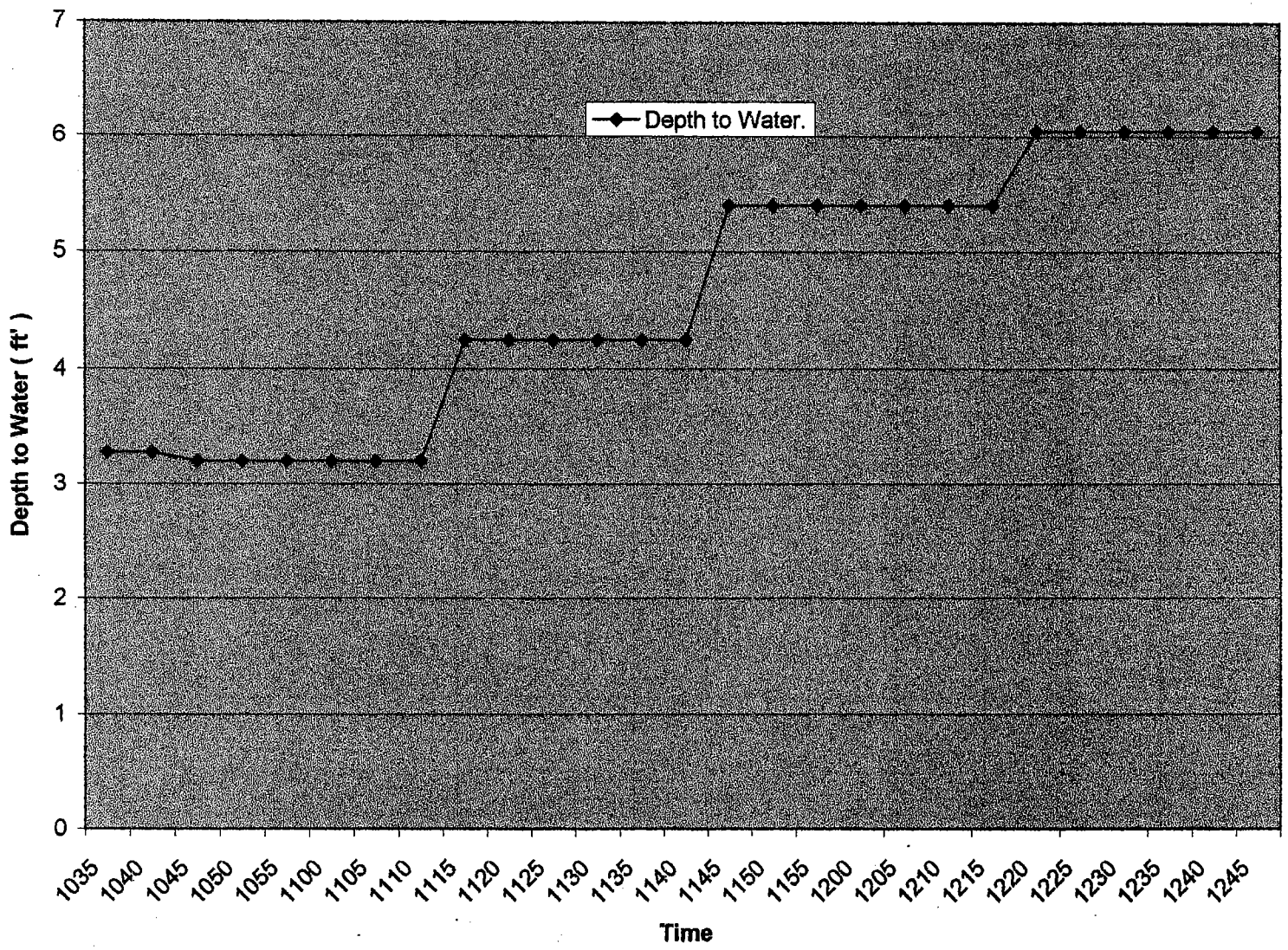
0080MW05
Permit #: 29-43202
09/06/00

Turbidity



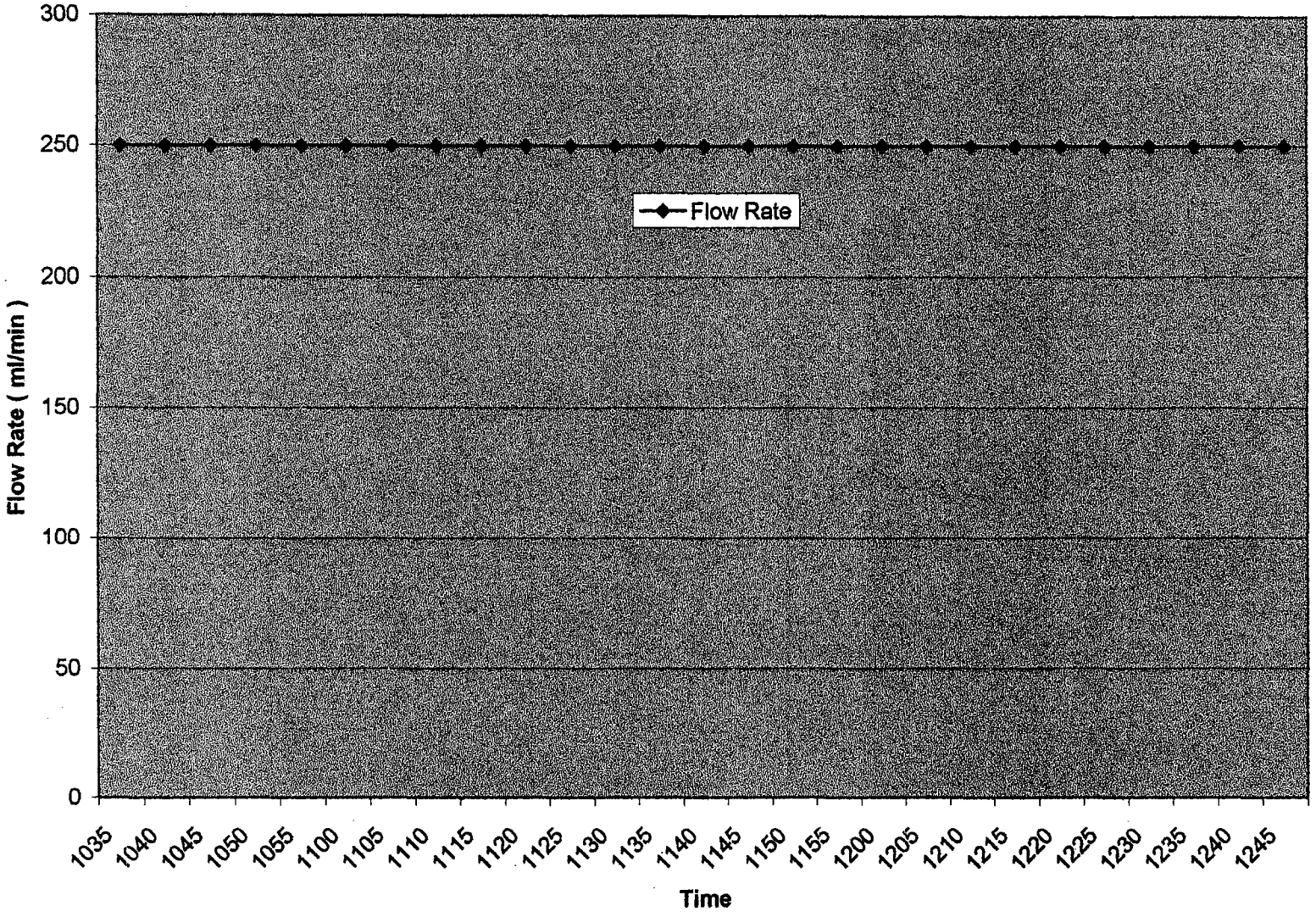
0080MW05
Permit #: 29-43202
09/06/00

Depth to Water.



0080MW05
Permit #: 29-43202
09/06/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.166
MW#: 0166MW01
NJDEP ID#29-31773
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 09/07/00
WEATHER: Sunny
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 2.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp.: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 2.15 ft
Before Purge Start: 2.15 ft **Previous Day: 2.10 ft** **After Sampling: 2.20 ft**
DEPTH OF WELL: 7.75 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 5.5 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: ft
( ) X .65 / X 3 = ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALIC/ 2" REDIFLO 2 GRUNDPHOS SUBMERSIBLE PUMP
Purged at 250 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 13:05
pH 6.33 su
TEMP 24.59 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1197 ms/cm

PURGE END TIME: 13:55
pH 6.36 su
TEMP 24.93 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1047 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 2.20 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 13:46
pH 6.35 su
TEMP 24.91 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1025 ms/cm

SAMPLE END TIME: 13:54
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

MW: 0166MW011
NJDEP ID#: 29-31773
DATE: 9/07/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
13:05	6.33	24.59	1187	1197	0.00	11.9	2.15	250	
13:10	6.34	24.51	1177	1188	0.00	5.3	2.2	250	
13:15	6.37	24.75	1169	1175	0.00	3.38	2.2	250	
13:20	6.37	24.6	1148	1155	0.00	2.65	2.2	250	
13:25	6.37	24.78	1121	1125	0.00	2.37	2.2	250	
13:30	6.37	24.74	1097	1102	0.00	1.91	2.2	250	
13:35	6.36	24.67	1064	1071	0.00	1.96	2.2	250	
13:40	6.36	24.93	1046	1047	0.00	1.8	2.2	250	
13:45	6.35	24.91	1023	1025	0.00	1.72	2.2	250	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1305	11.90	2.15	250
1310	5.30	2.2	250
1315	3.38	2.2	250
1320	2.65	2.2	250
1325	2.37	2.2	250
1330	1.91	2.2	250
1335	1.96	2.2	250
1340	1.80	2.2	250
1345	1.72	2.2	250

166mw01

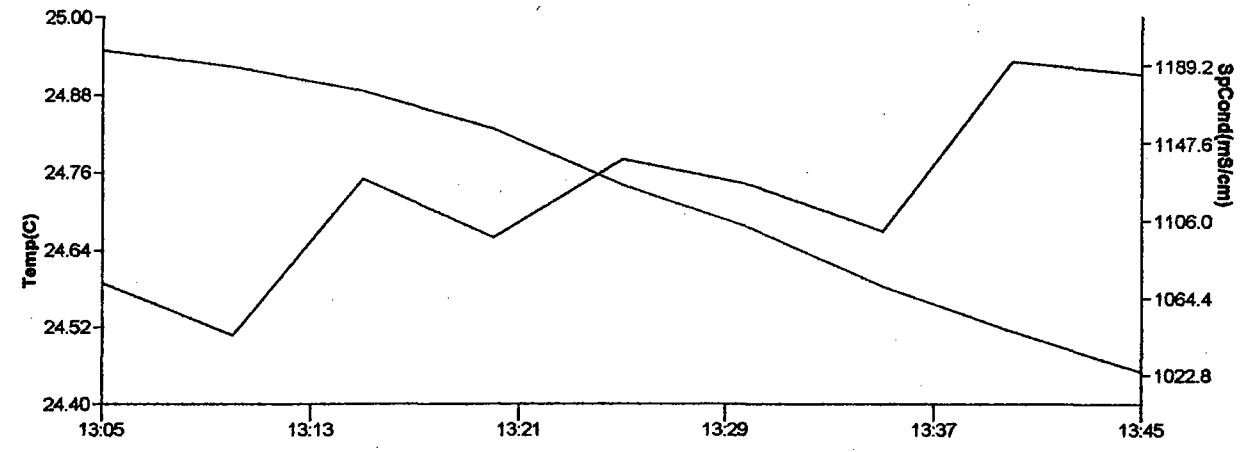
166MW01 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

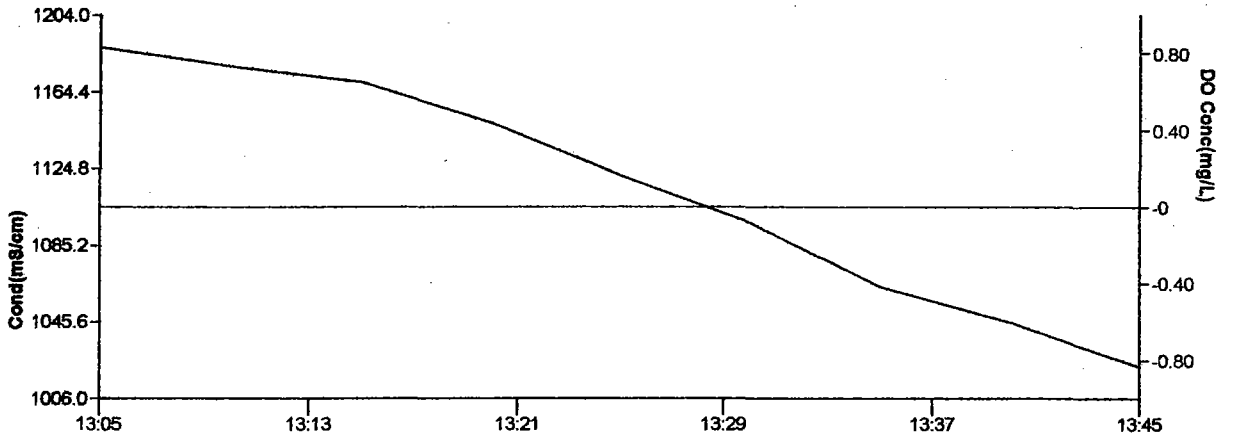
From 09/07/00 13:05 to 09/07/00 13:45
Number of samples: 9

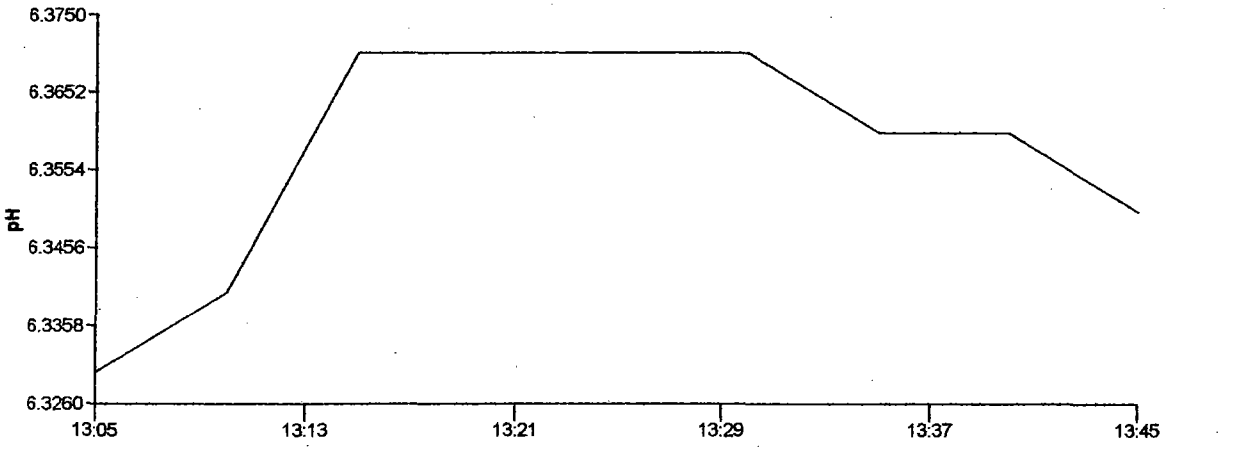
09/07/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
09/07/00 13:05	24.59	1197.000	1187.000	0.00	6.33
09/07/00 13:10	24.51	1188.000	1177.000	0.00	6.34
09/07/00 13:15	24.75	1175.000	1169.000	0.00	6.37
09/07/00 13:20	24.66	1155.000	1148.000	0.00	6.37
09/07/00 13:25	24.78	1125.000	1121.000	0.00	6.37
09/07/00 13:30	24.74	1102.000	1097.000	0.00	6.37
09/07/00 13:35	24.67	1071.000	1064.000	0.00	6.36
09/07/00 13:40	24.93	1047.000	1046.000	0.00	6.36
09/07/00 13:45	24.91	1025.000	1023.000	0.00	6.35

166MW01 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH





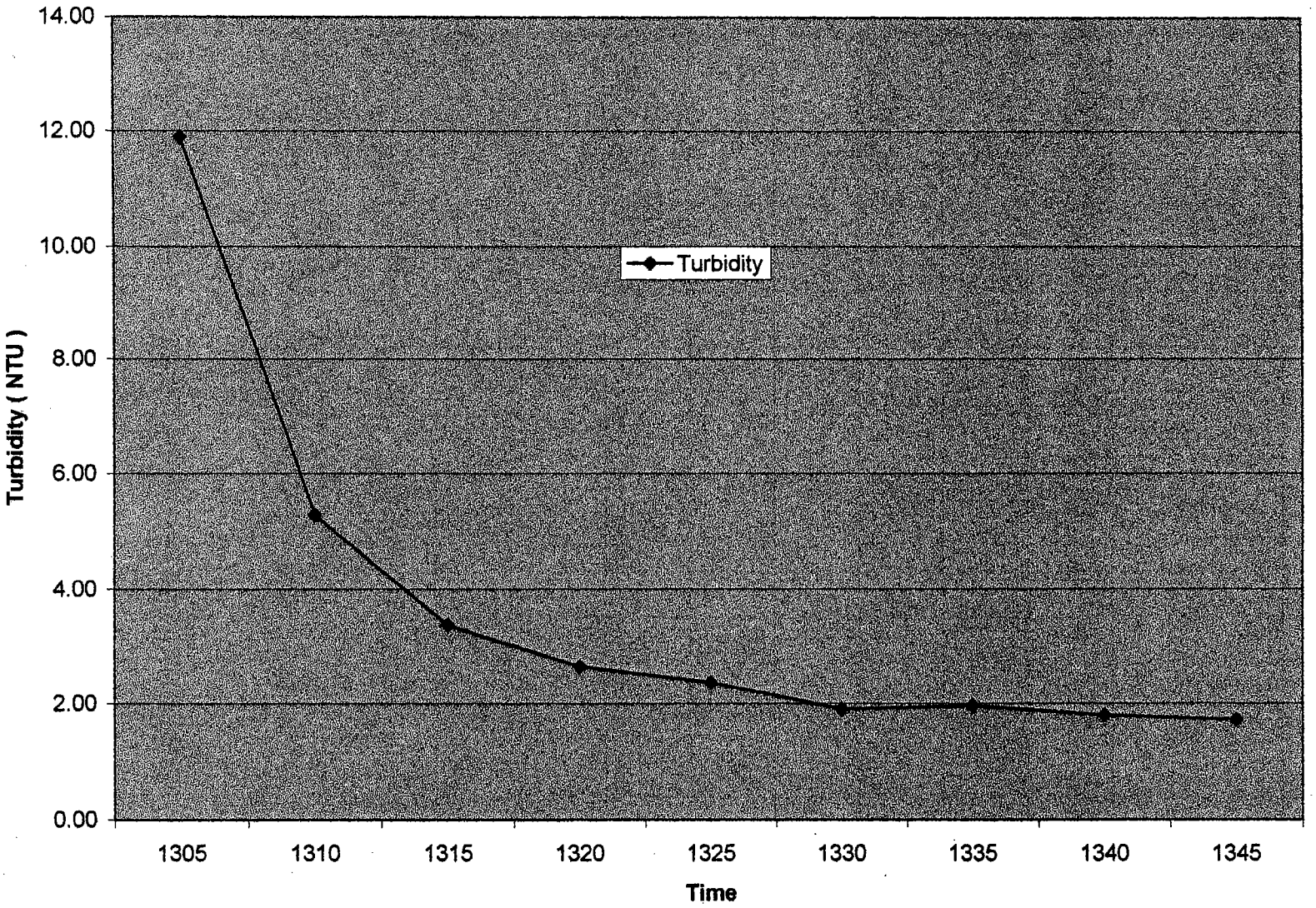


09/07/00 09/07/00 09/07/00 09/07/00 09/07/00 09/07/00

(09/07/00)

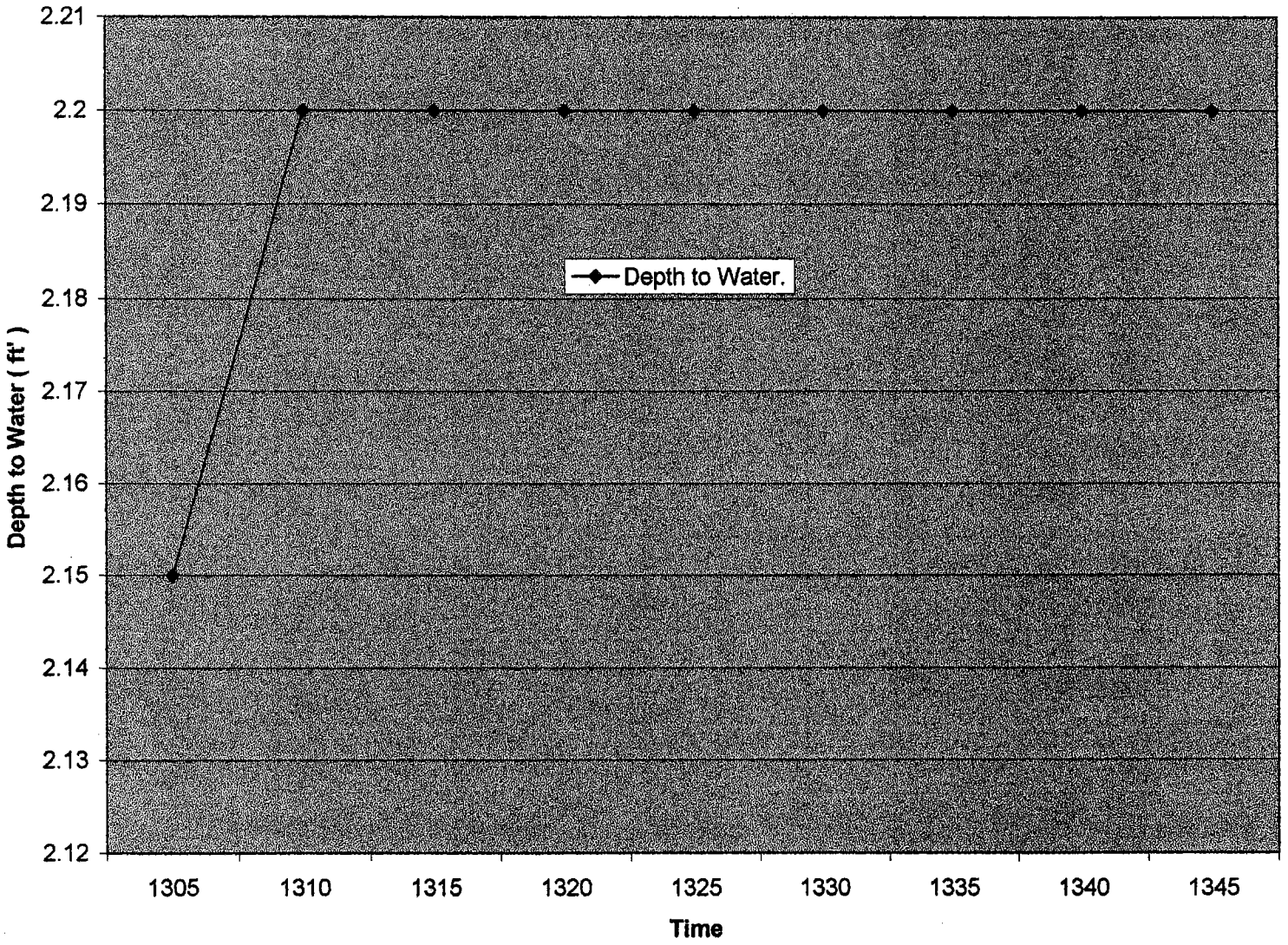
166MW01
Permit #: 29-31773
09/07/00

Turbidity

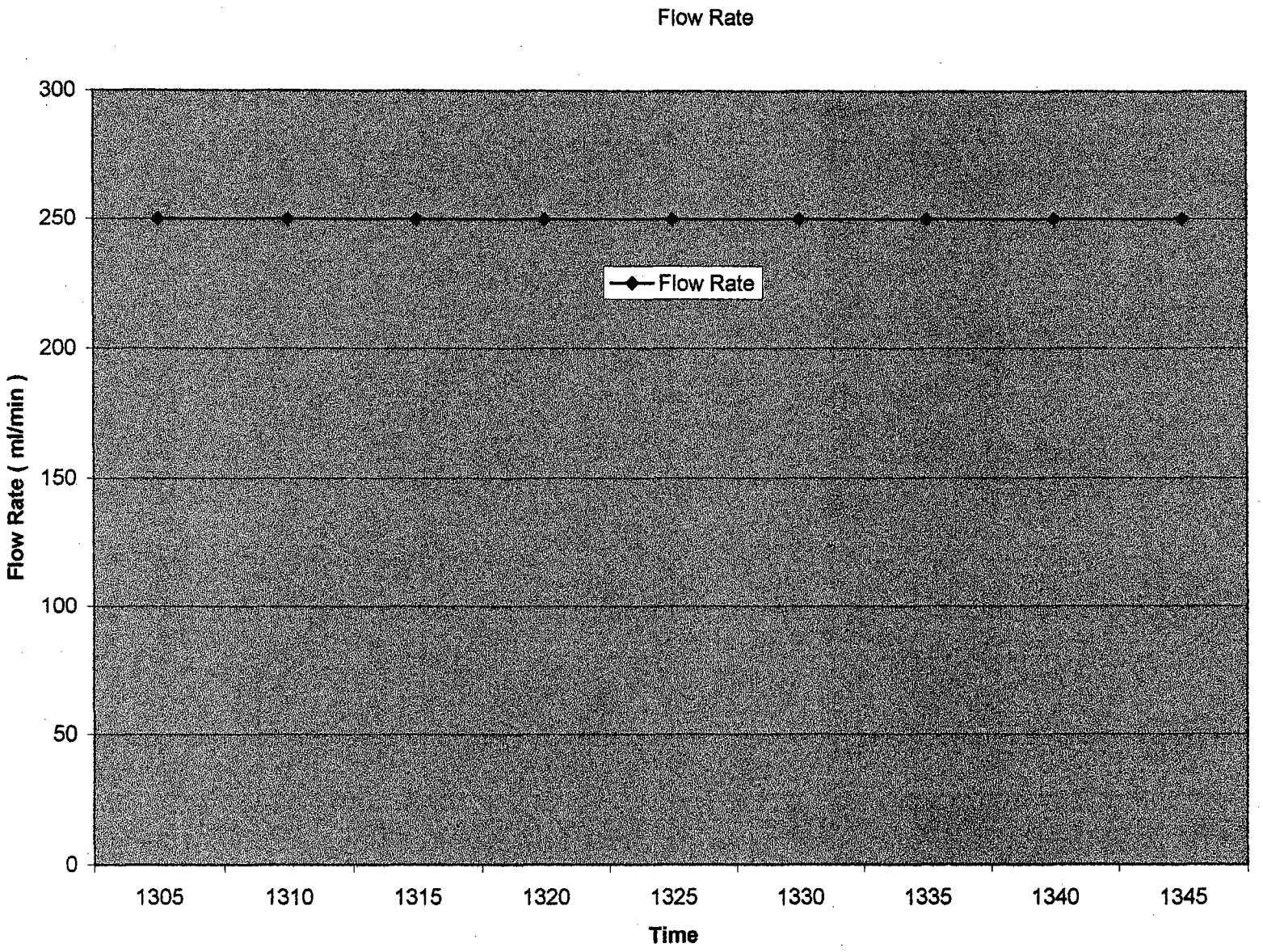


166MW01
Permit #: 29-31773
09/07/00

Depth to Water.



166MW01
Permit #: 29-31773
09/07/00



PESTICIDES

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK586
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5691.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/6/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FB
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5694.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FB
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5691.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FD
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5694.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FD
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1	18.83	0.10	0.0020	**0.024**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5694.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5694.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW02
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1	18.83	0.10	0.0020	**0.025**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5691.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW03
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5691.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW04
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5691.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW05
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5694.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/7/00
	Bldg. 173	**Extraction Date:**	9/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/14/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1	17.08	0.50	0.0036	**0.840**
Gamma-chlordane	1	16.72	0.50	0.0007	**0.460**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5694
Sample Prepared: 09/19/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	53.8	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	ND	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	99.2	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	ND	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	58.6	300	10.0
Lead	09/19/00	ND	10	1.0
Magnesium	09/19/00	ND	NLE	20.0
Manganese	09/19/00	ND	50	0.5
Mercury	09/28/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	ND	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	112	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	17.8	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5691.01
Sample Received: 09/06/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: FB

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	ND	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	ND	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	ND	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	ND	NLE	0.5
Copper	09/19/00	ND	1000	3.0
Iron	09/19/00	ND	300	10.0
Lead	09/19/00	ND	10	2.0
Magnesium	09/19/00	ND	NLE	20.0
Manganese	09/19/00	ND	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	ND	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	3.0
Sodium	09/19/00	ND	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	1.0
Zinc	09/19/00	ND	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5694.01
Sample Received: 09/07/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: FB

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	ND	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	ND	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	ND	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	ND	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	ND	300	10.0
Lead	09/19/00	ND	10	1.0
Magnesium	09/19/00	ND	NLE	20.0
Manganese	09/19/00	ND	50	0.5
Mercury	09/28/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	ND	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	101	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	5.53	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5691.02
Sample Received: 09/06/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: FD

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	1130	200	10.0
Antimony	09/19/00	2.31	20	2.0
Arsenic	09/19/00	6.30	8	2.0
Barium	09/19/00	275	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	218000	NLE	20.0
Chromium	09/19/00	12.6	100	0.5
Cobalt	09/19/00	13.1	NLE	0.5
Copper	09/19/00	ND	1000	3.0
Iron	09/19/00	306000	300	10.0
Lead	09/19/00	1.25	10	2.0
Magnesium	09/19/00	131000	NLE	20.0
Manganese	09/19/00	1980	50	0.5
Mercury	09/18/00	0.5	2	0.1
Nickel	09/19/00	5.87	100	0.5
Potassium	09/19/00	9290	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	3.0
Sodium	09/19/00	1810000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	3.44	NLE	1.0
Zinc	09/19/00	83.7	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5694.02
Sample Received: 09/07/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: FD

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	95.3	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	45.2	8	2.0
Barium	09/19/00	75.6	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	51500	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	2.99	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	88800	300	10.0
Lead	09/19/00	ND	10	1.0
Magnesium	09/19/00	16600	NLE	20.0
Manganese	09/19/00	696	50	0.5
Mercury	09/28/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	4180	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	657000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	19.1	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5694.04
Sample Received: 09/07/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	368	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	65.9	2000	0.5
Beryllium	09/19/00	0.849	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	13600	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	10.9	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	1820	300	10.0
Lead	09/19/00	ND	10	1.0
Magnesium	09/19/00	6620	NLE	20.0
Manganese	09/19/00	392	50	0.5
Mercury	09/28/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	2470	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	142000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	31.6	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5694.03
Sample Received: 09/07/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	102	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	46.6	8	2.0
Barium	09/19/00	76.9	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	51100	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	3.18	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	89700	300	10.0
Lead	09/19/00	ND	10	1.0
Magnesium	09/19/00	16500	NLE	20.0
Manganese	09/19/00	697	50	0.5
Mercury	09/28/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	4210	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	638000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	22.8	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5691.05
Sample Received: 09/06/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	650	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	34.7	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	33800	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	1.67	NLE	0.5
Copper	09/19/00	ND	1000	3.0
Iron	09/19/00	14600	300	10.0
Lead	09/19/00	ND	10	2.0
Magnesium	09/19/00	11100	NLE	20.0
Manganese	09/19/00	121	50	0.5
Mercury	09/18/00	0.2	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	6110	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	3.0
Sodium	09/19/00	132000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	1.0
Zinc	09/19/00	25.3	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5691.03
Sample Received: 09/06/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW04

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	1130	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	4.93	8	2.0
Barium	09/19/00	273	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	230000	NLE	20.0
Chromium	09/19/00	10.5	100	0.5
Cobalt	09/19/00	12.6	NLE	0.5
Copper	09/19/00	ND	1000	3.0
Iron	09/19/00	306000	300	10.0
Lead	09/19/00	ND	10	2.0
Magnesium	09/19/00	139000	NLE	20.0
Manganese	09/19/00	1980	50	0.5
Mercury	09/18/00	0.2	2	0.1
Nickel	09/19/00	2.67	100	0.5
Potassium	09/19/00	10700	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	3.0
Sodium	09/19/00	1920000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	3.11	NLE	1.0
Zinc	09/19/00	71.7	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5691.04
Sample Received: 09/06/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW05

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	48000	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	32.7	8	2.0
Barium	09/19/00	865	2000	0.5
Beryllium	09/19/00	8.35	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	699000	NLE	20.0
Chromium	09/19/00	29.5	100	0.5
Cobalt	09/19/00	30.3	NLE	0.5
Copper	09/19/00	ND	1000	3.0
Iron	09/19/00	353000	300	10.0
Lead	09/19/00	79.5	10	2.0
Magnesium	09/19/00	241000	NLE	20.0
Manganese	09/19/00	2300	50	0.5
Mercury	09/18/00	0.2	2	0.1
Nickel	09/19/00	45.5	100	0.5
Potassium	09/19/00	69700	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	3.0
Sodium	09/19/00	7830000	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	7.30	NLE	1.0
Zinc	09/19/00	248	5000	1.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5694.05
Sample Received: 09/07/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	39.9	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	23.5	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	71200	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	0.603	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	8360	300	10.0
Lead	09/19/00	1.73	10	1.0
Magnesium	09/19/00	18400	NLE	20.0
Manganese	09/19/00	452	50	0.5
Mercury	09/28/00	ND	2	0.1
Nickel	09/19/00	ND	100	0.5
Potassium	09/19/00	4590	NLE	20.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	83300	50000	20.0
Thallium	09/19/00	ND	10	3.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	28.4	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program
Low Flow/Round II

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5782.03	0080MW01	29-31774	10/12/00
5782.04	0080MW02	29-43199	10/12/00
5780.05	0080MW03	29-43201	10/11/00
5780.03	0080MW04	29-43200	10/11/00
5780.04	0080MW05	29-43202	10/11/00
5782.05	0166MW01	29-31773	10/12/00

NJDEP Laboratory Certification # 13461

11-01-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: SFALCON
Phone #: 426223
(✓)DERA ( )OMA ( )Other:_____

Project No: ~~8[illegible]~~ 35 Low Flow
Location: 80/166

Samplers Name / Company: David Sharp - TVS

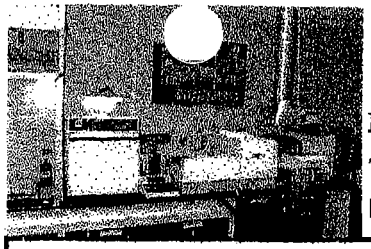
Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	TAL Metals	PEST							Comments: Remarks / Preservation Method
5780-1	FB	10/11/00	0845	AQ	2	✓	✓							HNO3
2	FD	"	—	AQ	2	✓	✓							"
3	80MW04	"	1000	AQ	2	✓	✓							"
4	80MW05	"	1130	AQ	2	✓	✓							"
5	80MW03	"	1435	AQ	2	✓	✓							"

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	10/11/00 1530	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, (X)Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks:

1 1



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: JFALLON
Phone #: X26223
(✓)DERA ( )OMA ( )Other:_____

Project No: LOW FLOW
Location: 80/166

Samplers Name / Company: David Sharpe

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	TAL METALS	TCLP							Remarks / Preservation Method
5782. 01	FB	10/12/00	0915	AQ	2	✓	✓							HNO_3
02	FD	"	—	AQ	2	✓	✓							"
03	80MW01	"	1045	AQ	2	✓	✓							"
04	80MW02	"	1210	AQ	2	✓	✓							"
05	166MW01	"	1455	AQ	2	✓	✓							"

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
David Sharpe	10/12/00 1500				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks:

print legibly

Coc xls9/27/00

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW01
NJDEP ID#29-31774
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/12/00
WEATHER: Sunny, and cool.
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 1.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 2.9 ft
Before Purge Start: 2.9 ft **Previous Day: 2.9 ft** **After Sampling: 2.9 ft**
DEPTH OF WELL: 12.26 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE:10 ft
TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 9.36 ft
(9.36) X .65 X 3 = 18.25
(.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 18Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 280 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 09:50
pH 5.18 su
TEMP 22.81 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 1717 ms/cm

PURGE END TIME: 10:45
pH 5.21 su
TEMP 23.10 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1628 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 2.9 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 10:35
pH 5.20 su
TEMP 23.09 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1621 ms/cm

SAMPLE END TIME: 10:44
ANALYTES: TAL Metals/Pest
COMMENTS: DUP. Here.

FIELD READINGS

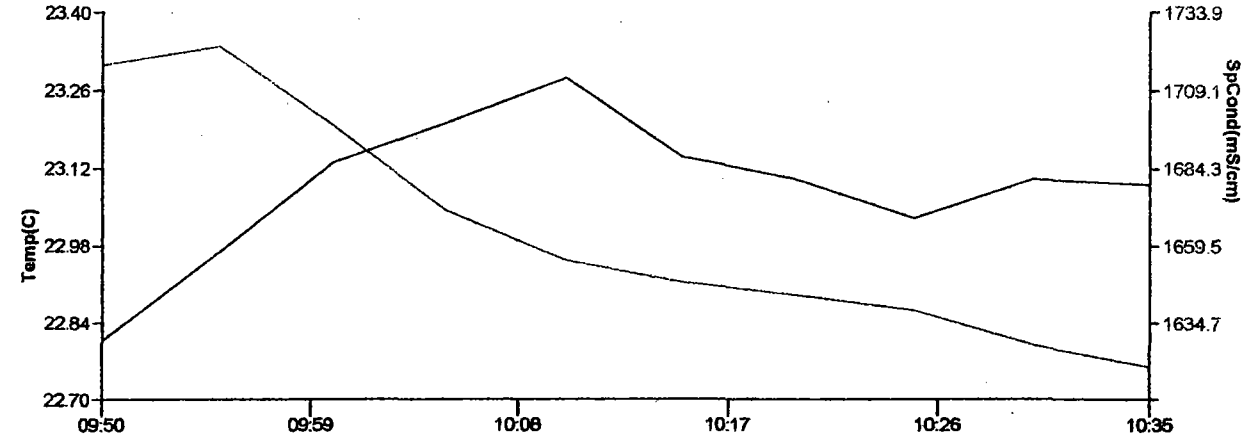
MW: 0080MW01
NJDEP ID#: 29-31774
DATE: 10/12/00

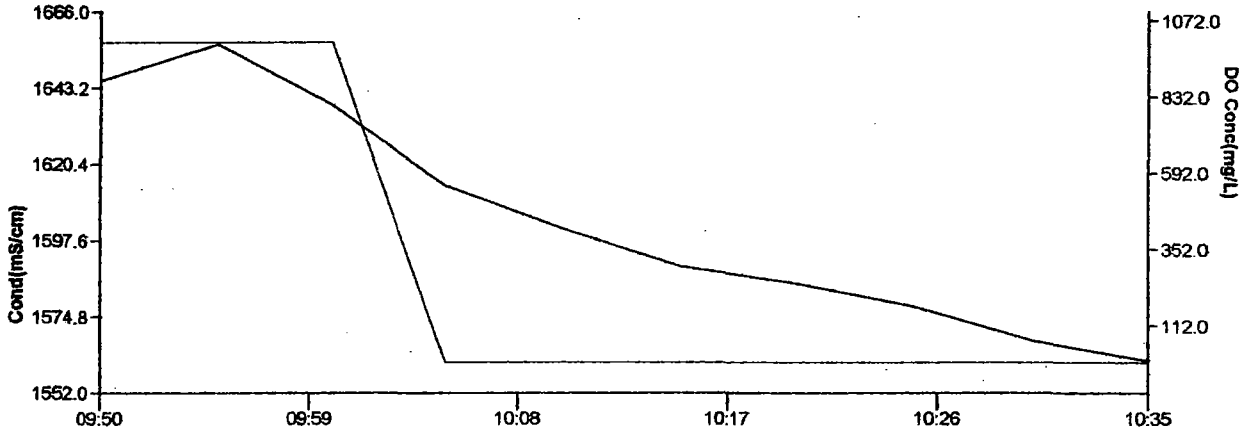
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
9:50	5.18	22.81	1645	1717	999.99	9.31	2.9	280	
9:55	5.21	22.97	1656	1723	999.99	7.64	2.9	280	
10:00	5.22	23.13	1638	1698	999.99	9.52	2.9	280	
10:05	5.22	23.2	1614	1671	0	6.92	2.9	280	
10:10	5.22	23.28	1601	1655	0	7.2	2.9	280	
10:15	5.21	23.14	1590	1648	0	7.05	2.9	280	
10:20	5.21	23.1	1585	1644	0	7.16	2.9	280	
10:25	5.21	23.03	1578	1639	0	6.57	2.9	280	
10:30	5.21	23.1	1568	1628	0	6.1	2.9	280	
10:35	5.2	23.09	1562	1621	0	5.98	2.9	280	

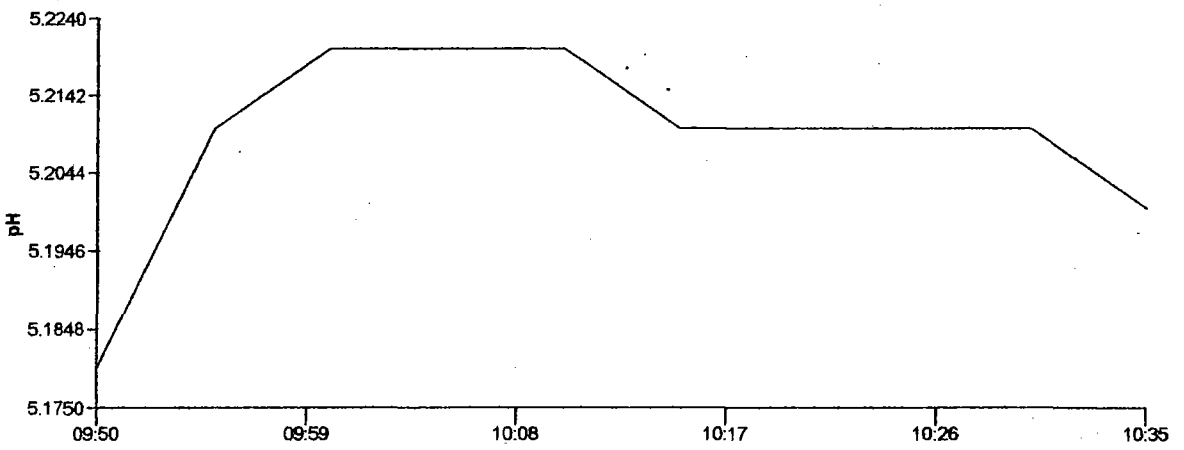
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
950	9.31	2.9	280
955	7.64	2.9	280
1000	9.52	2.9	280
1005	6.92	2.9	280
1010	7.20	2.9	280
1015	7.05	2.9	280
1020	7.16	2.9	280
1025	6.57	2.9	280
1030	6.10	2.9	280
1035	5.98	2.9	280

80MW01-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







10/12/00 10/12/00 10/12/00 10/12/00 10/12/00 10/12/00

(10/12/00)

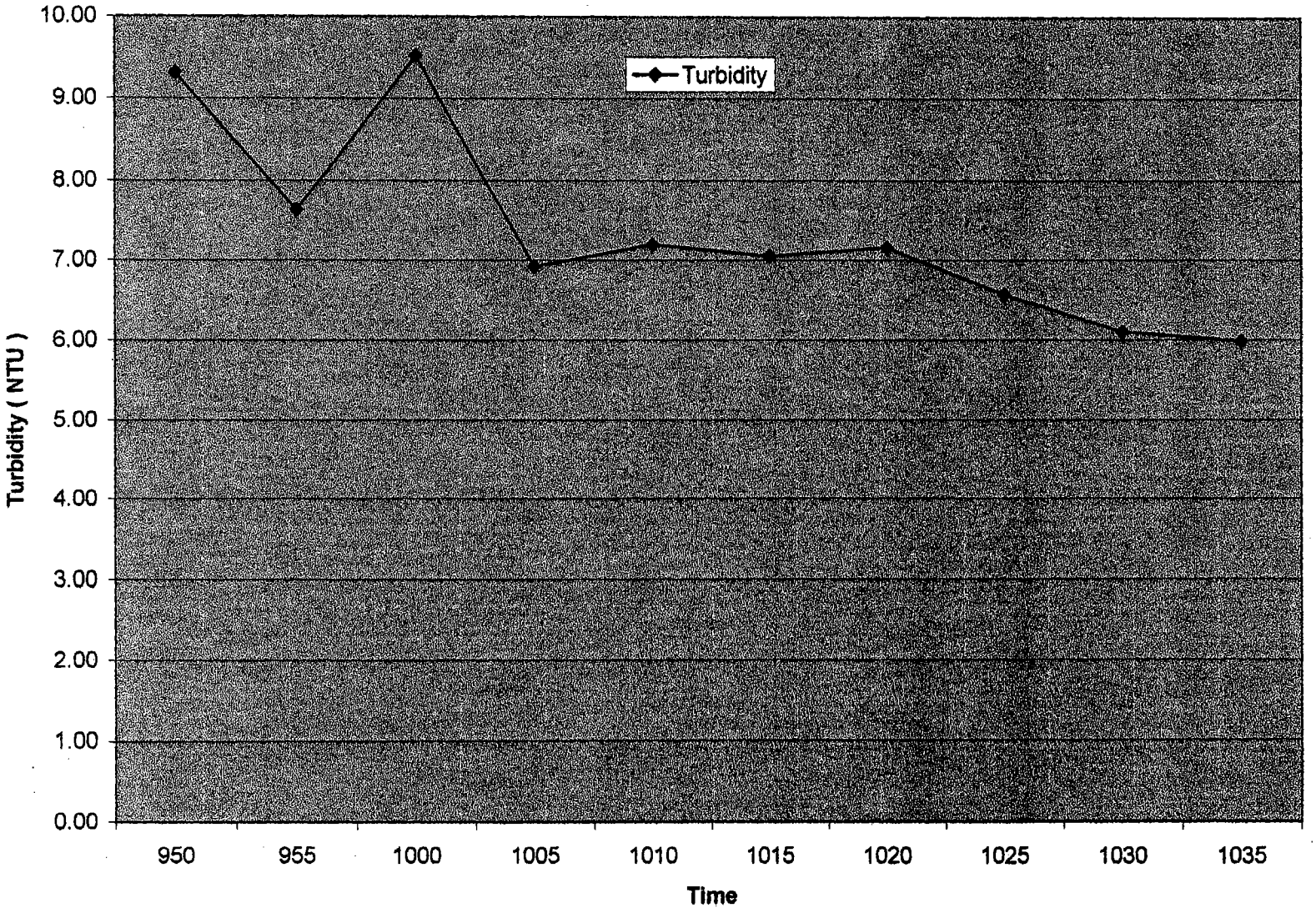
80mw01-2

80MW01-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/12/00 09:50 to 10/12/00 10:35
Number of samples: 10

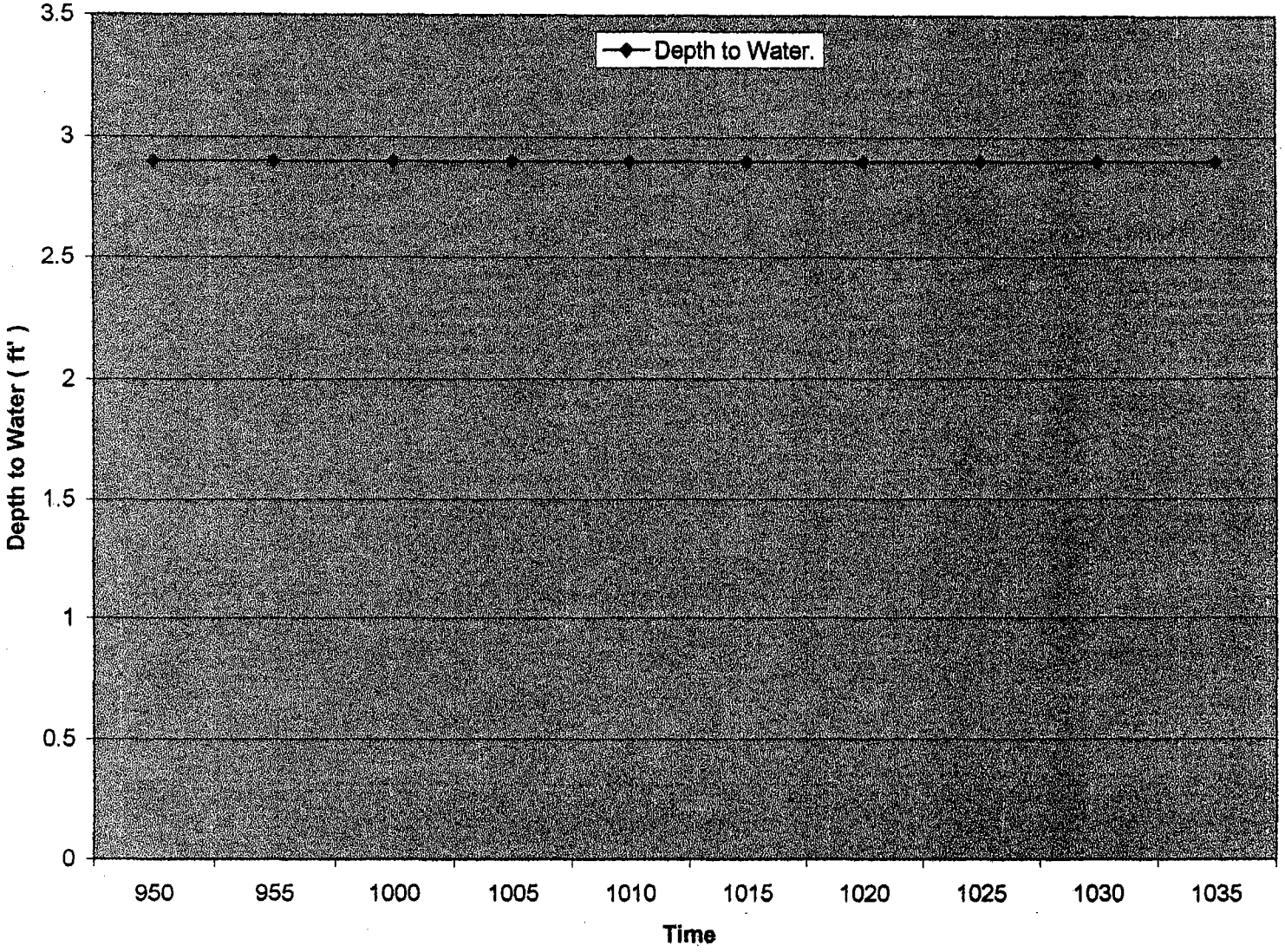
10/12/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/12/00 09:50	22.81	1717.000	1645.000	999.99	5.18
10/12/00 09:55	22.97	1723.000	1656.000	999.99	5.21
10/12/00 10:00	23.13	1698.000	1638.000	999.99	5.22
10/12/00 10:05	23.20	1671.000	1614.000	0.00	5.22
10/12/00 10:10	23.28	1655.000	1601.000	0.00	5.22
10/12/00 10:15	23.14	1648.000	1590.000	0.00	5.21
10/12/00 10:20	23.10	1644.000	1585.000	0.00	5.21
10/12/00 10:25	23.03	1639.000	1578.000	0.00	5.21
10/12/00 10:30	23.10	1628.000	1568.000	0.00	5.21
10/12/00 10:35	23.09	1621.000	1562.000	0.00	5.20

0080MW01
Permit #: 29-31774
10/12/00

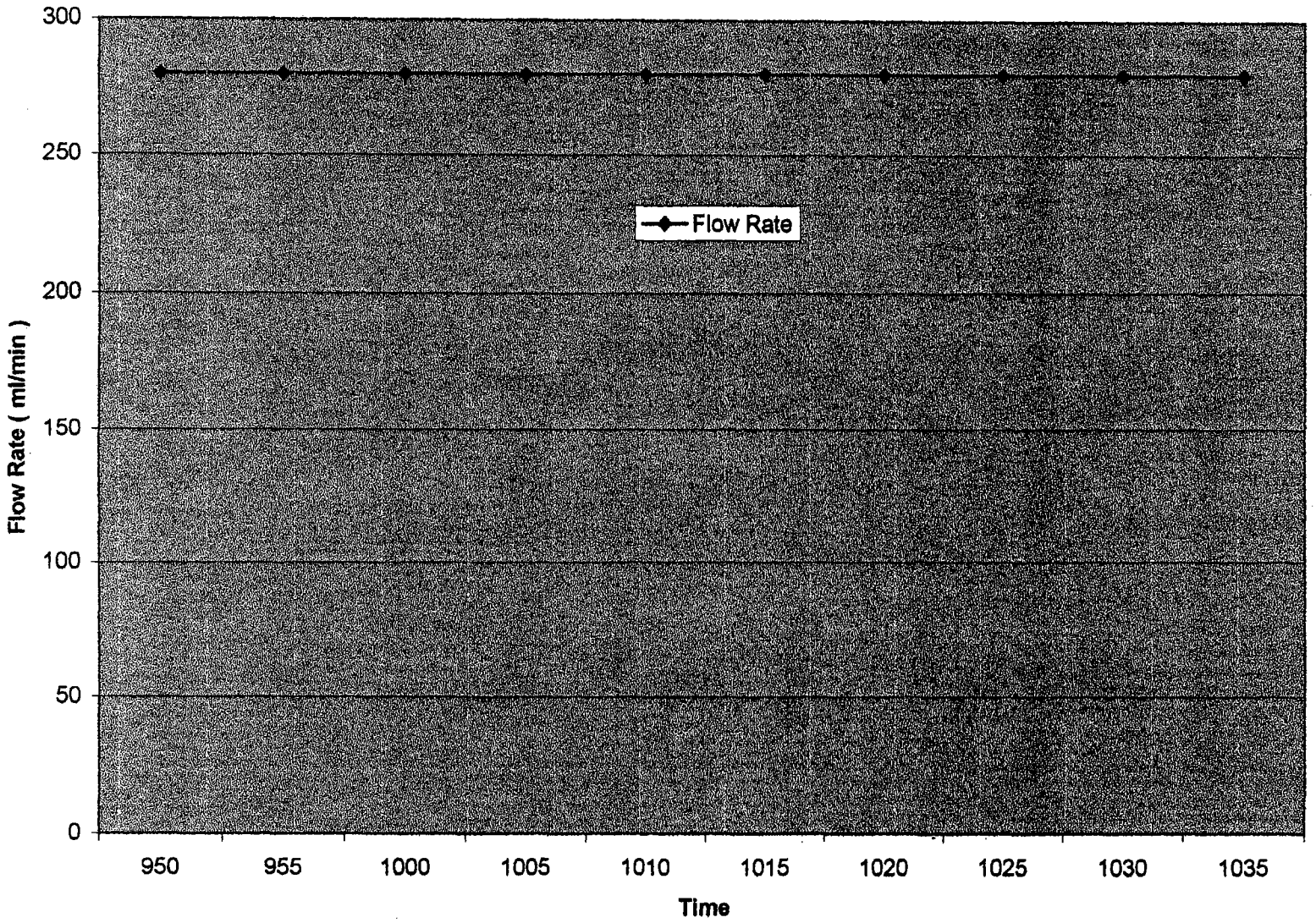


0080MW01
Permit #: 29-31774
10/12/00

Depth to Water.



0080MW01
Permit #: 29-31774
10/12/00



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW02
NJDEP ID#29-43199
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/12/00
WEATHER: Sunny, and cool.
TIDE: N/A

Hnu Calibration: Span 1.0 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp: N/A

WELL CONDITION: Good
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.45 ft
Before Purge Start: 3.45 ft **Previous Day: 3.5 ft** **After Sampling: 3.45 ft**
DEPTH OF WELL: 12.35 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 10.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 8.9 ft
(8.9) X .65 X 3 = 17.35 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 17 Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 300 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 11:15
pH 4.21 su
TEMP 22.12 °C
DISSOLVED O_2 0.24 mg/L
SPECIFIC CONDUCTIVITY 355.5 ms/cm

PURGE END TIME: 12:12
pH 3.94 su
TEMP 21.95 °C
DISSOLVED O_2 0.13 mg/L
SPECIFIC CONDUCTIVITY 312.8 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 3.45 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 12:06
pH 3.98 su
TEMP 21.84 °C
DISSOLVED O_2 0.13 mg/L
SPECIFIC CONDUCTIVITY 313.7 ms/cm

SAMPLE END TIME: 12:11
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

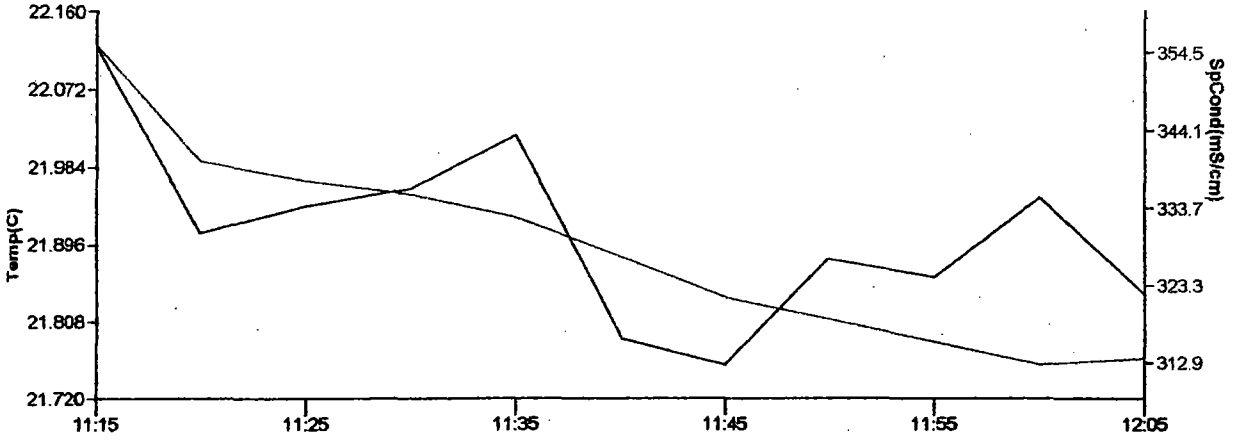
MW: 0080MW02
NJDEP ID#: 29-43199
DATE: 10/12/00

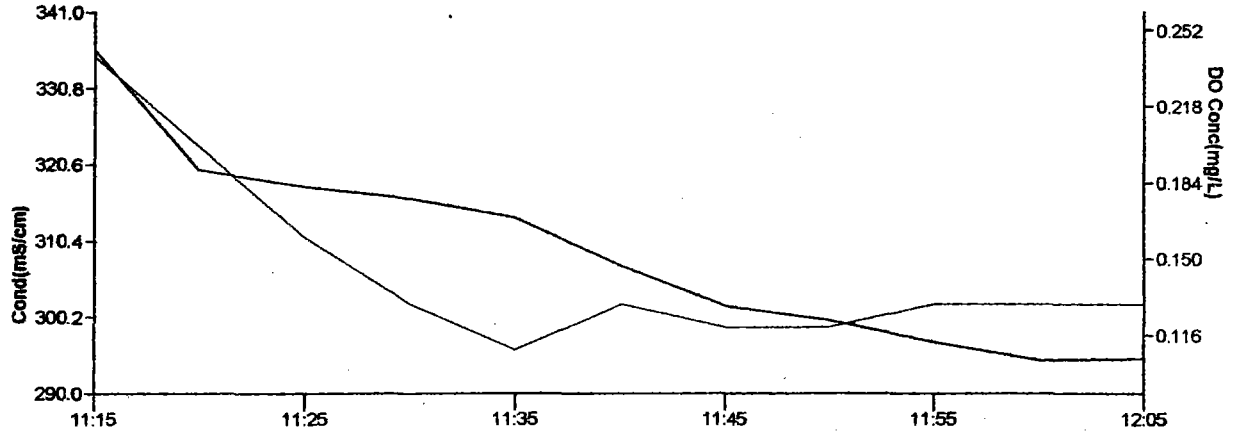
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
11:15	4.21	22.12	335.9	355.5	0.24	30.2	3.45	300	
11:20	3.97	21.91	319.9	340	0.2	24.7	3.45	300	
11:25	3.97	21.94	317.7	337.4	0.16	19.6	3.45	300	
11:30	3.97	21.96	316.1	335.6	0.13	13.1	3.45	300	
11:35	3.96	22.02	313.5	332.5	0.11	9.2	3.45	300	
11:40	3.96	21.79	307.1	327.1	0.13	7.86	3.45	300	
11:45	3.93	21.76	301.8	321.8	0.12	8.77	3.45	300	
11:50	3.94	21.88	299.9	318.9	0.12	9.98	3.45	300	
11:55	3.94	21.86	297	315.9	0.13	8.26	3.45	300	
12:00	3.94	21.98	294.6	312.8	0.13	7.78	3.45	300	
12:05	3.96	21.84	294.8	313.7	0.13	8.5	3.45	300	

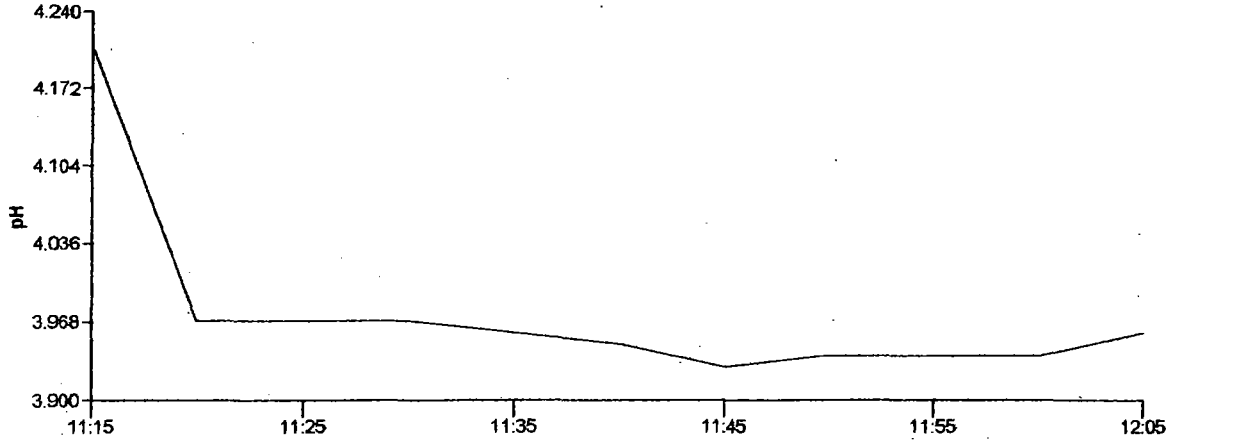
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1115	30.20	3.45	300
1120	24.70	3.45	300
1125	19.60	3.45	300
1130	13.10	3.45	300
1135	9.20	3.45	300
1140	7.86	3.45	300
1145	8.77	3.45	300
1150	9.98	3.45	300
1155	8.26	3.45	300
1200	7.78	3.45	300
1205	8.50	3.45	300

80MW02-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







10/12/00 10/12/00 10/12/00 10/12/00 10/12/00 10/12/00

(10/12/00)

80mw02-2

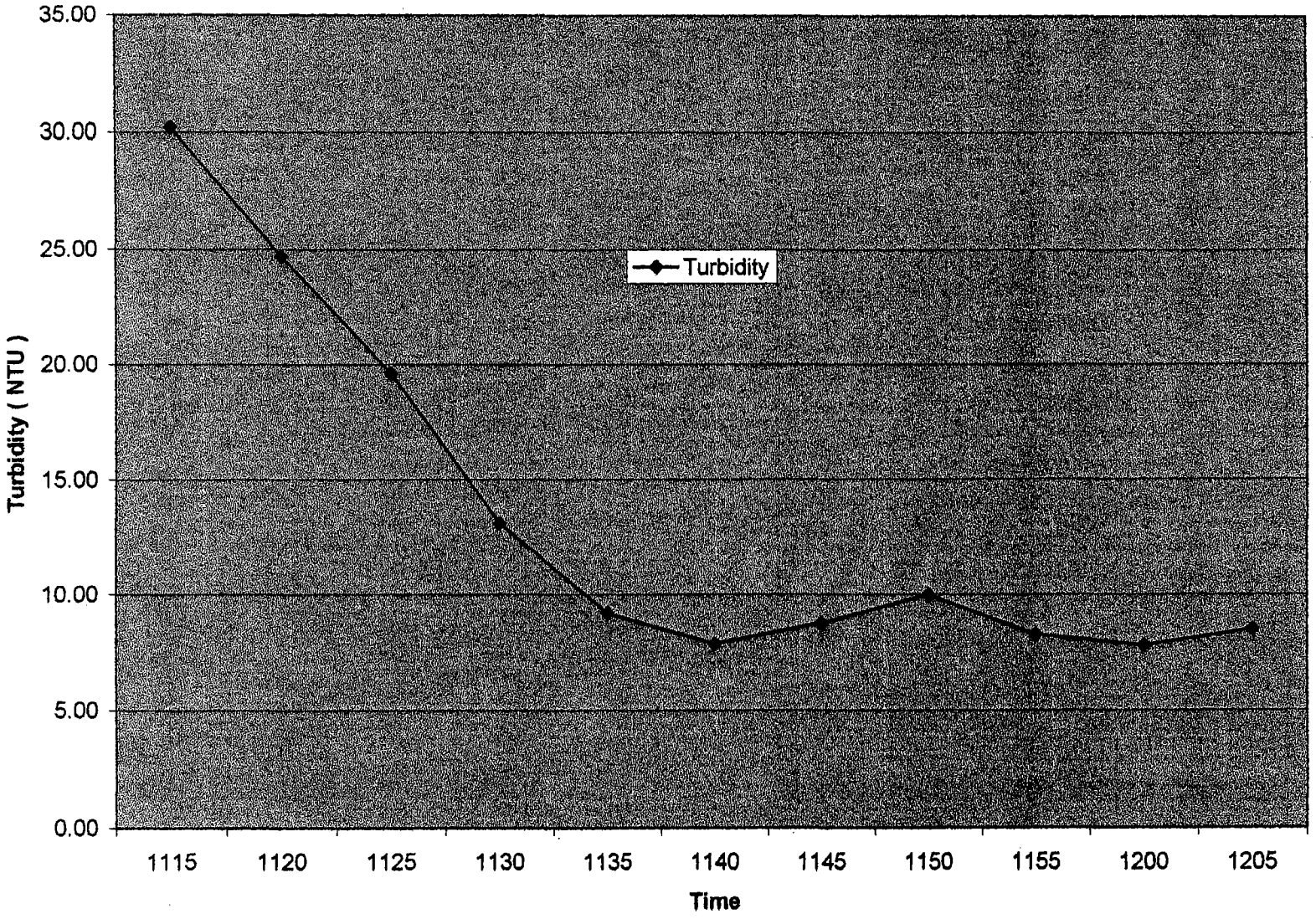
80MW02-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/12/00 11:15 to 10/12/00 12:05
Number of samples: 11

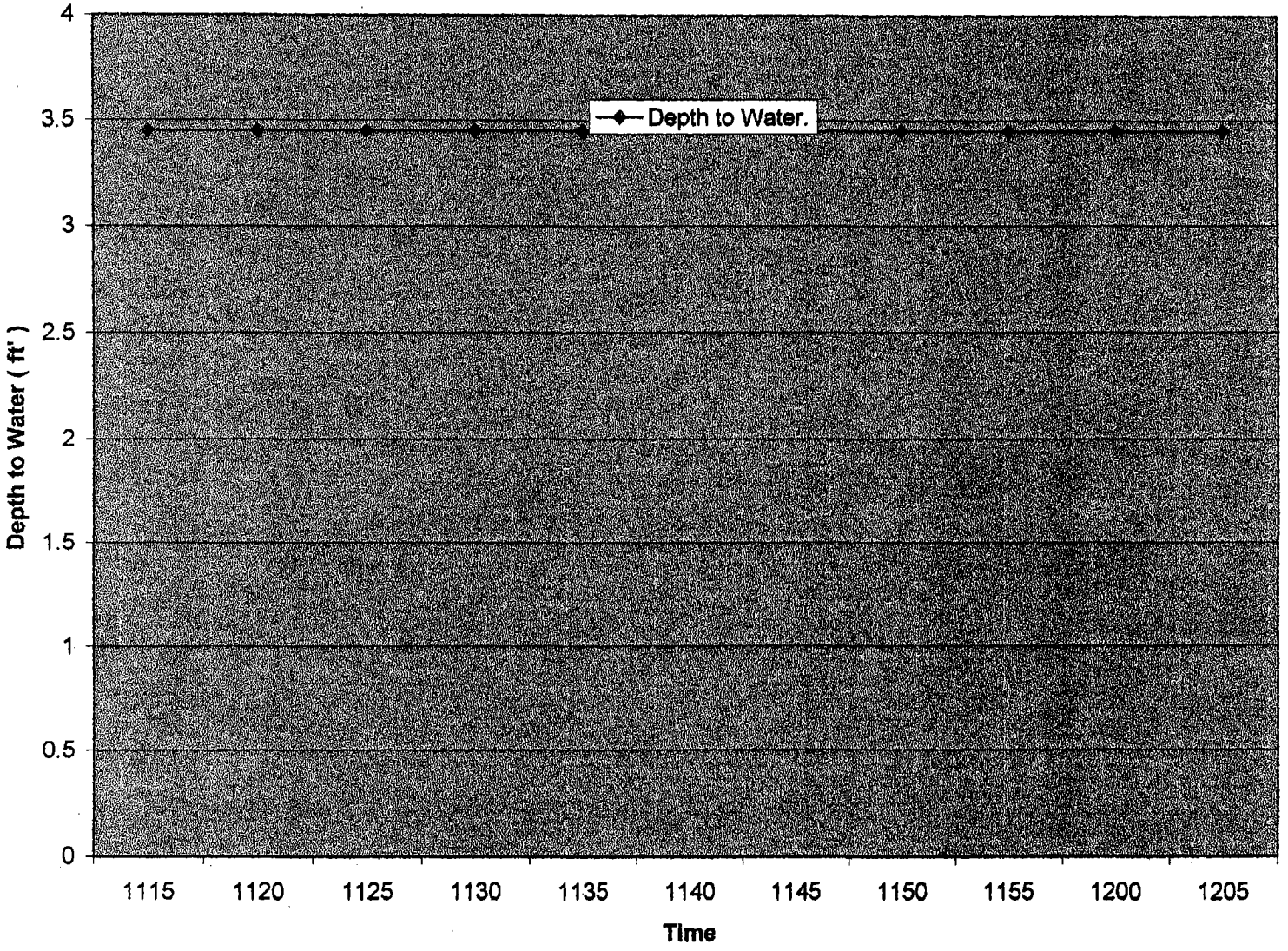
10/12/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/12/00 11:15	22.12	355.500	335.900	0.24	4.21
10/12/00 11:20	21.91	340.000	319.900	0.20	3.97
10/12/00 11:25	21.94	337.400	317.700	0.16	3.97
10/12/00 11:30	21.96	335.600	316.100	0.13	3.97
10/12/00 11:35	22.02	332.500	313.500	0.11	3.96
10/12/00 11:40	21.79	327.200	307.100	0.13	3.95
10/12/00 11:45	21.76	321.800	301.800	0.12	3.93
10/12/00 11:50	21.88	318.900	299.900	0.12	3.94
10/12/00 11:55	21.86	315.900	297.000	0.13	3.94
10/12/00 12:00	21.95	312.800	294.600	0.13	3.94
10/12/00 12:05	21.84	313.700	294.800	0.13	3.96

0080MW02
Permit #: 29-43199
10/12/00

Turbidity

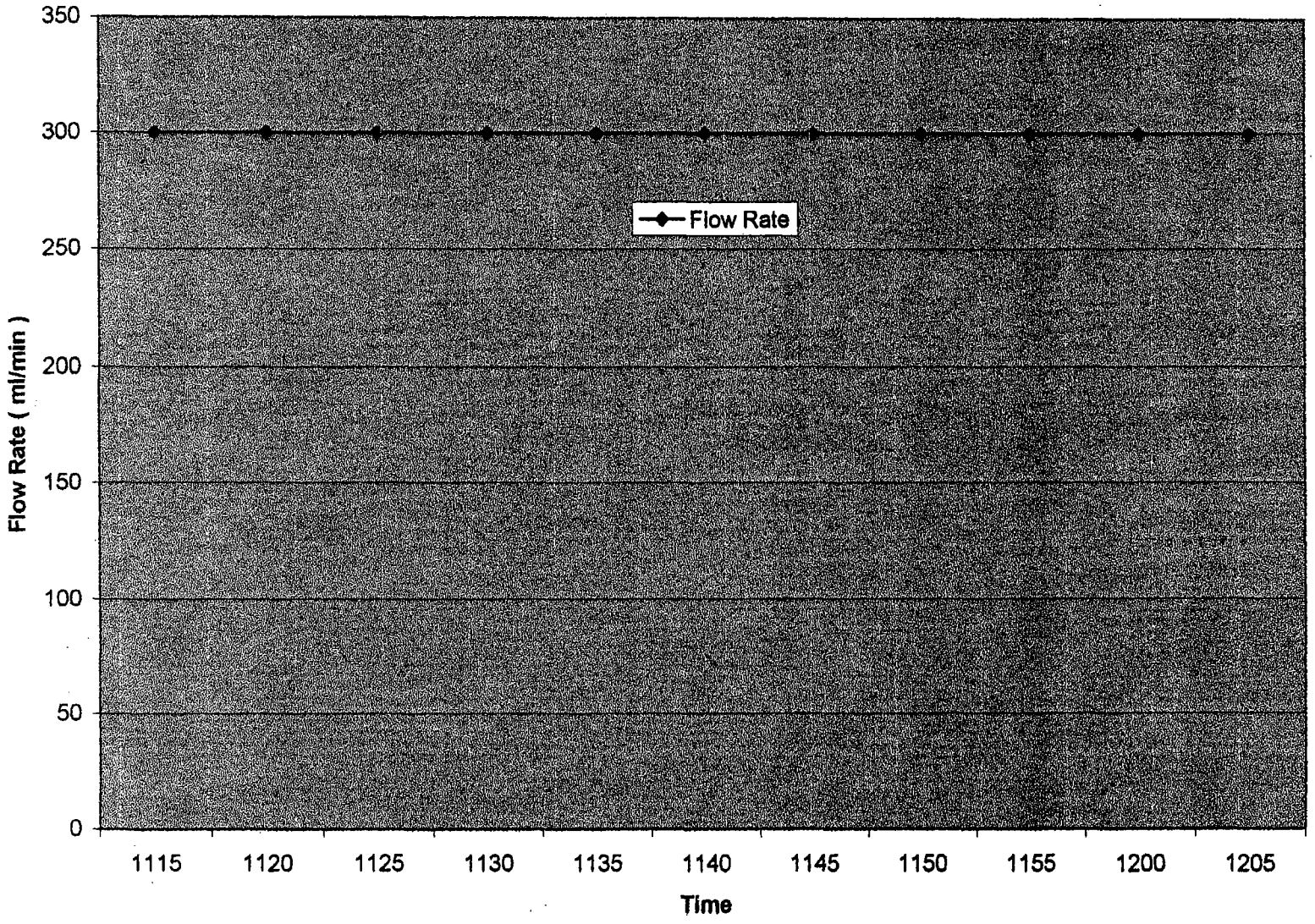


0080MW02
Permit #: 29-43199
10/12/00



0080MW02
Permit #: 29-43199
10/12/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW03
NJDEP ID#29-43201
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/11/00
WEATHER: Sunny, and cool.
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 1.0 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.55 ft
Before Purge Start: 3.55 ft **Previous Day: 3.60 ft** **After Sampling: 4.05 ft**
DEPTH OF WELL: 11.25 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 9.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 7.7 ft
(7.7) X .65 X 3 = 15 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 15 Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 330 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 12:00
pH 5.98 su
TEMP 20.91 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 2194 ms/cm

PURGE END TIME: 14:35
pH 5.75 su
TEMP 20.80 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1072 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 4.05 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 14:26
pH 5.75 su
TEMP 20.85 °C
DISSOLVED O_2 0.00 mg/L
SPECIFIC CONDUCTIVITY 1072 ms/cm

SAMPLE END TIME: 14:34
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

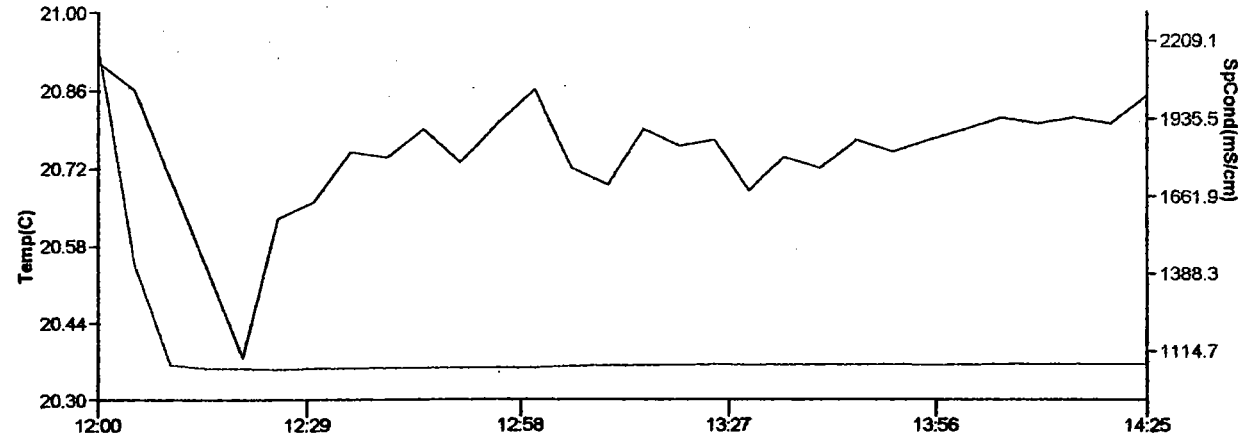
MW: 0080MW03
NJDEP ID#: 29-43201
DATE: 10/11/00

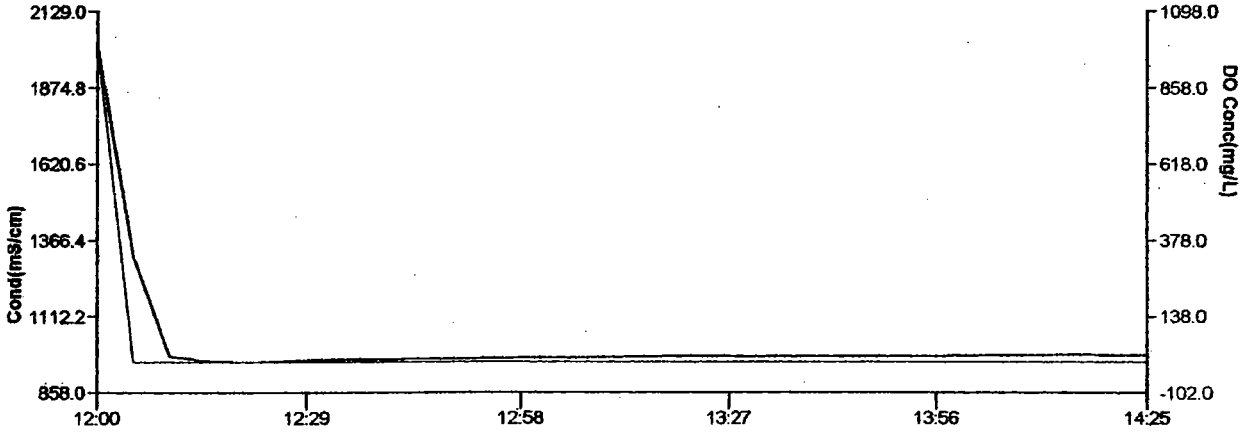
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
12:00	5.98	20.91	2023	2194	999.99	79.3	3.55	330	
12:05	5.95	20.86	1313	1426	0	73.3	3.55	330	
12:10	6.23	20.7	982.6	1070	0	75.5	3.55	330	
12:15	6.74	20.54	966.6	1057	0	59.2	3.55	330	
12:20	5.93	20.38	964.2	1058	0	63	3.55	330	
12:25	5.9	20.63	965.9	1059	0	52.1	3.55	330	
12:30	5.91	20.66	970.1	1058	0	45.6	3.55	330	
12:35	5.91	20.75	974.6	1058	0	40.8	3.55	330	
12:40	5.91	20.74	972.5	1059	0	36.5	3.55	330	
12:45	5.91	20.79	974.7	1060	0	33.6	3.55	330	
12:50	5.89	20.73	973.8	1060	0	31.1	3.55	330	
12:55	5.87	20.8	975.1	1060	0	28.8	3.55	330	
13:00	5.86	20.86	976.4	1060	0	26.4	3.55	330	
13:05	5.86	20.72	979.5	1065	0	24	3.55	330	
13:10	5.99	20.69	978.5	1066	0	22.4	3.55	330	
13:15	5.88	20.79	981.6	1067	0	20.8	3.55	330	
13:20	5.86	20.76	982.2	1069	0	19.6	3.55	330	
13:25	5.81	20.77	983.7	1070	0	18.7	3.55	330	
13:30	5.82	20.68	980.6	1069	0	17	3.55	330	
13:35	5.8	20.74	982.6	1070	0	16.5	3.55	330	
13:40	5.8	20.72	982.1	1070	0	15	3.55	330	
13:45	5.79	20.77	983.4	1070	0	15.2	3.55	330	
13:50	5.79	20.78	983.3	1070	0	15.1	3.55	330	
13:55	5.79	20.77	982.8	1069	0	13.6	3.55	330	
14:00	5.77	20.79	983.9	1070	0	14	3.55	330	
14:05	5.75	20.81	986	1072	0	13.1	3.55	330	
14:10	5.76	20.8	986.8	1073	0	12.4	3.55	330	
14:15	5.75	20.81	987.1	1073	0	11.8	3.55	330	
14:20	5.75	20.8	986.4	1072	0	11.5	3.55	330	
14:25	5.75	20.85	986.7	1072	0	11.9	3.55	330	

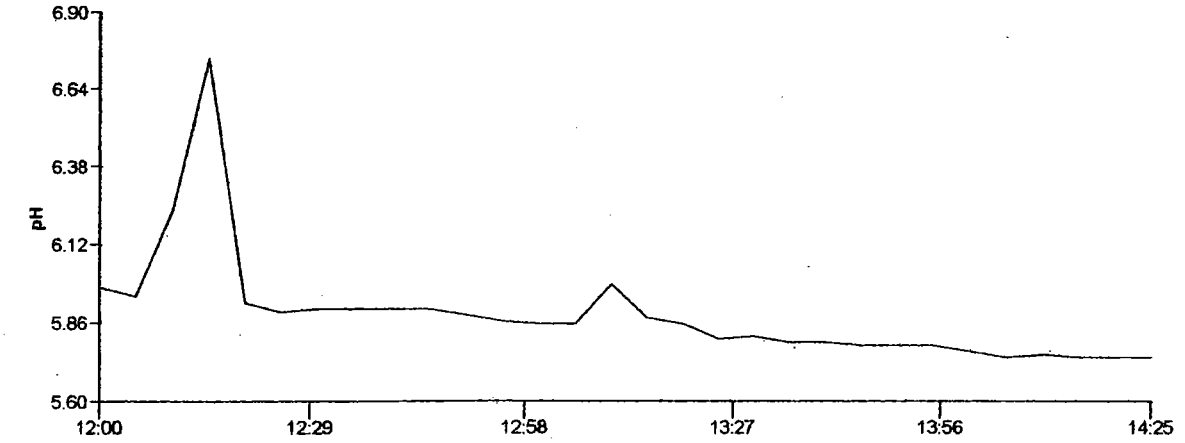
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1200	79.30	3.55	330
1205	73.30	3.55	330
1210	75.50	3.55	330
1215	59.20	3.55	330
1220	63.00	3.55	330
1225	52.10	3.55	330
1230	45.60	3.55	330
1235	40.80	3.55	330
1240	36.50	3.55	330
1245	33.60	3.55	330
1250	31.10	3.55	330
1255	28.80	3.65	330
1300	26.40	3.65	330
1305	24.00	3.65	330
1310	22.40	3.65	330
1315	20.80	3.65	330
1320	19.60	3.8	330
1325	18.70	3.8	330
1330	17	3.8	330
1335	16.5	3.8	330
1340	15	3.9	330
1345	15.2	3.9	330
1350	15.1	3.9	330
1355	13.6	3.9	330
1400	14	4	330
1405	13.1	4	330
1410	12.4	4	330
1415	11.8	4.05	330
1420	11.5	4.05	330
1425	11.9	4.05	330

80MW03-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







10/11/00 10/11/00 10/11/00 10/11/00 10/11/00 10/11/00

(10/11/00)

80mw03-2

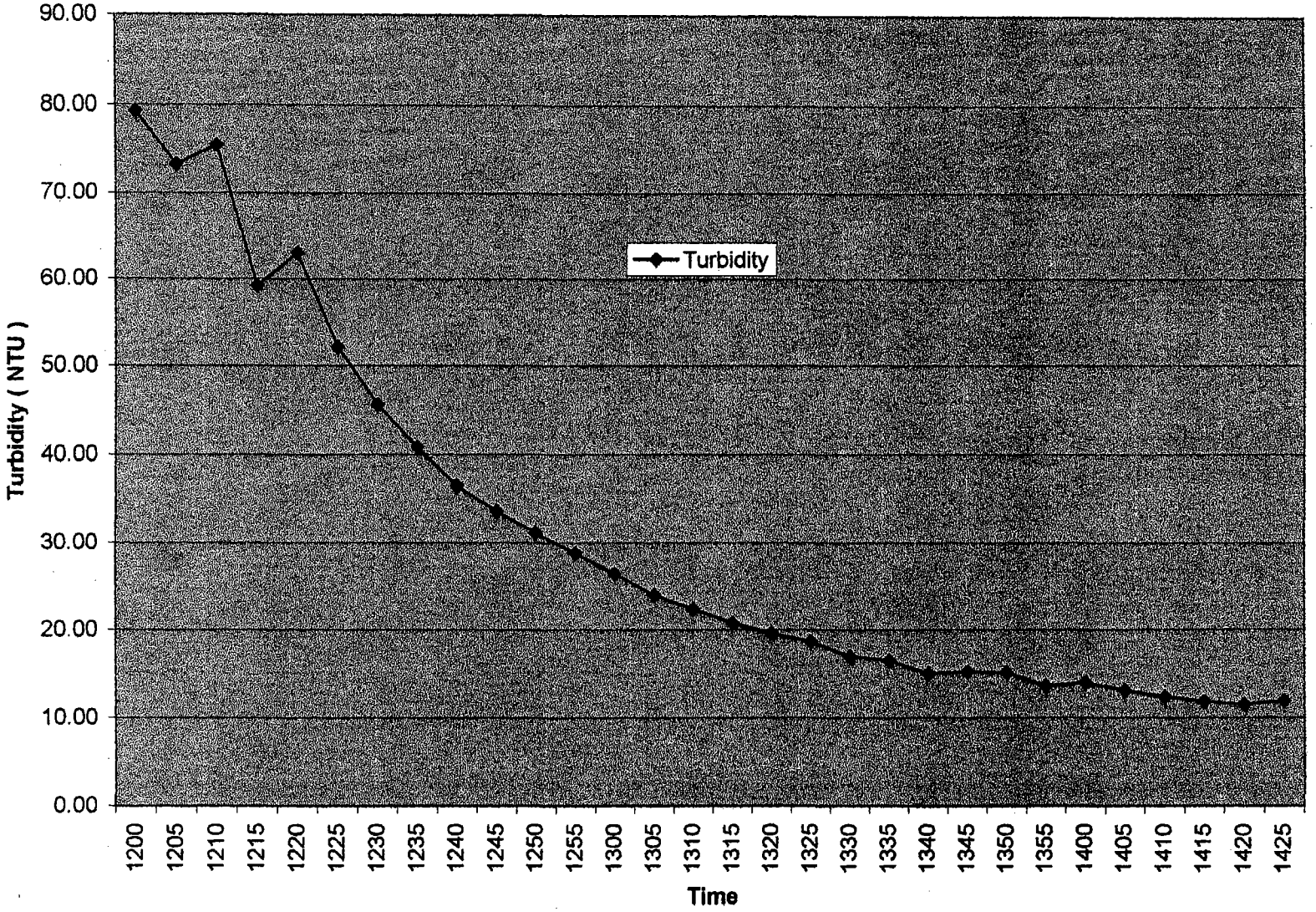
80MW03-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/11/00 12:00 to 10/11/00 14:25
Number of samples: 30

10/11/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/11/00 12:00	20.91	2194.000	2023.000	999.99	5.98
10/11/00 12:05	20.86	1426.000	1313.000	0.00	5.95
10/11/00 12:10	20.70	1070.000	982.600	0.00	6.23
10/11/00 12:15	20.54	1057.000	966.600	0.00	6.74
10/11/00 12:20	20.38	1058.000	964.200	0.00	5.93
10/11/00 12:25	20.63	1054.000	965.900	0.00	5.90
10/11/00 12:30	20.66	1058.000	970.100	0.00	5.91
10/11/00 12:35	20.75	1058.000	971.600	0.00	5.91
10/11/00 12:40	20.74	1059.000	972.500	0.00	5.91
10/11/00 12:45	20.79	1060.000	974.700	0.00	5.91
10/11/00 12:50	20.73	1060.000	973.800	0.00	5.89
10/11/00 12:55	20.80	1060.000	975.100	0.00	5.87
10/11/00 13:00	20.86	1060.000	976.400	0.00	5.86
10/11/00 13:05	20.72	1065.000	977.500	0.00	5.86
10/11/00 13:10	20.69	1066.000	978.500	0.00	5.99
10/11/00 13:15	20.79	1067.000	981.600	0.00	5.88
10/11/00 13:20	20.76	1069.000	982.200	0.00	5.86
10/11/00 13:25	20.77	1070.000	983.700	0.00	5.81
10/11/00 13:30	20.68	1069.000	980.600	0.00	5.82
10/11/00 13:35	20.74	1070.000	982.600	0.00	5.80
10/11/00 13:40	20.72	1070.000	982.100	0.00	5.80
10/11/00 13:45	20.77	1070.000	983.400	0.00	5.79
10/11/00 13:50	20.75	1070.000	983.300	0.00	5.79
10/11/00 13:55	20.77	1069.000	982.800	0.00	5.79
10/11/00 14:00	20.79	1070.000	983.900	0.00	5.77
10/11/00 14:05	20.81	1072.000	986.000	0.00	5.75
10/11/00 14:10	20.80	1073.000	986.800	0.00	5.76
10/11/00 14:15	20.81	1073.000	987.100	0.00	5.75
10/11/00 14:20	20.80	1072.000	986.400	0.00	5.75
10/11/00 14:25	20.85	1072.000	986.700	0.00	5.75

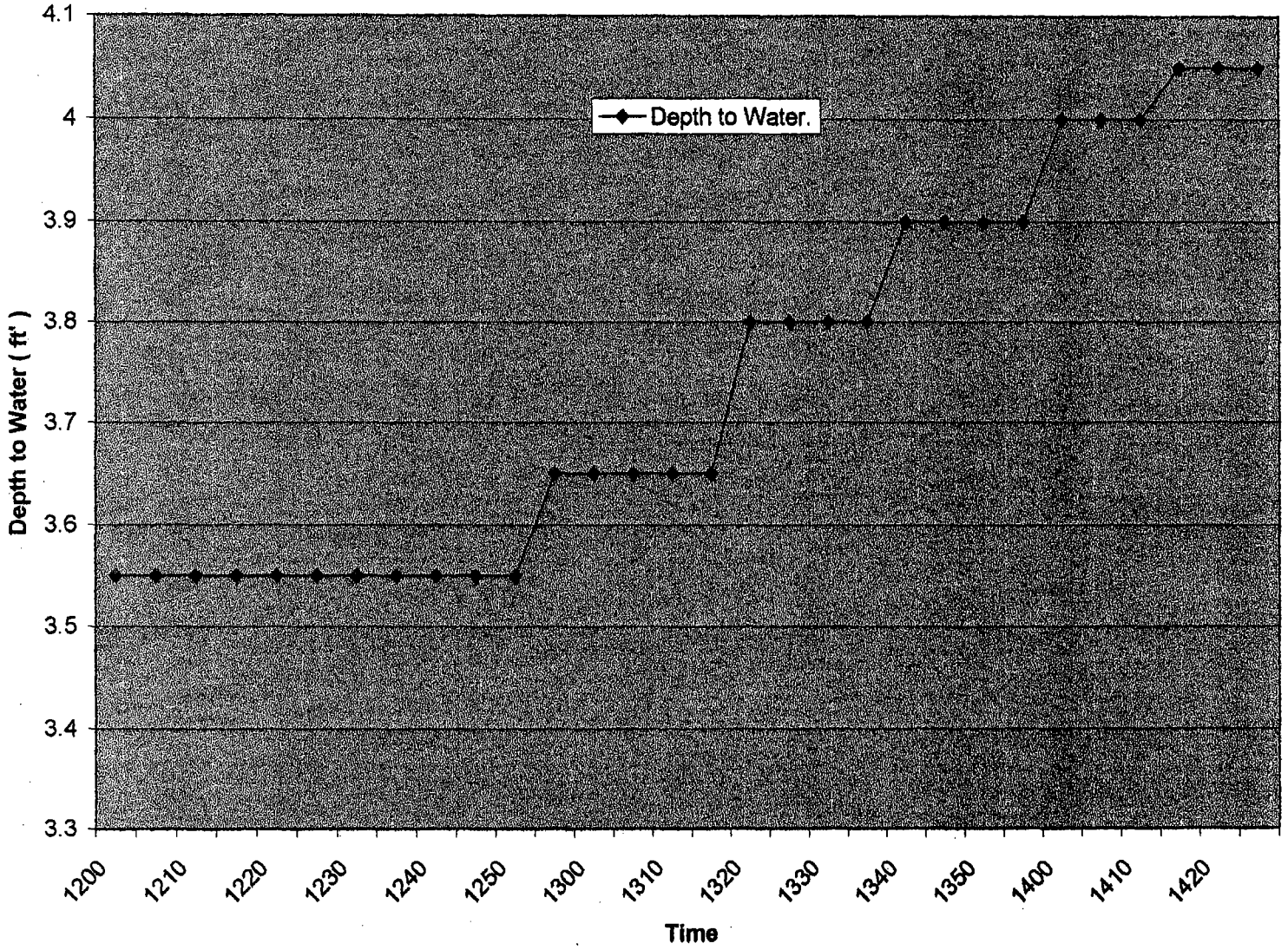
0080MW03
Permit #: 29-43201
10/11/00

Turbidity



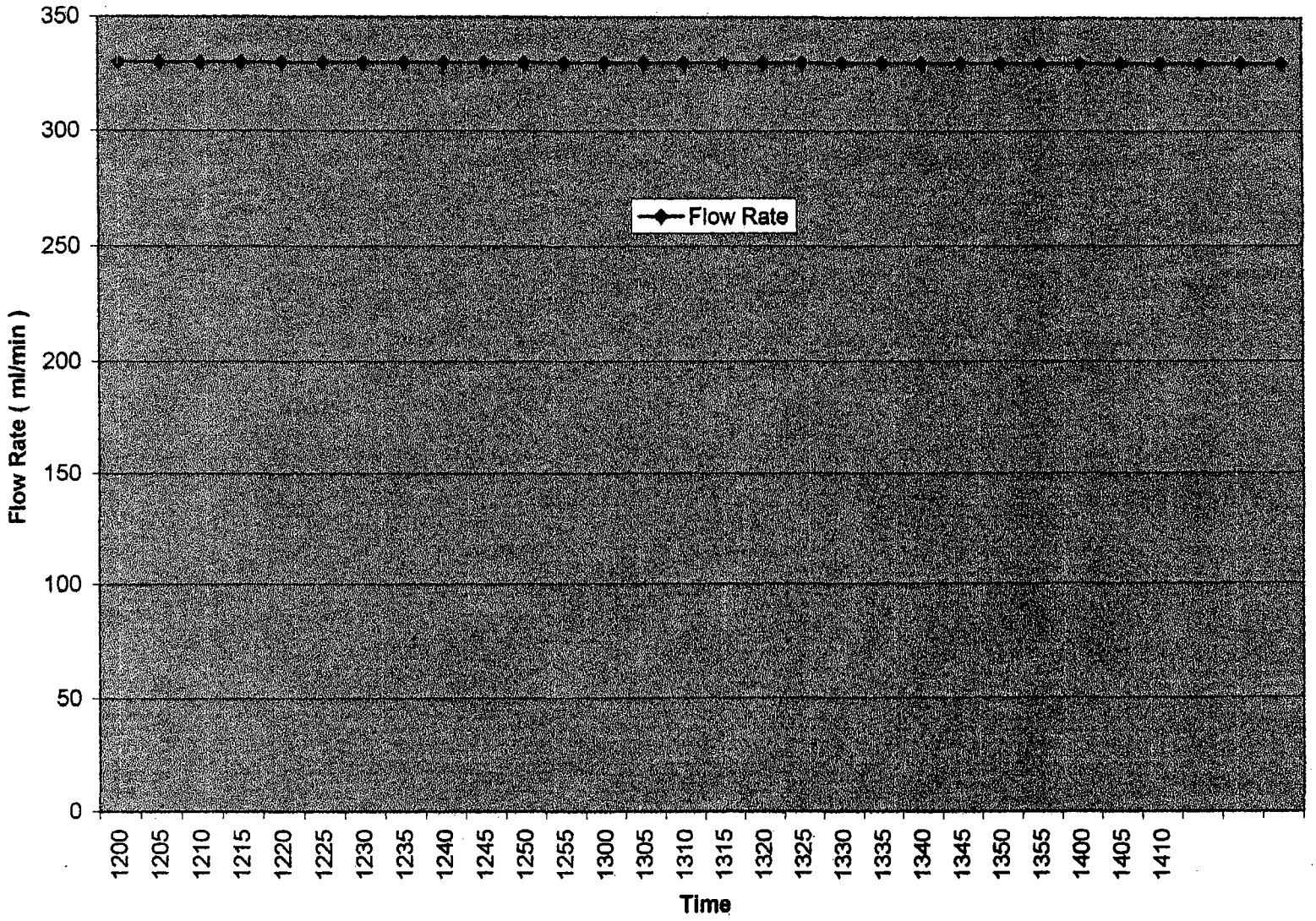
0080MW03
Permit #: 29-43201
10/11/00

Depth to Water.



0080MW03
Permit #: 29-43201
10/11/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW04
NJDEP ID#29-43200
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/11/00
WEATHER: Sunny, and cool.
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 0.3 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 μ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.4 ft
Before Purge Start: 3.4 ft **Previous Day: 3.5 ft** **After Sampling: 3.7 ft**
DEPTH OF WELL: 12.00 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 9.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 8.6 ft
(8.6) X .65 X 3 = 16.77 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 17 Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 290 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 09:05
pH 4.46 su
TEMP 16.66 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 39242 ms/cm

PURGE END TIME: 10:06
pH 5.24 su
TEMP 17.67 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 30884 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 3.7 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 09:51
pH 5.26 su
TEMP 17.70 °C
DISSOLVED O_2 999.99 mg/L
SPECIFIC CONDUCTIVITY 30180 ms/cm

SAMPLE END TIME: 10:05
ANALYTES: TAL Metals/Pest
COMMENTS: DUP. Here.

FIELD READINGS

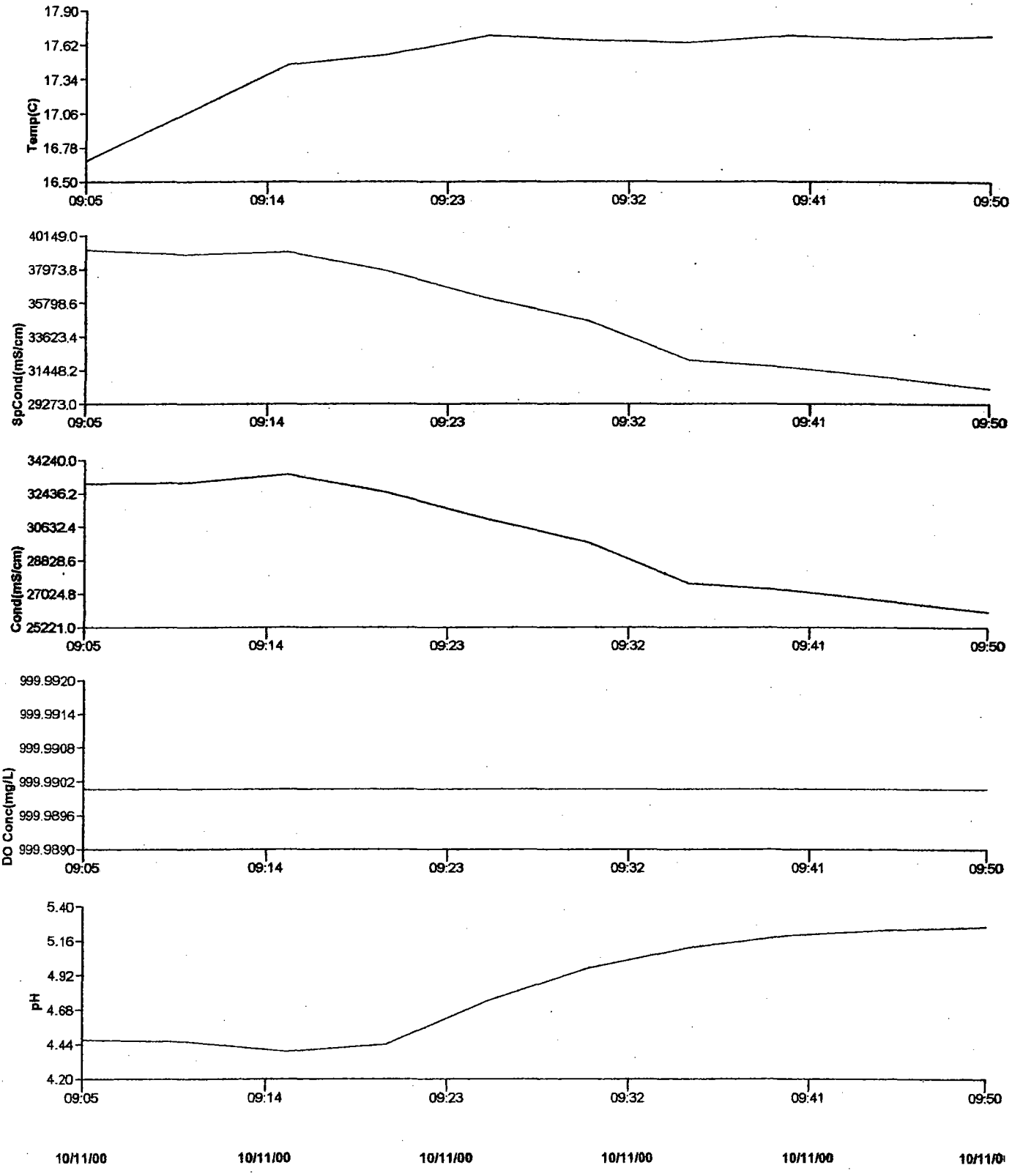
MW: 0080MW04
NJDEP ID#: 29-43200
DATE: 10/11/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
9:05	4.46	16.66	32993	39242	999.99	10.3	3.4	290	
9:10	4.45	17.06	33033	38942	999.99	5.55	3.4	290	
9:15	4.38	17.46	33488	39122	999.99	4.28	3.4	290	
9:20	4.43	17 .54	32502	37900	999.99	4.5	3.4	290	
9:25	4.74	17.7	31031	36061	999.99	4.76	3.4	290	
9:30	4.97	17.66	29761	34613	999.99	5.6	3.4	290	
9:35	5.11	17.64	27525	32029	999.99	5.46	3.4	290	
9:40	5.2	17.7	27154	31556	999.99	4.67	3.4	290	
9:45	5.24	17.67	26561	30884	999.99	3.64	3.4	290	
9:50	5.26	17.7	25973	30180	999.99	3.35	3.7	290	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
905	10.30	3.4	290
910	5.55	3.4	290
915	4.28	3.45	290
920	4.50	3.45	290
925	4.76	3.5	290
930	5.60	3.55	290
935	5.46	3.6	290
940	4.67	3.65	290
945	3.64	3.7	290
950	3.35	3.7	290

80MW04-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH

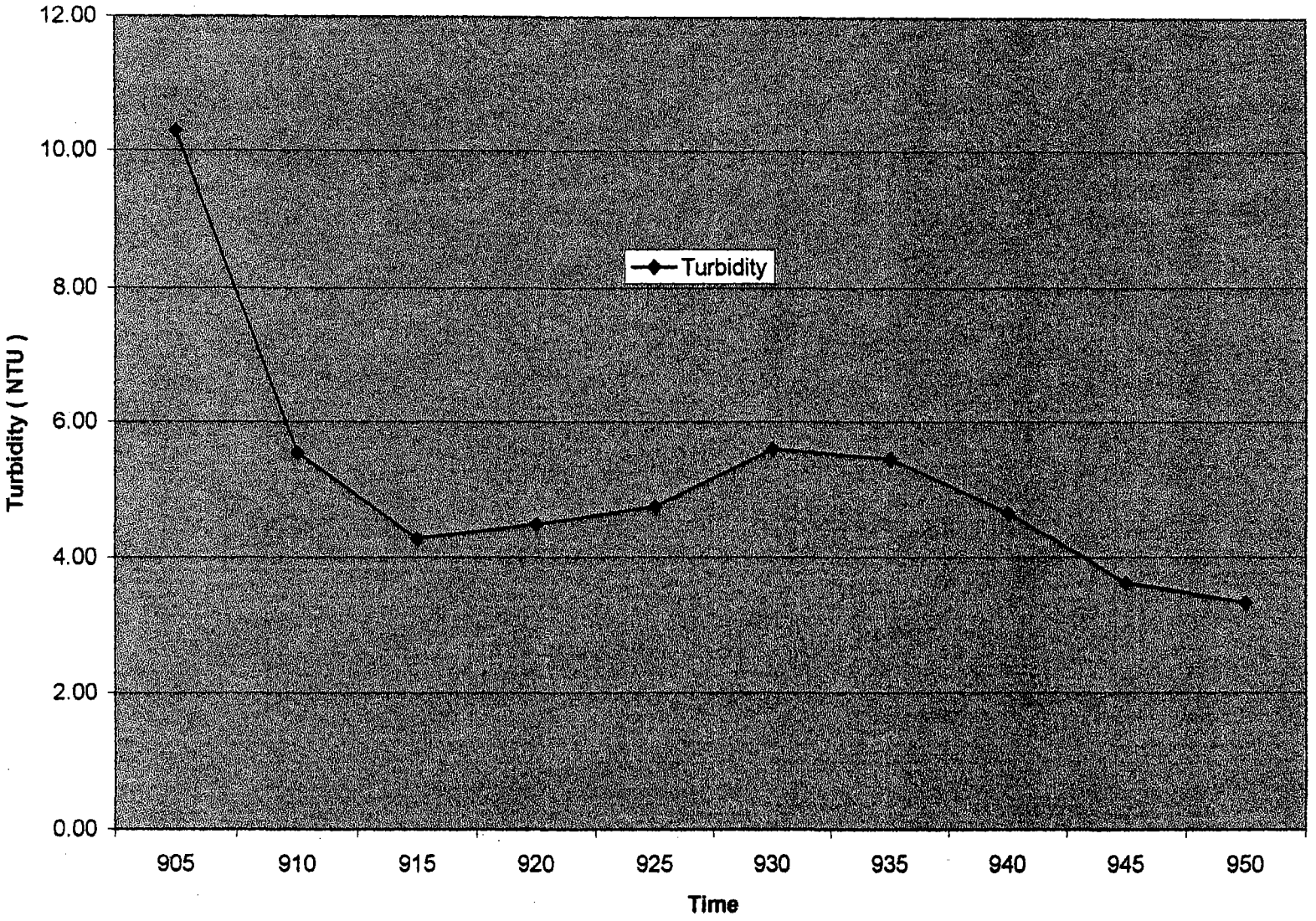


80MW04-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

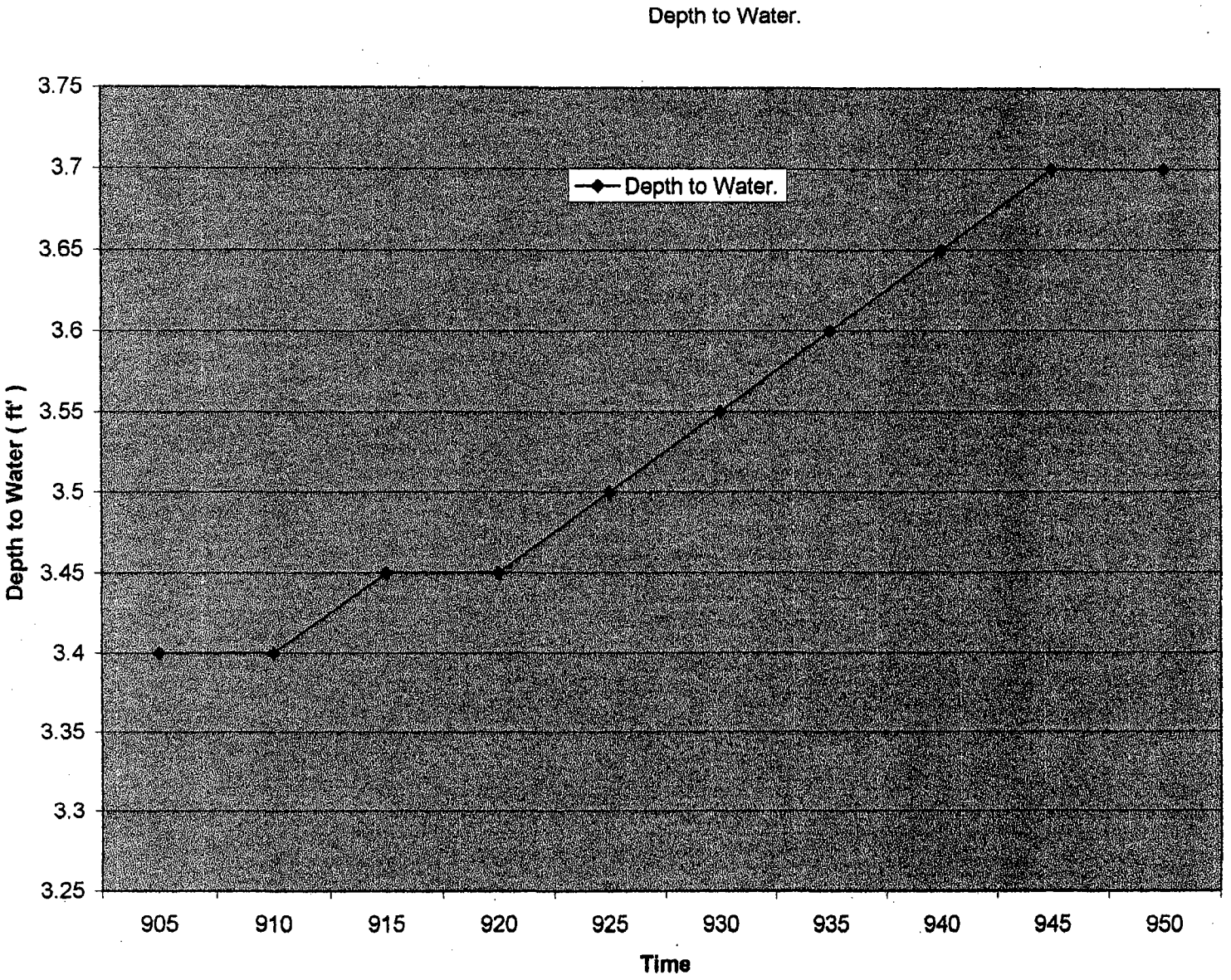
From 10/11/00 09:05 to 10/11/00 09:50
Number of samples: 10

10/11/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/11/00 09:05	16.66	39242.00	32993.000	999.99	4.46
10/11/00 09:10	17.06	38942.00	33033.000	999.99	4.45
10/11/00 09:15	17.46	39122.00	33488.000	999.99	4.38
10/11/00 09:20	17.54	37900.00	32502.000	999.99	4.43
10/11/00 09:25	17.70	36061.00	31031.000	999.99	4.74
10/11/00 09:30	17.66	34613.00	29761.000	999.99	4.97
10/11/00 09:35	17.64	32029.00	27525.000	999.99	5.11
10/11/00 09:40	17.70	31556.00	27154.000	999.99	5.20
10/11/00 09:45	17.67	30884.00	26561.000	999.99	5.24
10/11/00 09:50	17.70	30180.00	25973.000	999.99	5.26

80MW04
Permit #: 29-43200
10/11/00

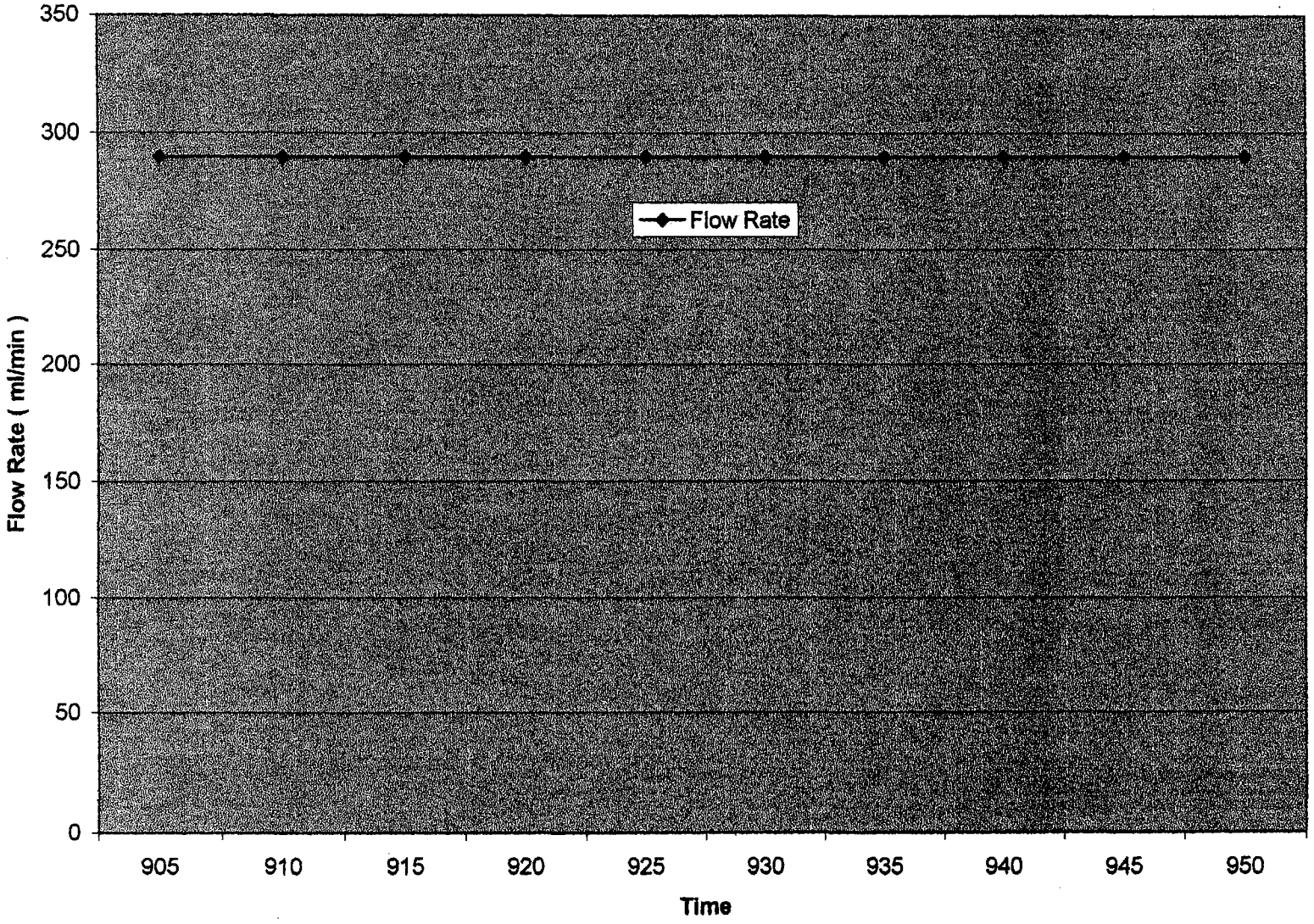


0080MW04
Permit #: 29-43202
10/11/00



0080MW04
Permit #: 29-43201
10/11/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.80
MW#: 0080MW05
NJDEP ID#29-43202
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/11/00
WEATHER: Sunny, and cool.
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 0.4 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp: N/A

ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 3.15 ft
Before Purge Start: 3.15 ft **Previous Day: 3.20 ft** **After Sampling: 5.50 ft**
DEPTH OF WELL: 11.4 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 9.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 8.25 ft
(8.25) X .65 X 3 = 16.09 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 16 Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 350 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 10:40
pH 4.84 su
DISSOLVED O_2 999.99 mg/L
TEMP 17.98 °C
SPECIFIC CONDUCTIVITY 69051 ms/cm

PURGE END TIME: 11:28
pH 4.73 su
DISSOLVED O_2 999.99 mg/L
TEMP 17.84 °C
SPECIFIC CONDUCTIVITY 63399 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 5.5 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 11:21
pH 4.70 su
DISSOLVED O_2 999.99 mg/L
TEMP 17.77 °C
SPECIFIC CONDUCTIVITY 64033 ms/cm

SAMPLE END TIME: 11:27
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

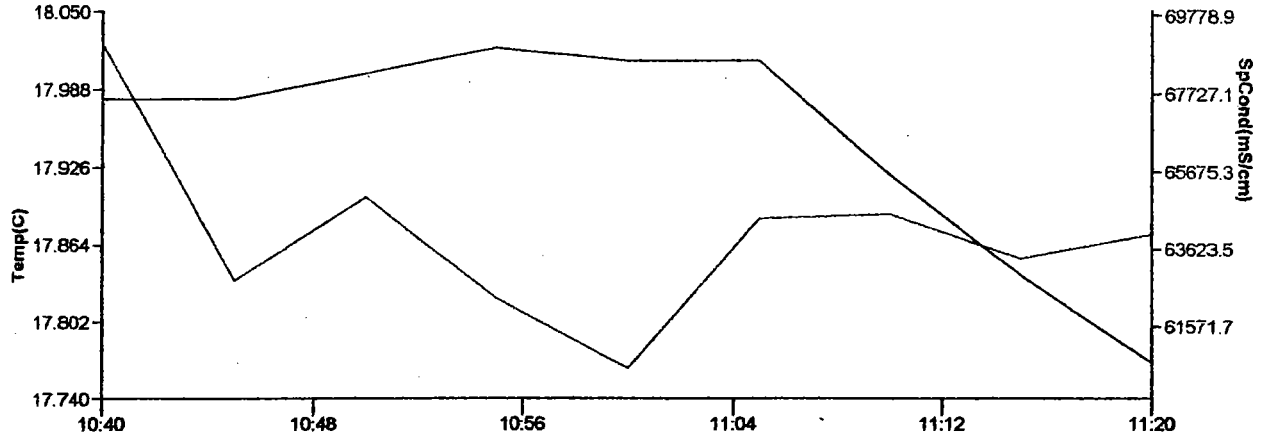
MW: 0080MW05
NJDEP ID#: 29-43202
DATE: 10/11/00

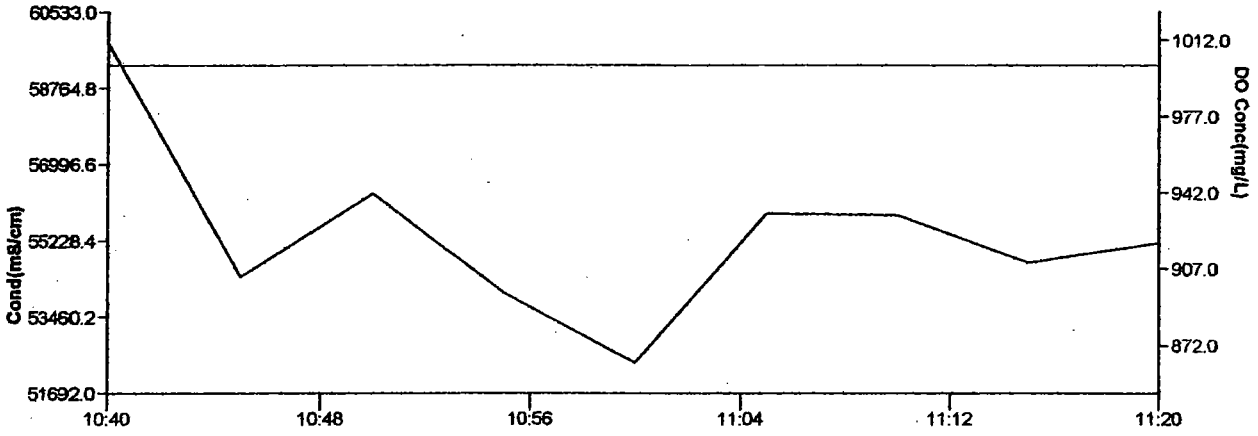
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
10:40	4.84	17.98	59796	69051	999.99	6.59	3.15	350	
10:45	4.97	17.98	54403	62828	999.99	5.17	3.15	350	
10:50	4.92	18	56317	65012	999.99	5	3.15	350	
10:55	4.97	18.02	54032	62346	999.99	5	3.15	350	
11:00	4.95	18.01	52429	60502	999.99	4.96	3.15	350	
11:05	4.94	18.01	55855	64462	999.99	5.48	3.15	350	
11:10	4.68	17.92	55830	64503	999.99	5.65	3.15	350	
11:15	4.73	17.84	54734	63399	999.99	5.78	3.15	350	
11:20	4.7	17.77	55188	64033	999.99	6.4	5.5	350	

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1040	6.59	3.15	350
1045	5.17	3.35	350
1050	5.00	3.55	350
1055	5.00	3.75	350
1100	4.96	4	350
1105	5.84	4.3	350
1110	5.65	4.7	350
1115	5.78	5	350
1120	6.40	5.5	350

80MW05-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







10/11/00 10/11/00 10/11/00 10/11/00 10/11/00 10/11/00

(10/11/00)

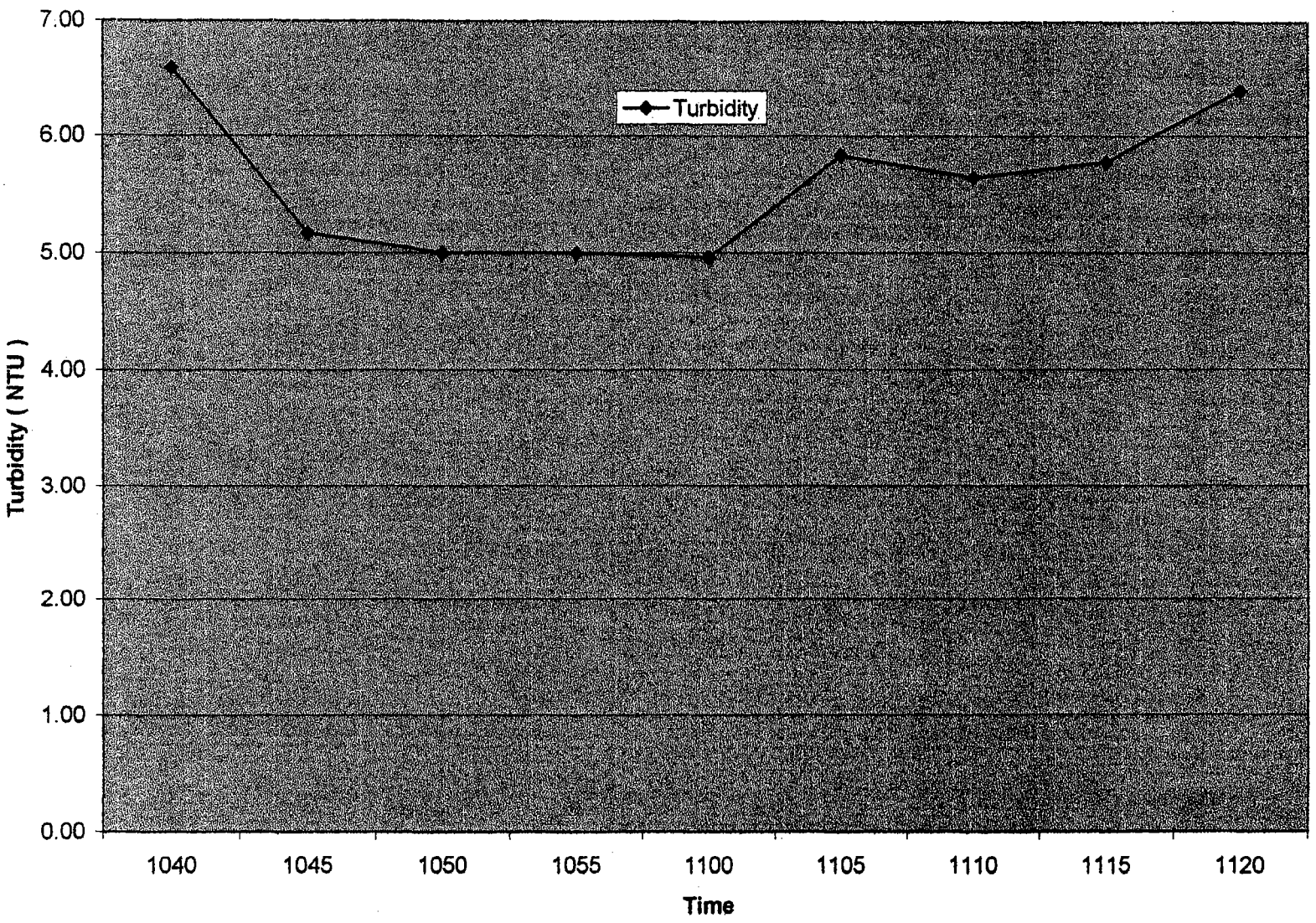
80mw05-2

80MW05-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/11/00 10:40 to 10/11/00 11:20
Number of samples: 9

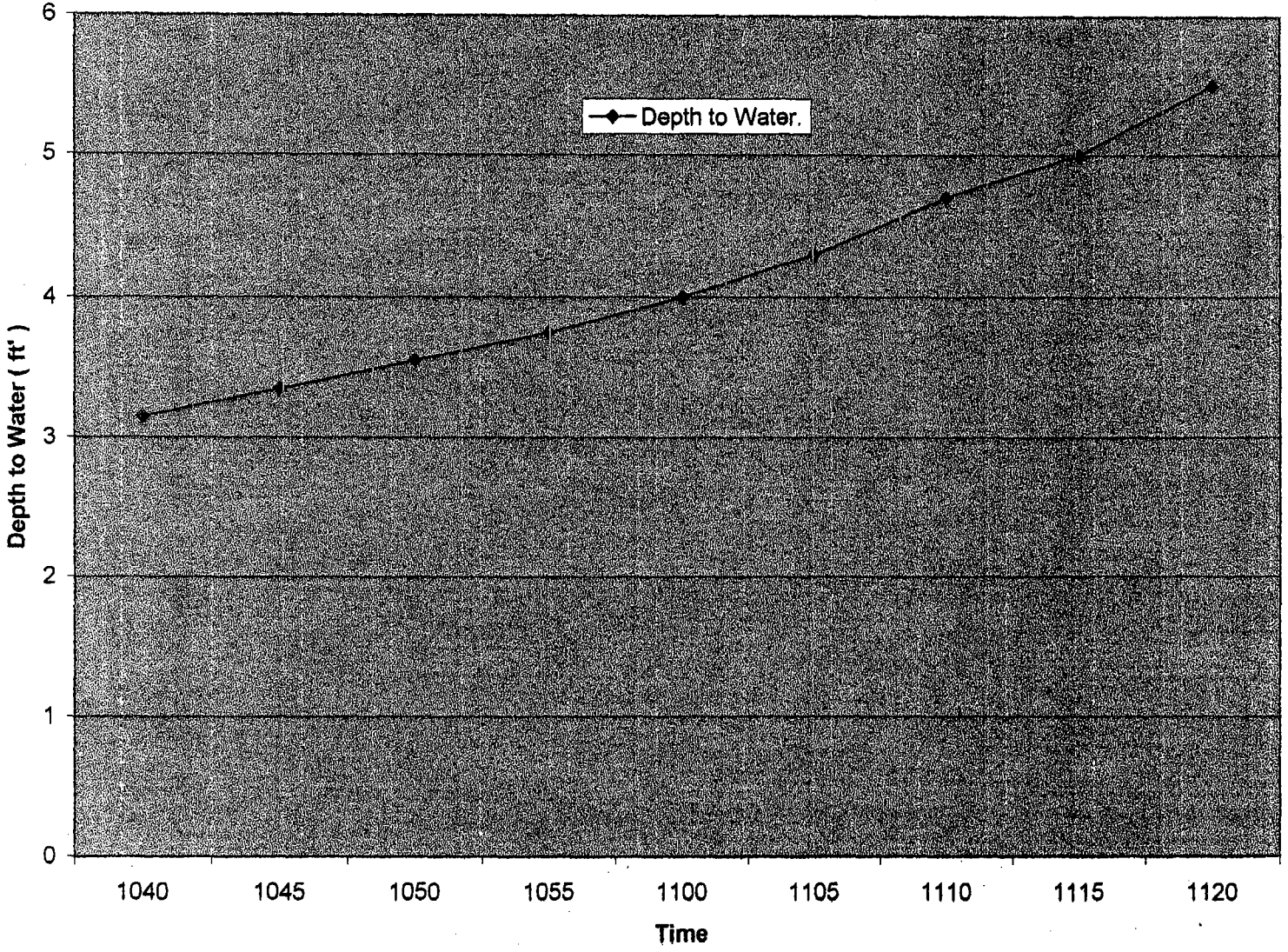
10/11/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/11/00 10:40	17.986	9051.00	059796.000	999.99	4.84
10/11/00 10:45	17.986	2828.00	054403.000	999.99	4.97
10/11/00 10:50	18.006	5012.00	056317.000	999.99	4.92
10/11/00 10:55	18.026	2346.00	054033.000	999.99	4.97
10/11/00 11:00	18.016	0502.00	052429.000	999.99	4.95
10/11/00 11:05	18.016	4462.00	055855.000	999.99	4.74
10/11/00 11:10	17.926	4563.00	055830.000	999.99	4.68
10/11/00 11:15	17.846	3399.00	054734.000	999.99	4.73
10/11/00 11:20	17.776	4034.00	055188.000	999.99	4.70

0080MW05
Permit #: 29-43202
10/11/00



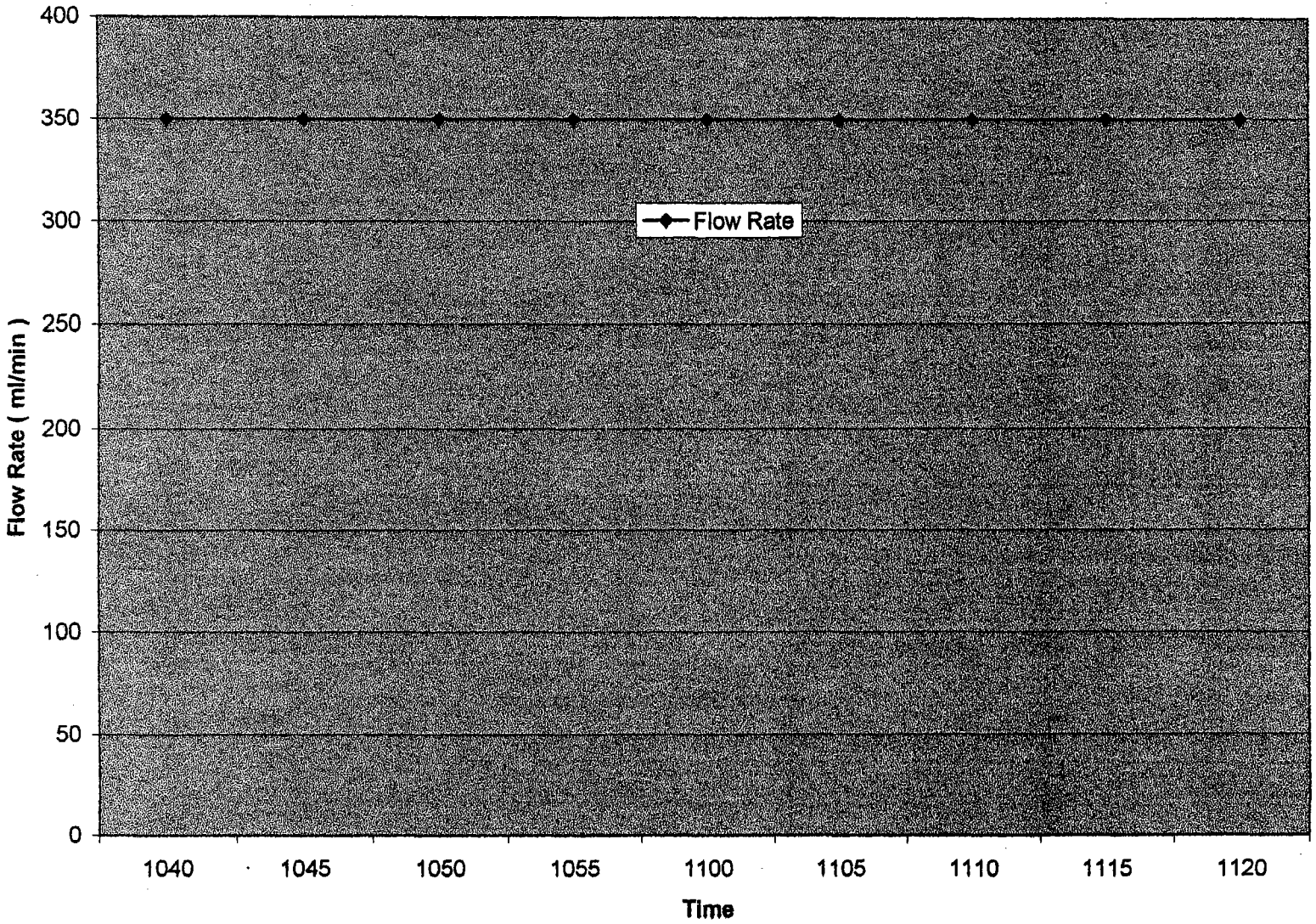
0080MW05
Permit #: 29-43202
10/11/00

Depth to Water.



0080MW05
Permit #: 29-43202
10/11/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg.166
MW#: 0166MW01
NJDEP ID#29-31773
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/12/00
WEATHER: Sunny, and cool.
TIDE: N/A

Hnu Calibration: Span 1.1 w/ 100 ppm Isobutylene
Sonde Calibration:
pH: 7.00/10.00/4.00 Buffers
Sp Cond/Cond:147.0 µ ohms/cm solution (KCl)
DO: % Humidity 760mm (Barometric Pressure)
Temp: N/A

WELL CONDITION: Good
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 2.65 ft
Before Purge Start: 2.65 ft **Previous Day: 2.55 ft** **After Sampling: 2.65 ft**
DEPTH OF WELL: 7.75 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 5.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 5.1 ft
(5.1) X .65 X 3 = 9.95 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED:10 Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 310 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 0 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 13:45
pH 5.74 su
TEMP 21.91 °C
DISSOLVED O_2 0.36 mg/L
SPECIFIC CONDUCTIVITY 369.4 ms/cm

PURGE END TIME: 14:58
pH 5.85 su
TEMP 21.91 °C
DISSOLVED O_2 0.04 mg/L
SPECIFIC CONDUCTIVITY 391.5 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 2.65 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 14:50
pH 5.89 su
TEMP 21.89 °C
DISSOLVED O_2 0.04 mg/L
SPECIFIC CONDUCTIVITY 392.6 ms/cm

SAMPLE END TIME: 14:57
ANALYTES: TAL Metals/Pest
COMMENTS:

FIELD READINGS

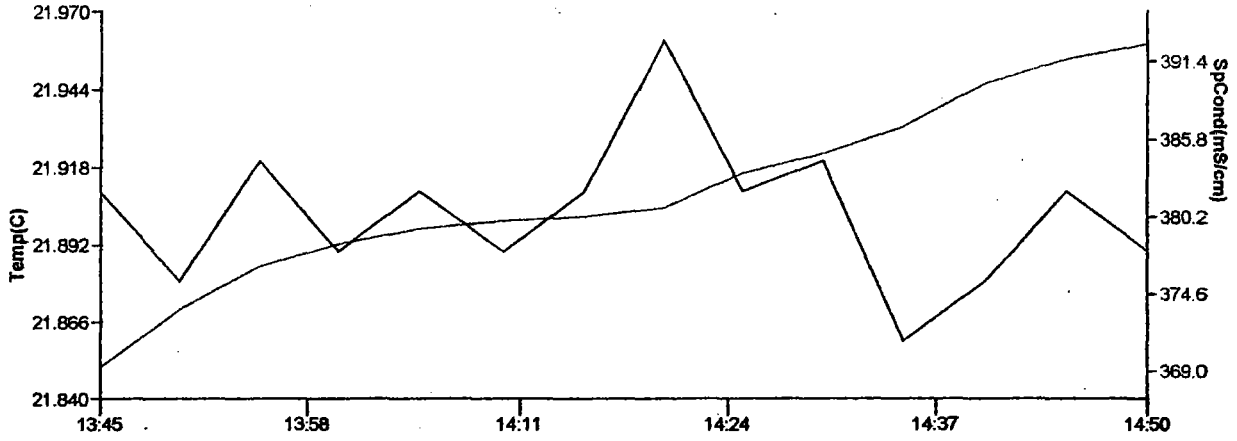
MW: 0166MW01
NJDEP ID#: 29-31773
DATE: 10/12/00

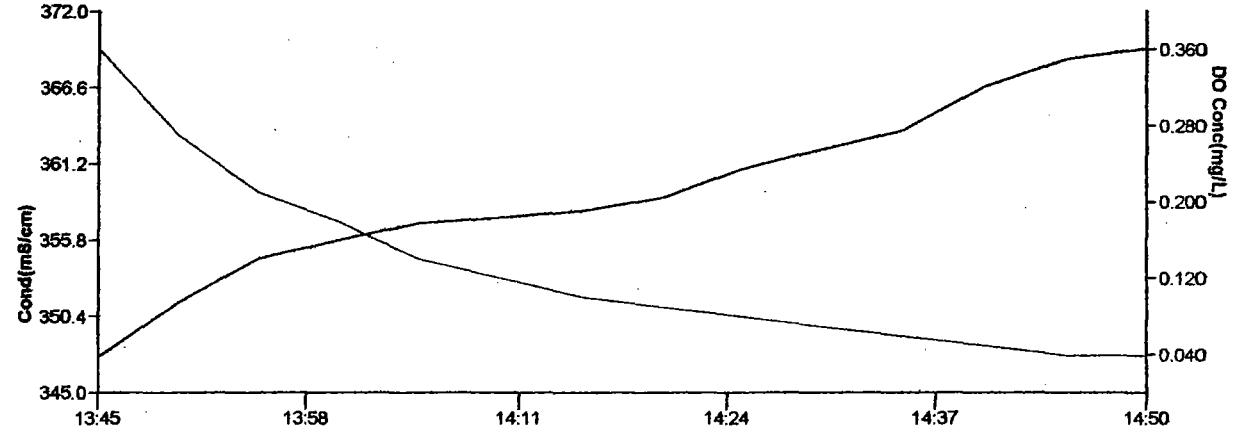
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
13:45	5.74	21.91	347.6	369.4	0.36	26.7	2.65	310	
13:50	5.82	21.88	351.4	373.6	0.27	19.5	2.65	310	
13:55	5.87	21.92	354.5	376.7	0.21	17.3	2.65	310	
14:00	5.89	21.89	355.8	378.3	0.18	15.5	2.65	310	
14:05	5.89	21.91	357	379.4	0.14	15.2	2.65	310	
14:10	5.9	21.89	357.4	380	0.12	14.6	2.65	310	
14:15	5.89	21.91	357.9	380.3	0.1	12	2.65	310	
14:20	5.88	21.96	358.8	380.9	0.09	10.8	2.65	310	
14:25	5.86	21.91	360.8	383.4	0.08	9.29	2.65	310	
14:30	5.86	21.92	362.2	384.8	0.07	9.33	2.65	310	
14:35	5.85	21.86	363.5	386.7	0.06	8.36	2.65	310	
14:40	5.85	21.88	366.6	389.8	0.05	8.11	2.65	310	
14:45	5.85	21.91	368.5	391.5	0.04	7.87	2.65	310	
14:50	5.84	21.89	369.3	392.6	0.04	7.22	2.65	310	

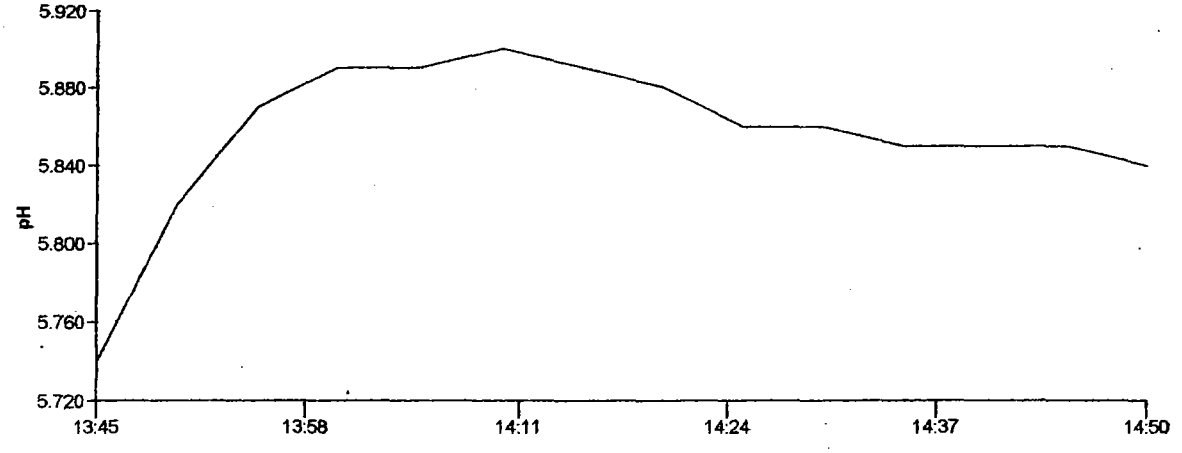
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1345	26.70	2.65	310
1350	19.50	2.65	310
1355	17.30	2.65	310
1400	15.50	2.65	310
1405	15.20	2.65	310
1410	14.60	2.65	310
1415	12.00	2.65	310
1420	10.80	2.65	310
1425	9.29	2.65	310
1430	9.33	2.65	310
1435	8.36	2.65	310
1440	8.11	2.65	310
1445	7.57	2.65	310
1450	7.22	2.65	310

166MW01-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







10/12/00 10/12/00 10/12/00 10/12/00 10/12/00 10/12/00

(10/12/00)

166mw01-

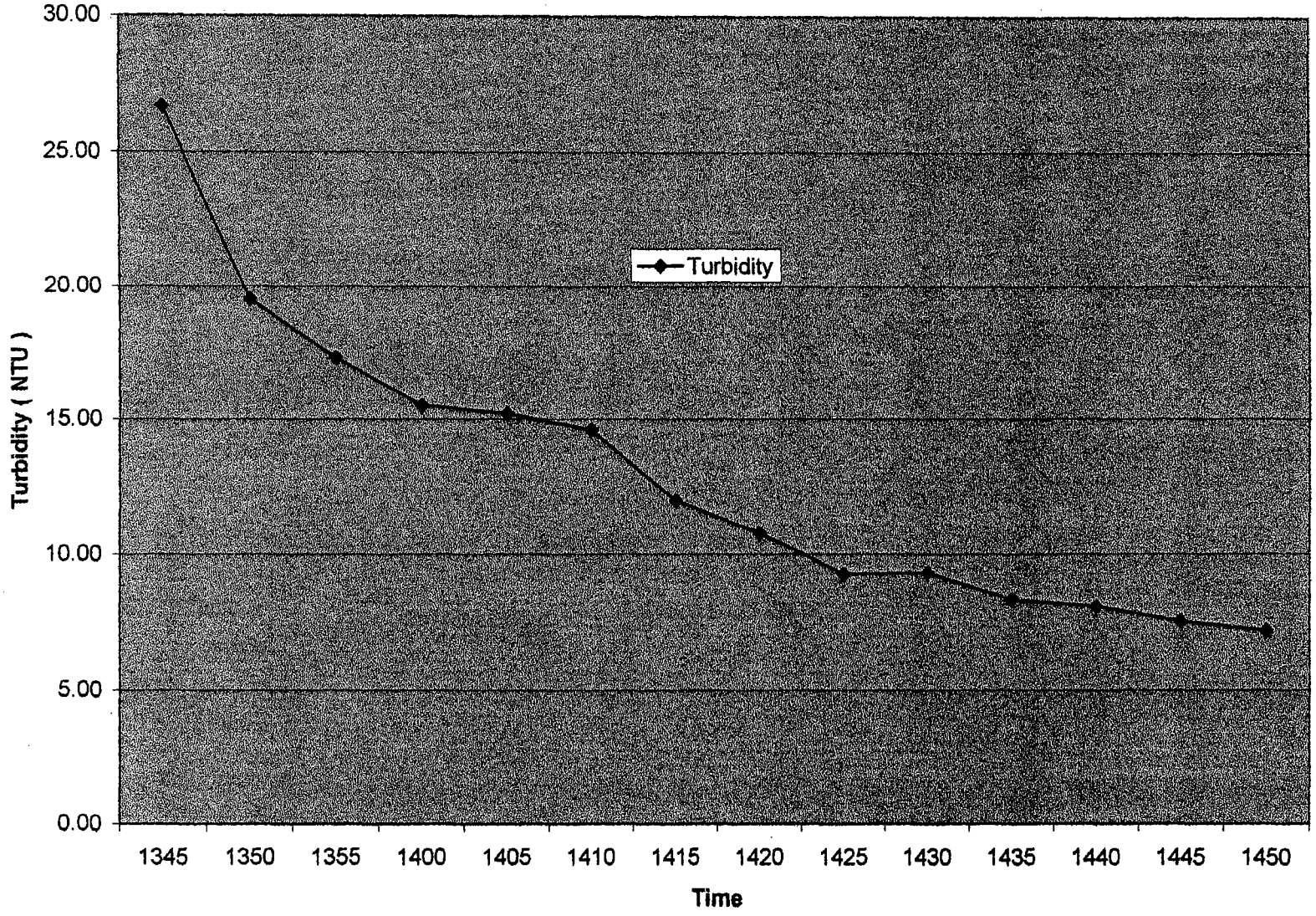
166MW01-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/12/00 13:45 to 10/12/00 14:50
Number of samples: 14

10/12/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/12/00 13:45	21.91	369.400	347.600	0.36	5.74
10/12/00 13:50	21.88	373.600	351.400	0.27	5.82
10/12/00 13:55	21.92	376.700	354.500	0.21	5.87
10/12/00 14:00	21.89	378.300	355.800	0.18	5.89
10/12/00 14:05	21.91	379.400	357.000	0.14	5.89
10/12/00 14:10	21.89	380.000	357.400	0.12	5.90
10/12/00 14:15	21.91	380.300	357.900	0.10	5.89
10/12/00 14:20	21.96	380.900	358.800	0.09	5.88
10/12/00 14:25	21.91	383.400	360.800	0.08	5.86
10/12/00 14:30	21.92	384.800	362.200	0.07	5.86
10/12/00 14:35	21.86	386.700	363.500	0.06	5.85
10/12/00 14:40	21.88	389.800	366.600	0.05	5.85
10/12/00 14:45	21.91	391.500	368.500	0.04	5.85
10/12/00 14:50	21.89	392.600	369.300	0.04	5.84

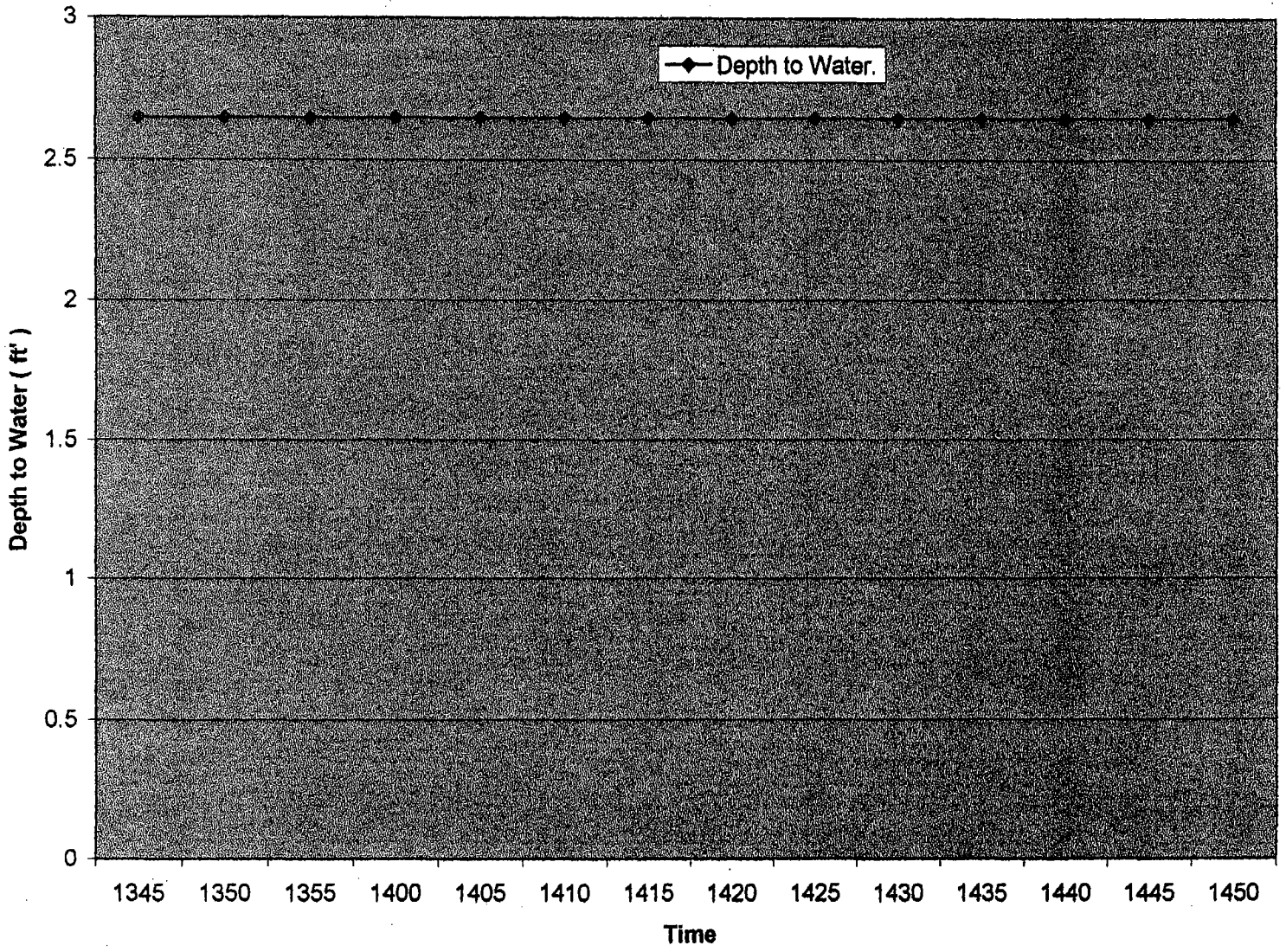
166MW01
Permit #: 29-31773
10/12/00

Turbidity



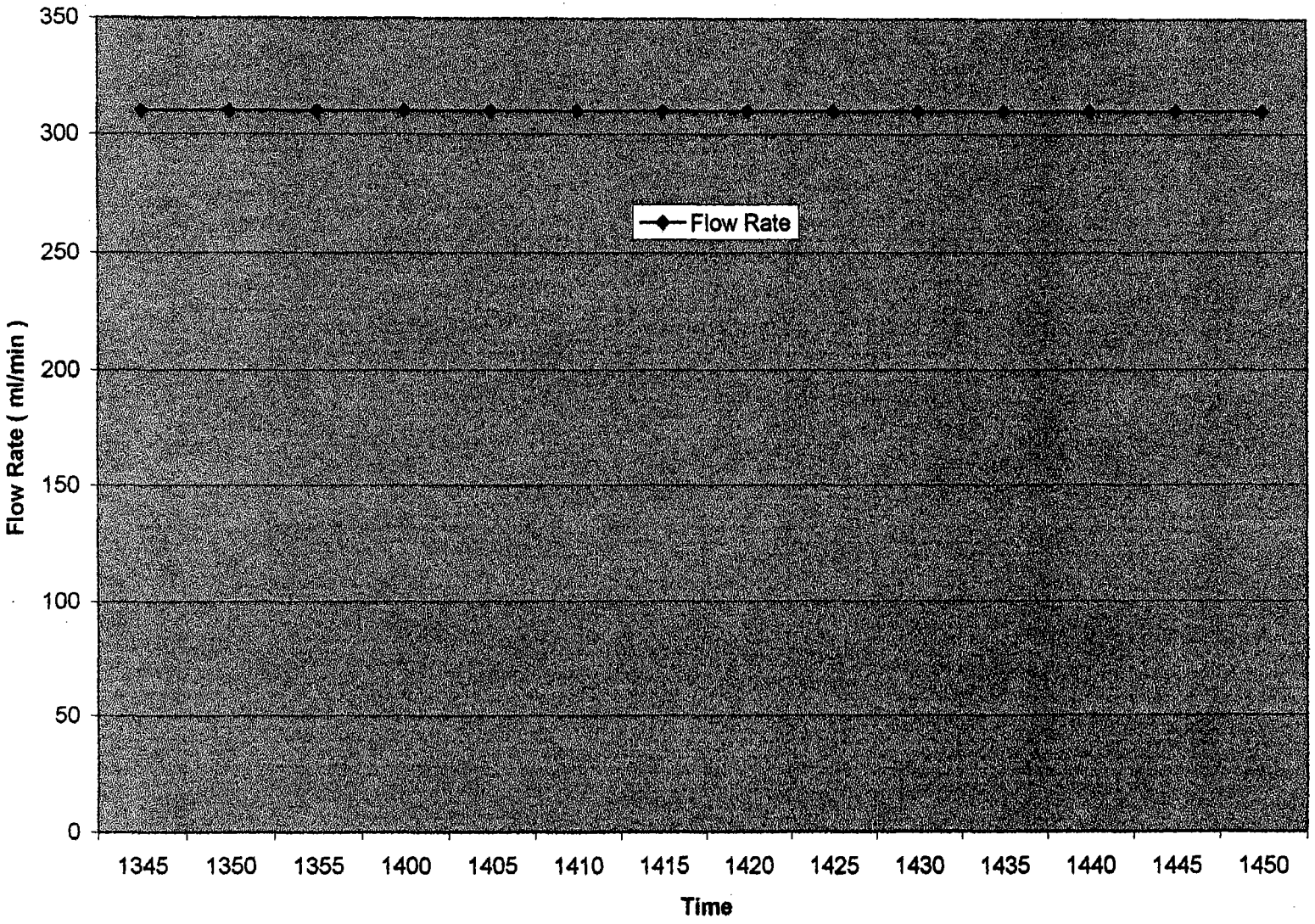
166MW01
Permit #: 29-31773
10/12/00

Depth to Water.



166MW01
Permit #: 29-31773
10/12/00

Flow Rate



PESTICIDES

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK605
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	10/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK606
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	10/16/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5780.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/11/00
	Bldg. 173	**Extraction Date:**	10/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FB
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5782.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/12/00
	Bldg. 173	**Extraction Date:**	10/16/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FB
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5780.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/11/00
	Bldg. 173	**Extraction Date:**	10/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FD
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5782.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/12/00
	Bldg. 173	**Extraction Date:**	10/16/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	FD
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5782.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/12/00
	Bldg. 173	**Extraction Date:**	10/16/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5782.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/12/00
	Bldg. 173	**Extraction Date:**	10/16/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW02
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1	16.72	0.40	0.0026	**0.485**
Alpha-chlordane	1	16.73	0.50	0.0036	**0.979**
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5780.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/11/00
	Bldg. 173	**Extraction Date:**	10/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW03
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1		0.50	0.0036	**ND**
Gamma-chlordane	1		0.50	0.0007	**ND**
Toxaphene	1		3.00	0.1517	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5780.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/11/00
	Bldg. 173	**Extraction Date:**	10/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW04
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5780.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/11/00
	Bldg. 173	**Extraction Date:**	10/12/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW05
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5782.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/12/00
	Bldg. 173	**Extraction Date:**	10/16/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/16/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5780
Sample Prepared: 10/18/00

Site: 80
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	12.2	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	ND	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	85.3	NLE	20.0
Chromium	10/19/00	ND	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	28.8	300	2.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	ND	NLE	10.0
Manganese	10/19/00	ND	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	1.0
Potassium	10/19/00	ND	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	171	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	0.584	NLE	0.5
Zinc	10/19/00	12.5	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5782
Sample Prepared: 10/17/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	12.2	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	ND	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	85.3	NLE	20.0
Chromium	10/19/00	ND	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	28.8	300	10.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	ND	NLE	20.0
Manganese	10/19/00	ND	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	0.5
Potassium	10/19/00	ND	NLE	20.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	171	50000	20.0
Thallium	10/19/00	ND	10	3.0
Vanadium	10/19/00	0.584	NLE	0.5
Zinc	10/19/00	12.5	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5780.01
Sample Received: 10/11/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: FB

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	ND	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	ND	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	ND	NLE	20.0
Chromium	10/19/00	ND	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	7.53	1000	2.0
Iron	10/19/00	ND	300	2.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	ND	NLE	10.0
Manganese	10/19/00	ND	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	1.0
Potassium	10/19/00	ND	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	ND	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	ND	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5782.01
Sample Received: 10/12/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: FB

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	13.4	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	ND	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	ND	NLE	20.0
Chromium	10/19/00	ND	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	ND	300	10.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	ND	NLE	20.0
Manganese	10/19/00	ND	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	0.5
Potassium	10/19/00	ND	NLE	20.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	ND	50000	20.0
Thallium	10/19/00	ND	10	3.0
Vanadium	10/19/00	0.896	NLE	0.5
Zinc	10/19/00	ND	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5780.02
Sample Received: 10/11/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: FD

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	1830	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	8.20	8	2.0
Barium	10/19/00	845	2000	0.5
Beryllium	10/19/00	0.885	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	243000	NLE	20.0
Chromium	10/19/00	21.3	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	462000	300	2.0
Lead	10/19/00	3.35	10	1.0
Magnesium	10/19/00	168000	NLE	10.0
Manganese	10/19/00	2210	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	1.0
Potassium	10/19/00	20000	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	2010000	50000	20.0
Thallium	10/19/00	8.52	10	2.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	51.4	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5782.02
Sample Received: 10/12/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: FD

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	57.2	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	51.9	8	2.0
Barium	10/19/00	89.6	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	54100	NLE	20.0
Chromium	10/19/00	5.80	100	0.5
Cobalt	10/19/00	1.61	NLE	0.5
Copper	10/19/00	17.2	1000	2.0
Iron	10/19/00	114000	300	10.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	18700	NLE	20.0
Manganese	10/19/00	785	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	0.5
Potassium	10/19/00	5600	NLE	20.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	694000	50000	20.0
Thallium	10/19/00	ND	10	3.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	28.4	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5782.03
Sample Received: 10/12/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	73.2	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	55.2	8	2.0
Barium	10/19/00	89.7	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	51900	NLE	20.0
Chromium	10/19/00	5.93	100	0.5
Cobalt	10/19/00	1.90	NLE	0.5
Copper	10/19/00	8.58	1000	2.0
Iron	10/19/00	109000	300	10.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	18200	NLE	20.0
Manganese	10/19/00	788	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	0.5
Potassium	10/19/00	5130	NLE	20.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	664000	50000	20.0
Thallium	10/19/00	ND	10	3.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	33.2	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5782.04
Sample Received: 10/12/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	743	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	62.1	2000	0.5
Beryllium	10/19/00	0.784	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	12200	NLE	20.0
Chromium	10/19/00	3.04	100	0.5
Cobalt	10/19/00	11.3	NLE	0.5
Copper	10/19/00	58.5	1000	2.0
Iron	10/19/00	942	300	10.0
Lead	10/19/00	9.12	10	1.0
Magnesium	10/19/00	6240	NLE	20.0
Manganese	10/19/00	407	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	8.10	100	0.5
Potassium	10/19/00	2640	NLE	20.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	126000	50000	20.0
Thallium	10/19/00	ND	10	3.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	114	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5780.05
Sample Received: 10/11/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	237	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	23.9	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	28000	NLE	20.0
Chromium	10/19/00	2.55	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	8170	300	2.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	7420	NLE	10.0
Manganese	10/19/00	61.3	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	1.0
Potassium	10/19/00	7000	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	40200	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	2.33	NLE	0.5
Zinc	10/19/00	14.8	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5780.03
Sample Received: 10/11/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW04

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	1420	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	6.00	8	2.0
Barium	10/19/00	672	2000	0.5
Beryllium	10/19/00	0.679	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	241000	NLE	20.0
Chromium	10/19/00	20.7	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	448000	300	2.0
Lead	10/19/00	ND	10	1.0
Magnesium	10/19/00	163000	NLE	10.0
Manganese	10/19/00	2080	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	ND	100	1.0
Potassium	10/19/00	17700	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	1920000	50000	20.0
Thallium	10/19/00	7.55	10	2.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	42.4	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5780.04
Sample Received: 10/11/00
Sample Matrix: Aqueous

Site: 80
Ft. Monmouth, New Jersey

Field ID#: 0080MW05

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	3420	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	7.86	8	2.0
Barium	10/19/00	367	2000	0.5
Beryllium	10/19/00	1.25	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	417000	NLE	20.0
Chromium	10/19/00	20.4	100	0.5
Cobalt	10/19/00	7.85	NLE	0.5
Copper	10/19/00	17.3	1000	2.0
Iron	10/19/00	162000	300	2.0
Lead	10/19/00	15.2	10	1.0
Magnesium	10/19/00	103000	NLE	10.0
Manganese	10/19/00	1280	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	13.0	100	1.0
Potassium	10/19/00	45800	NLE	40.0
Selenium	10/19/00	3.45	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	5670000	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	0.724	NLE	0.5
Zinc	10/19/00	307	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5782.05
Sample Received: 10/12/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	154	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	3.13	8	2.0
Barium	10/19/00	27.4	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	79400	NLE	20.0
Chromium	10/19/00	4.69	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	146	1000	2.0
Iron	10/19/00	11300	300	10.0
Lead	10/19/00	22.7	10	1.0
Magnesium	10/19/00	20200	NLE	20.0
Manganese	10/19/00	606	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	6.50	100	0.5
Potassium	10/19/00	4570	NLE	20.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	94600	50000	20.0
Thallium	10/19/00	ND	10	3.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	237	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5818.04	0080MW01	29-31774	10/27/00
5818.05	0080MW02	29-43199	10/27/00
5818.06	0080MW03	29-43201	10/27/00
5818.07	0080MW04	29-43200	10/27/00
5818.08	0080MW05	29-43202	10/27/00
5818.09	0166MW01	29-31773	10/27/00

NJDEP Laboratory Certification # 13461

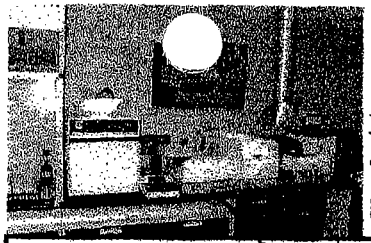
11-16-00

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon / UST
Phone #: X26223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: 80/166
4th Qtr '00

Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	Analysis Parameters: VOA+15	TAL mtls	Pest / PCB	BNA+20				Any Head	Comments: Remarks / Preservation Method
														HCL / HNO_3 / 4°C
5818.01	Trip	10/27/00	0735	AQ	2	✓	-						—	
.02	Field Blank		0830		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	80mw01		1038		5	✓	✓	✓	✓				0.0	29-31774
.05	80mw02		0938		5	✓	✓	✓	✓				0.0	29-43199
.06	80mw03		1048			✓	✓	✓	✓				0.0	29-43201
.07	80mw04		1318			✓	✓	✓	✓				0.0	29-43200
.08	80mw05		1315			✓	✓	✓	✓				0.0	29-43202
.09	~~80~~/166mw01*	↓	0902	↓	↓	✓	✓	✓	✓				0.3	29-31773

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	10/27/00 1530	J. Wright			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:
Tide: N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/27/00
WEATHER: Overcast, fog, cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.98 ft
DEPTH OF WELL: 12.40 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 9.42 ft
(9.42) X .65 X 3 =18.36
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 09:19
pH 6.71 su
TEMP 21.3 °C
DISSOLVED O_2 5.87 ppm
SPECIFIC CONDUCTIVITY 639 us/cm

PURGE END TIME: 10:37
pH 6.63 su
TEMP 21.1 °C
DISSOLVED O_2 4.12 ppm
SPECIFIC CONDUCTIVITY 640 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.46 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 10:38
pH. 6.62 su
TEMP 21.2 °C
DISSOLVED O_2 4.11 ppm
SPECIFIC CONDUCTIVITY 638 us/cm

SAMPLE END TIME: 10:48

COMMENTS: Oil sheen on purge water. Cloudy, yellow tinge.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW02
NJDEP ID #: 29-43199
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/27/00
WEATHER: Overcast, fog, cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.77 ft
DEPTH OF WELL: 12.35 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 8.58 ft
(8.58) X .65 X 3 =16.73
GALLONS OF H2O TO BE PURGED: 17 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 08:23
pH 6.37 su
TEMP 21.7 °C
DISSOLVED O_2 5.07 ppm
SPECIFIC CONDUCTIVITY 349 us/cm

PURGE END TIME: 09:37
pH 6.32 su
TEMP 21.2 °C
DISSOLVED O_2 3.49 ppm
SPECIFIC CONDUCTIVITY 340 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.81 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 17 gal

SAMPLE START TIME: 09:38
pH. 6.32 su
TEMP 21.5 °C
DISSOLVED O_2 3.47 ppm
SPECIFIC CONDUCTIVITY 339 us/cm

SAMPLE END TIME: 09:48

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW03
NJDEP ID #: 29-431201
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/27/00
WEATHER: Overcast, fog, cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.83 ft
DEPTH OF WELL: 11:25 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 7.42 ft
(7.42) X .65 X 3 =14.46
GALLONS OF H2O TO BE PURGED: 14 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 09:46
pH 6.67 su
TEMP 20.0 °C
DISSOLVED O_2 5.79 ppm
SPECIFIC CONDUCTIVITY 257 us/cm

PURGE END TIME: 10:47
pH 6.60 su
TEMP 19.9 °C
DISSOLVED O_2 4.09 ppm
SPECIFIC CONDUCTIVITY 252 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 5.00 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 14 gal

SAMPLE START TIME: 10:48
pH. 6.60 su
TEMP 20.1 °C
DISSOLVED O_2 4.07 ppm
SPECIFIC CONDUCTIVITY 251 us/cm

SAMPLE END TIME: 10:58

COMMENTS: Cloudy, yellow.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW04
NJDEP ID #: 29-431200
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/27/00
WEATHER: Overcast, fog, cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.67 ft
DEPTH OF WELL: 12.08 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.41 ft
(8.41) X .65 X 3 =16.39
GALLONS OF H2O TO BE PURGED: 16 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 12:00
pH 6.31 su
TEMP 18.4 °C
DISSOLVED O_2 5.89 ppm
SPECIFIC CONDUCTIVITY 804 us/cm

PURGE END TIME: 13:09
pH 6.24 su
TEMP 18.1 °C
DISSOLVED O_2 4.14 ppm
SPECIFIC CONDUCTIVITY 797 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.53 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 16 gal

SAMPLE START TIME: 13:10
pH. 6.24 su
TEMP 18.2 °C
DISSOLVED O_2 4.13 ppm
SPECIFIC CONDUCTIVITY 796 us/cm

SAMPLE END TIME: 13:13

COMMENTS: Cloudy, yellow.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW05
NJDEP ID #: 29-431202
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/27/00
WEATHER: Overcast, rain.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.58 ft
DEPTH OF WELL: 11.76 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.18 ft
(8.18) X .65 X 3 =15.95
GALLONS OF H2O TO BE PURGED: 16 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 12:05
pH 6.21 su — TEMP 18.3 °C
DISSOLVED O_2 5.97 ppm — SPECIFIC CONDUCTIVITY 1333 us/cm

PURGE END TIME: 13:14
pH 6.17 su — TEMP 18.0 °C
DISSOLVED O_2 3.22 ppm — SPECIFIC CONDUCTIVITY 1327 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.77 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 16 gal

SAMPLE START TIME: 13:15
pH. 6.17 su — TEMP 18.1 °C
DISSOLVED O_2 4.00 ppm — SPECIFIC CONDUCTIVITY 1326 us/cm

SAMPLE END TIME: 13:20

COMMENTS: Yellow color.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/27/00
WEATHER: Overcast, fog, cool.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.96 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.95 ft
DEPTH OF WELL: 7.90 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 4.95 ft
(4.95) X .65 X 3 =9.65
GALLONS OF H2O TO BE PURGED: 10 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.3 ppm

PURGE START TIME: 08:18
pH 7.11 su
TEMP 19.3 °C
DISSOLVED O_2 4.91 ppm
SPECIFIC CONDUCTIVITY 372 us/cm

PURGE END TIME: 09:01
pH 7.09 su
TEMP 19.0 °C
DISSOLVED O_2 3.42 ppm
SPECIFIC CONDUCTIVITY 364 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.98 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 10 gal

SAMPLE START TIME: 09:02
pH 7.09 su
TEMP 19.1 °C
DISSOLVED O_2 3.41 ppm
SPECIFIC CONDUCTIVITY 364 us/cm

SAMPLE END TIME: 09:09

COMMENTS: DUP here. Cloudy, black particles.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL : Method Detection Limit
J : Compound Identified Below Detection Limit
B : Compound is in Both Sample and Blank
D : Results are from a Dilution of the Sample
U : Compound Searched for but not Detected
E : Compound Exceeds Calibration Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008696.D**	Sample Name	**Vblk256**
Operator	**Skelton**	Field ID	**Vblk256**
Date Acquired	**6 Nov 2000 12:17 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk256**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk256

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008696.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008701.D**	Sample Name	**5818.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**6 Nov 2000 4:44 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Trip Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008701.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008702.D**	Sample Name	**5818.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**6 Nov 2000 5:24 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008702.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000581-42-0	Naphthalene, 2,6-dimethyl-	33.97	9	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008703.D**	Sample Name	**5818.03**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**6 Nov 2000 6:04 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.54	191594	1.15 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Dupe

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008703.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008704.D**	Sample Name	**5818.04**
Operator	**Skelton**	Field ID	**0080MW01**
Date Acquired	**6 Nov 2000 6:43 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	15.51	98505	4.87 ug/L	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.54	360282	2.23 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 0080MW01

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008704.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	33.95	6	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008705.D**	Sample Name	**5818.05**
Operator	**Skelton**	Field ID	**0080MW02**
Date Acquired	**6 Nov 2000 7:23 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008705.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008706.D**	Sample Name	**5818.06**
Operator	**Skelton**	Field ID	**0080MW03**
Date Acquired	**6 Nov 2000 8:03 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.32	161889	5.12 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	15.52	64881	3.30 ug/L	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008706.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	33.95	15	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB008707.D	Sample Name	5818.07
Operator	Skelton	Field ID	0080MW04
Date Acquired	6 Nov 2000 8:43 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW04**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.07

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008707.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008708.D**	Sample Name	**5818.08**
Operator	**Skelton**	Field ID	**0080MW05**
Date Acquired	**6 Nov 2000 9:23 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0080MW05**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 5818.08

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008708.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. _____ Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008709.D**	Sample Name	**5818.09**
Operator	**Skelton**	Field ID	**0166MW01**
Date Acquired	**6 Nov 2000 10:03 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.55	145492	1.10 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
00-00-0	m+p-Xylenes			not detected	nle	1.14 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0166MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.09

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008709.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: not dec. Date Analyzed: 11/6/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04612.D**	Sample Name	**Sblk433**
Operator	**Bhaskar**	Misc Info	**Sblk433 A 001102**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04612.D**	Sample Name	**Sblk433**
Operator	**Bhaskar**	Misc Info	**Sblk433 A 001102**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ng/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Sblk433**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk433

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04612.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	7	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04616.D**	Sample Name	**5818.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04616.D**	Sample Name	**5818.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	28.29	40158	1.89 ug/L	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04616.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	7	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04617.D**	Sample Name	**5818.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04617.D**	Sample Name	**5818.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04617.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 8 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	8	J
2. 054676-39-0	Cyclohexane, 2-butyl-1,1,3-trimet	14.25	4	JN
3.	unknown	14.80	9	J
4. 000000-00-0	Decahydro-4,4,8,9,10-pentameth	17.28	7	JN
5.	unknown	17.78	5	J
6. 002245-38-7	Naphthalene, 1,6,7-trimethyl-	18.85	6	JN
7. 001921-70-6	Pentadecane, 2,6,10,14-tetramet	20.33	6	JN
8. 000629-50-5	Tridecane	21.47	6	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04618.D**	Sample Name	**5818.04**
Operator	**Bhaskar**	Misc Info	**80MW01**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04618.D**	Sample Name	**5818.04**
Operator	**Bhaskar**	Misc Info	**80MW01**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04618.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 4 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	6	J
2. 000105-60-2	Caprolactam	14.83	7	JN
3.	unknown	19.91	5	J
4. 000057-10-3	Hexadecanoic acid	23.07	4	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04619.D**	Sample Name	**5818.05**
Operator	**Bhaskar**	Misc Info	**80MW02**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04619.D**	Sample Name	**5818.05**
Operator	**Bhaskar**	Misc Info	**80MW02**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04619.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	9	J
2.	unknown	8.17	5	J
3. 000124-25-4	Tetradecanal	30.49	7	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04620.D**	Sample Name	**5818.06**
Operator	**Bhaskar**	Misc Info	**80MW03**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene	18.15	232110	13.20 ug/L	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran	18.56	82433	3.32 ug/L	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04620.D**	Sample Name	**5818.06**
Operator	**Bhaskar**	Misc Info	**80MW03**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04620.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	8	J
2.	unknown	11.25	7	J
3. 000086-74-8	Carbazole	22.31	7	JN
4.	unknown	30.48	7	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04621.D**	Sample Name	**5818.07**
Operator	**Bhaskar**	Misc Info	**80MW04**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04621.D**	Sample Name	**5818.07**
Operator	**Bhaskar**	Misc Info	**80MW04**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW04**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.07

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04621.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	8	J
2. 000105-60-2	Caprolactam	14.80	6	JN
3.	unknown	30.51	16	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04622.D**	Sample Name	**5818.08**
Operator	**Bhaskar**	Misc Info	**80MW05**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04622.D**	Sample Name	**5818.08**
Operator	**Bhaskar**	Misc Info	**80MW05**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW05**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.08

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04622.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	8	J
2. 000105-60-2	Caprolactam	14.81	5	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04623.D**	Sample Name	**5818.09**
Operator	**Bhaskar**	Misc Info	**166MW01**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04623.D**	Sample Name	**5818.09**
Operator	**Bhaskar**	Misc Info	**166MW01**
Date Acquired	**2-Nov-00**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **166MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5818 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5818.09

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04623.D

Level: (low/med) LOW Date Received: 10/27/00

% Moisture: decanted: (Y/N) N Date Extracted: 11/2/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.44	8	J
2. 000105-60-2	Caprolactam	14.83	9	JN
3. 000000-00-0	Decahydro-4,4,8,9,10-pentameth	17.28	6	JN
4.	unknown	17.78	4	J
5. 002131-42-2	Naphthalene, 1,4,6-trimethyl-	18.84	5	JN
6. 001921-70-6	Pentadecane, 2,6,10,14-tetramet	20.33	5	JN

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK617
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW02
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.06
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW03
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.07
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW04
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.08
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW05
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	5818.09
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/27/00
	Bldg. 173	**Extraction Date:**	11/1/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	11/3/00
Analysis:	EPA Method 608	**Location :**	80/166
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818
Sample Prepared: 11/07/00

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	17.7	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	ND	8	2.0
Barium	11/07/00	ND	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	170	NLE	20.0
Chromium	11/07/00	ND	100	0.5
Cobalt	11/07/00	ND	NLE	0.5
Copper	11/07/00	ND	1000	2.0
Iron	11/07/00	ND	300	2.0
Lead	11/07/00	ND	10	2.0
Magnesium	11/07/00	ND	NLE	10.0
Manganese	11/07/00	ND	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	ND	100	1.0
Potassium	11/07/00	123	NLE	40.0
Selenium	11/07/00	ND	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	2380	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	ND	NLE	0.5
Zinc	11/07/00	ND	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.02
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	ND	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	ND	8	2.0
Barium	11/07/00	ND	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	25.6	NLE	20.0
Chromium	11/07/00	ND	100	0.5
Cobalt	11/07/00	ND	NLE	0.5
Copper	11/07/00	ND	1000	2.0
Iron	11/07/00	ND	300	2.0
Lead	11/07/00	ND	10	2.0
Magnesium	11/07/00	ND	NLE	10.0
Manganese	11/07/00	ND	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	ND	100	1.0
Potassium	11/07/00	49.1	NLE	40.0
Selenium	11/07/00	ND	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	345	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	0.635	NLE	0.5
Zinc	11/07/00	ND	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.03
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	2940	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	4.96	8	2.0
Barium	11/07/00	45.9	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	4.11	4	0.5
Calcium	11/07/00	86700	NLE	20.0
Chromium	11/07/00	18.6	100	0.5
Cobalt	11/07/00	1.28	NLE	0.5
Copper	11/07/00	185	1000	2.0
Iron	11/07/00	17900	300	2.0
Lead	11/07/00	36.5	10	2.0
Magnesium	11/07/00	23000	NLE	10.0
Manganese	11/07/00	589	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	9.10	100	1.0
Potassium	11/07/00	6480	NLE	40.0
Selenium	11/07/00	6.31	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	83500	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	14.5	NLE	0.5
Zinc	11/07/00	483	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.04
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	215	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	16.8	8	2.0
Barium	11/07/00	97.6	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	84400	NLE	20.0
Chromium	11/07/00	5.21	100	0.5
Cobalt	11/07/00	0.682	NLE	0.5
Copper	11/07/00	62.4	1000	2.0
Iron	11/07/00	26200	300	2.0
Lead	11/07/00	3.16	10	2.0
Magnesium	11/07/00	11100	NLE	10.0
Manganese	11/07/00	396	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	1.85	100	1.0
Potassium	11/07/00	6530	NLE	40.0
Selenium	11/07/00	5.92	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	431000	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	2.34	NLE	0.5
Zinc	11/07/00	38.2	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.05
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	1400	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	ND	8	2.0
Barium	11/07/00	61.7	2000	0.5
Beryllium	11/07/00	0.730	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	12500	NLE	20.0
Chromium	11/07/00	5.80	100	0.5
Cobalt	11/07/00	10.3	NLE	0.5
Copper	11/07/00	17.4	1000	2.0
Iron	11/07/00	1320	300	2.0
Lead	11/07/00	1.70	10	2.0
Magnesium	11/07/00	6040	NLE	10.0
Manganese	11/07/00	419	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	7.24	100	1.0
Potassium	11/07/00	2670	NLE	40.0
Selenium	11/07/00	5.79	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	170000	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	4.70	NLE	0.5
Zinc	11/07/00	42.2	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.06
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	1370	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	7.27	8	2.0
Barium	11/07/00	29.4	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	22800	NLE	20.0
Chromium	11/07/00	13.2	100	0.5
Cobalt	11/07/00	1.14	NLE	0.5
Copper	11/07/00	5.92	1000	2.0
Iron	11/07/00	21400	300	2.0
Lead	11/07/00	1.52	10	2.0
Magnesium	11/07/00	8140	NLE	10.0
Manganese	11/07/00	144	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	2.02	100	1.0
Potassium	11/07/00	4950	NLE	40.0
Selenium	11/07/00	3.72	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	40200	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	8.02	NLE	0.5
Zinc	11/07/00	27.5	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.07
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW04

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	3850	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	5.30	8	2.0
Barium	11/07/00	204	2000	0.5
Beryllium	11/07/00	0.726	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	198000	NLE	20.0
Chromium	11/07/00	22.2	100	0.5
Cobalt	11/07/00	18.0	NLE	0.5
Copper	11/07/00	ND	1000	2.0
Iron	11/07/00	211000	300	2.0
Lead	11/07/00	2.03	10	2.0
Magnesium	11/07/00	118000	NLE	10.0
Manganese	11/07/00	2220	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	30.6	100	1.0
Potassium	11/07/00	9190	NLE	40.0
Selenium	11/07/00	5.16	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	1190000	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	0.633	NLE	0.5
Zinc	11/07/00	271	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.08
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW05

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	2750	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	4.42	8	2.0
Barium	11/07/00	149	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	ND	4	0.5
Calcium	11/07/00	144000	NLE	20.0
Chromium	11/07/00	82.6	100	0.5
Cobalt	11/07/00	6.00	NLE	0.5
Copper	11/07/00	6.13	1000	2.0
Iron	11/07/00	30100	300	2.0
Lead	11/07/00	ND	10	2.0
Magnesium	11/07/00	34000	NLE	10.0
Manganese	11/07/00	673	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	35.7	100	1.0
Potassium	11/07/00	35500	NLE	40.0
Selenium	11/07/00	10.2	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	2590000	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	12.6	NLE	0.5
Zinc	11/07/00	267	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 5818.09
Sample Received: 10/27/00
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	11/07/00	3800	200	10.0
Antimony	11/07/00	ND	20	2.0
Arsenic	11/07/00	5.67	8	2.0
Barium	11/07/00	42.2	2000	0.5
Beryllium	11/07/00	ND	20	0.5
Cadmium	11/07/00	4.58	4	0.5
Calcium	11/07/00	86100	NLE	20.0
Chromium	11/07/00	23.7	100	0.5
Cobalt	11/07/00	1.39	NLE	0.5
Copper	11/07/00	59.3	1000	2.0
Iron	11/07/00	20100	300	2.0
Lead	11/07/00	16.4	10	2.0
Magnesium	11/07/00	23000	NLE	10.0
Manganese	11/07/00	587	50	0.5
Mercury	11/06/00	ND	2	0.1
Nickel	11/07/00	5.40	100	1.0
Potassium	11/07/00	6040	NLE	40.0
Selenium	11/07/00	5.13	50	3.0
Silver	11/07/00	ND	20	1.0
Sodium	11/07/00	121000	50000	20.0
Thallium	11/07/00	ND	10	2.0
Vanadium	11/07/00	18.1	NLE	0.5
Zinc	11/07/00	318	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	Acetone	2-Butanone	Benzene	Chlorobenzene	4,4'-DDD	Cadmium	Chromium	Iron	Manganese	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	1	4	0.1	4	100	300	50	-
08/20/1997	FMETL	ND	ND	ND	ND	ND	8.0	148	7490	136	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	2.26	ND	ND	1.2	9062	553	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	3.26	ND	8.0	1.3	70680	456	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	3.9	ND	8409	117	V,S,P,M
08/24/1998	FMETL	10.27	3.32	ND	5.20	0.059	4.49	3.12	67400	605	V,S,P,M
11/20/1998	FMETL	ND	ND	ND	4.88	0.093	1.96	9.77	68800	647	V,S,P,M
02/09/1999	FMETL	ND	ND	1.26	5.71	0.090	24.6	8.00	17600	407	V,S,P,M
05/26/1999	FMETL	2.28	ND	1.31	5.58	0.148	3.64	5.70	56700	564	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	ND	3.31	4.65	10500	228	V,S,P,M
12/17/1999	FMETL	ND	ND	ND	1.95	0.04	6.69	2.82	28500	424	V,S,P,M
03/06/2000	FMETL	ND	ND	ND	3.83	ND	0.585	15.6	52900	529	V,S,P,M
05/09/2000	FMETL	ND	ND	ND	4.49	0.176	4.44	11.0	22200	318	V,S,P,M
08/16/2000	FMETL	ND	ND	ND	5.90	ND	ND	4.05	48600	444	V,S,P,M
10/27/2000	FMETL	ND	4.87	ND	2.23	ND	ND	5.21	26200	396	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 10/27/2000

NOTES:

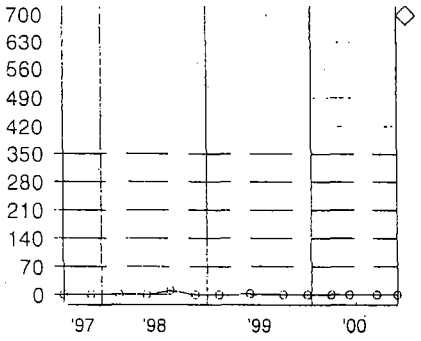
Page 1 of 2.

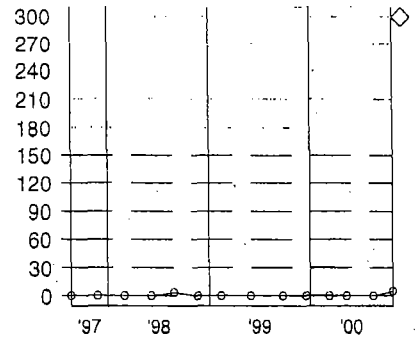
FORT MONMOUTH

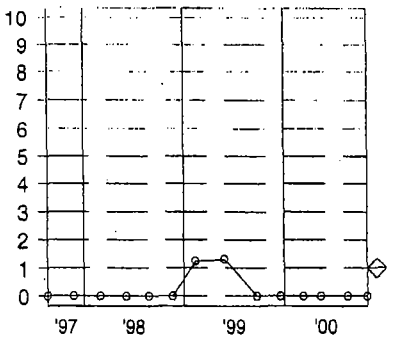
GW MONITORING
Bldg. 80

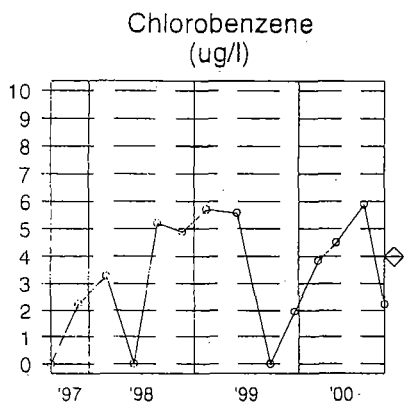
Source 1 of 5

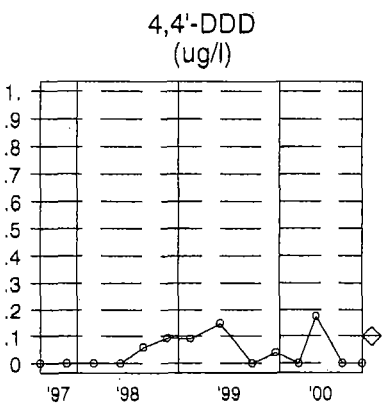
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

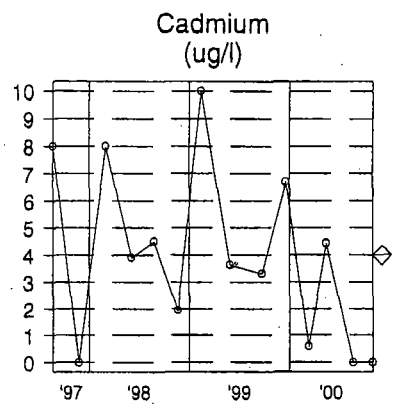


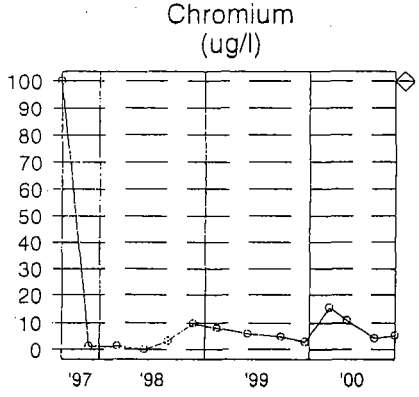


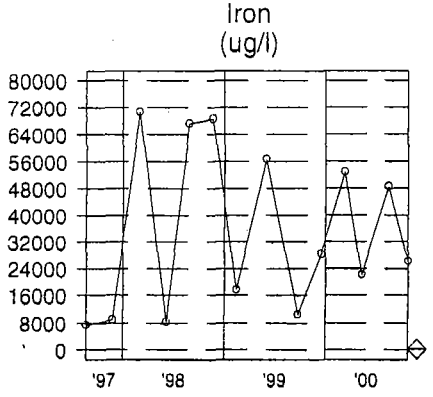


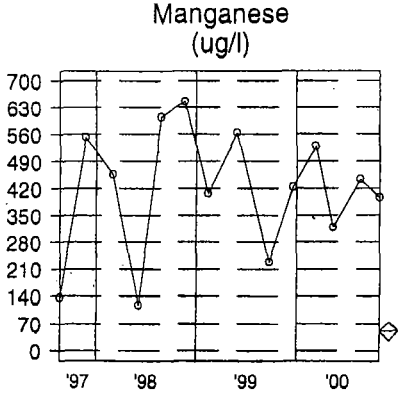












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 1 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	silver	Sodium	Lead	Acenaph thene	Dibenzo furan	Fluorene	2-Methyl naph thalene	1,2-Di chloro benzene	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	20	50000	10	400	NLE	300	NLE	600	-	-
08/20/1997	FMETL	8.0	110750	4.0	-	-	-	-	-	2.60	V,S,P,M
11/24/1997	FMETL	ND	97380	14	-	-	-	-	-	2.40	V,S,P,M
02/27/1998	FMETL	ND	279400	6.0	-	-	-	-	-	1.40	V,S,P,M
06/02/1998	FMETL	ND	147200	3.3	-	-	-	-	-	2.09	V,S,P,M
08/24/1998	FMETL	ND	533000	10.4	-	-	-	-	-	3.43	V,S,P,M
11/20/1998	FMETL	ND	530000	2.86	-	-	-	-	-	4.04	V,S,P,M
02/09/1999	FMETL	ND	306000	ND	-	-	-	-	-	3.84	V,S,P,M
05/26/1999	FMETL	ND	457000	5.34	-	-	-	-	-	2.61	V,S,P,M
09/22/1999	FMETL	ND	181000	5.15	-	-	-	-	-	2.73	V,S,P,M
12/17/1999	FMETL	ND	359000	ND	-	-	-	-	-	2.52	V,S,P,M
03/06/2000	FMETL	ND	315000	3.67	-	-	-	-	-	2.76	V,S,P,M
05/09/2000	FMETL	ND	648000	26.7	1.75	1.24	2.12	ND	-	2.36	V,S,P,M
08/16/2000	FMETL	ND	331000	2.63	1.54	1.19	1.98	2.91	1.81	1.80	V,S,P,M
10/27/2000	FMETL	ND	431000	3.16	ND	ND	ND	ND	ND	2.98	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 10/27/2000

NOTES:

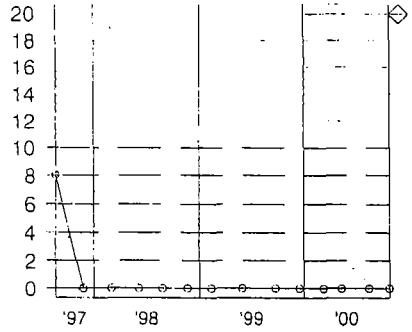
Page 2 of 2.

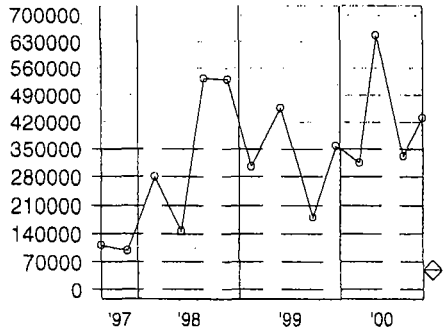
FORT MONMOUTH

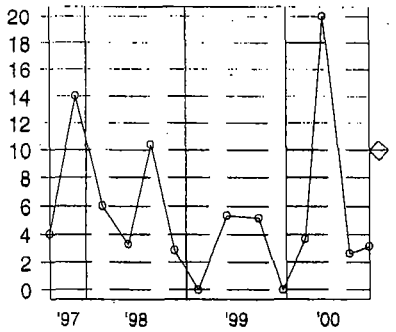
GW MONITORING
Bldg. 80

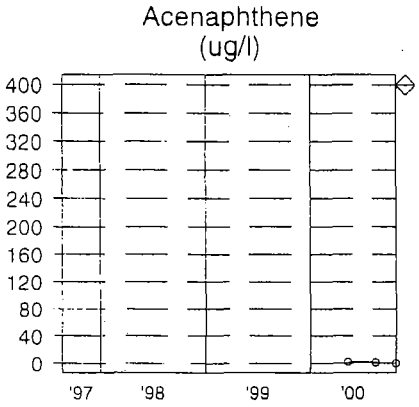
Source 1 of 5

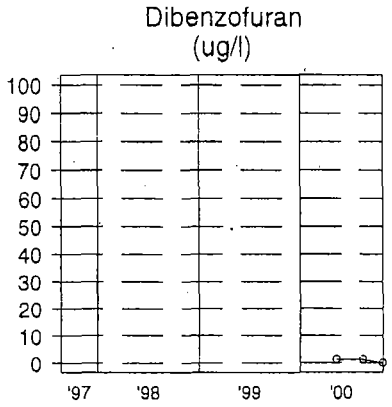
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

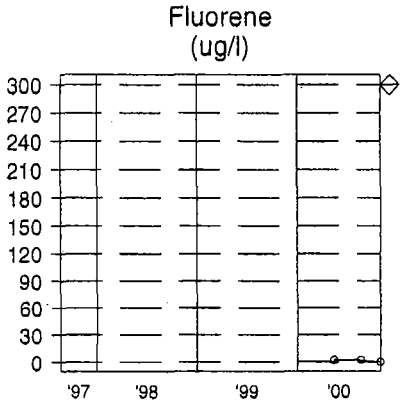


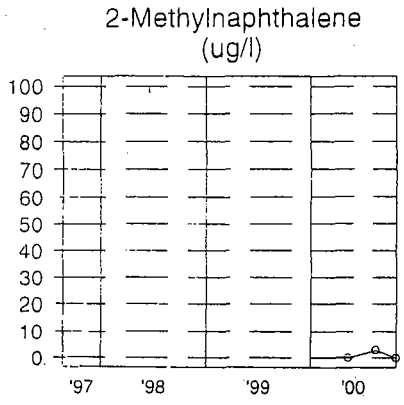


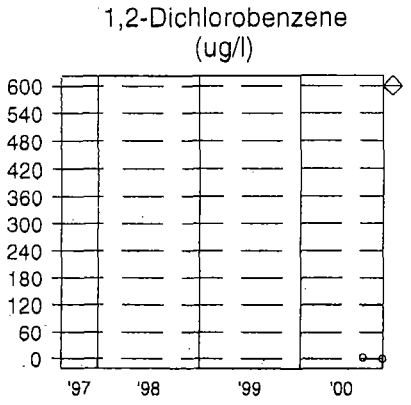


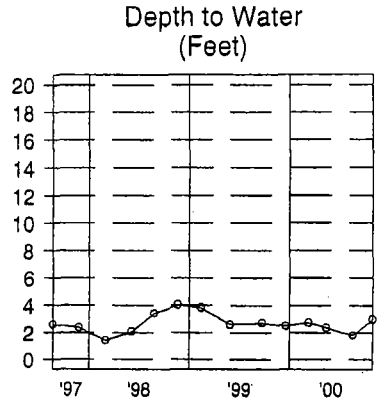












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 1 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Chromium	Iron	Mang anese	Sodium	Lead	Depth to Water				Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	100	300	50	50000	10	-				-
10/27/2000	FMETL	5.80	1320	419	170000	1.70	3.77				V,S,P,M

SOURCE: 0080MW02

Sampling Dates:
10/27/2000 - 10/27/2000

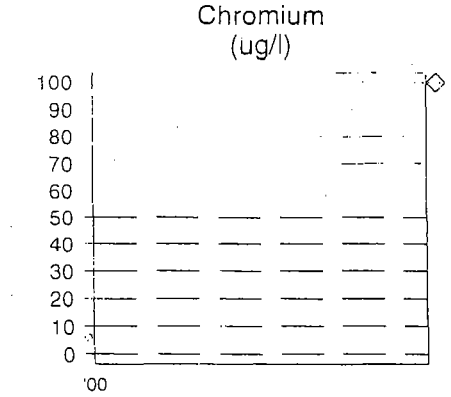
NOTES:

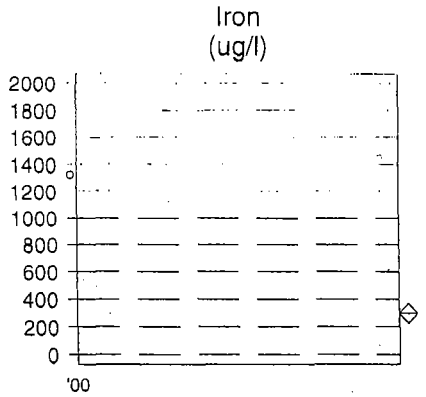
FORT MONMOUTH

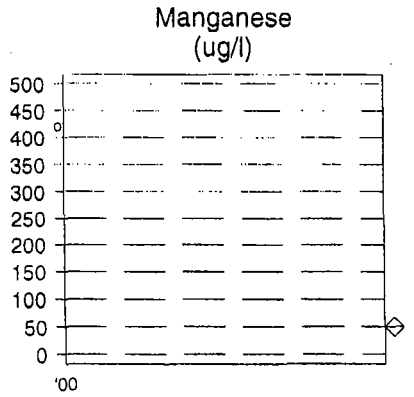
GW MONITORING
Bldg. 80

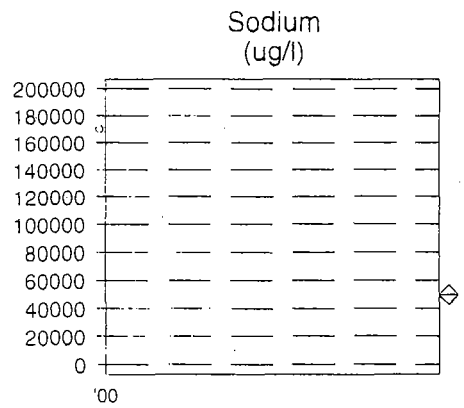
Source 2 of 5

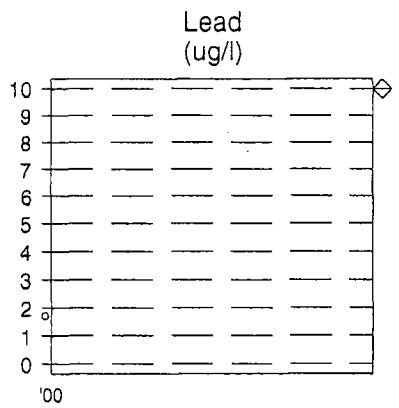
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

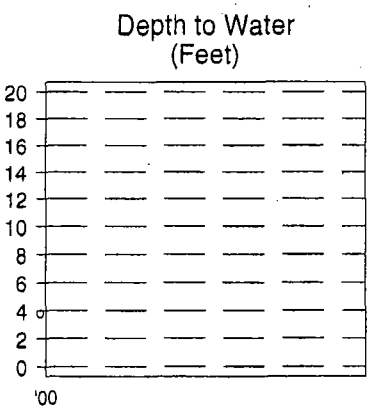












SOURCE: 0080MW02

Sampling Dates:
10/27/2000 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 2 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Acetone	2-Butanone	Chromium	Iron	Manganese	Sodium	Lead	Depth to Water		Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	700	300	100	300	50	50000	10	-		-
10/27/2000	FMETL	5.12	3.30	13.2	21400	144	40200	1.52	3.83		V,S,P,M

SOURCE: 0080MW03

Sampling Dates:
10/27/2000 - 10/27/2000

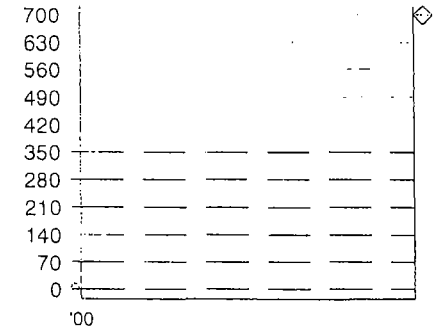
NOTES:

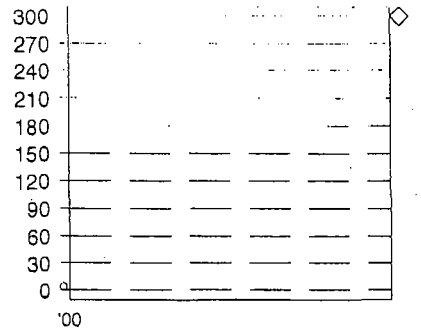
FORT MONMOUTH

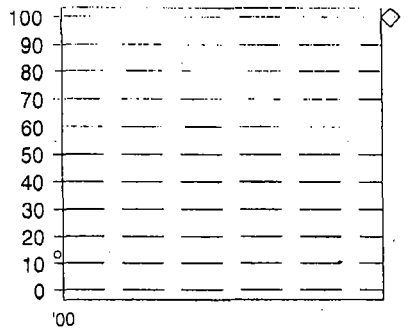
GW MONITORING
Bldg. 80

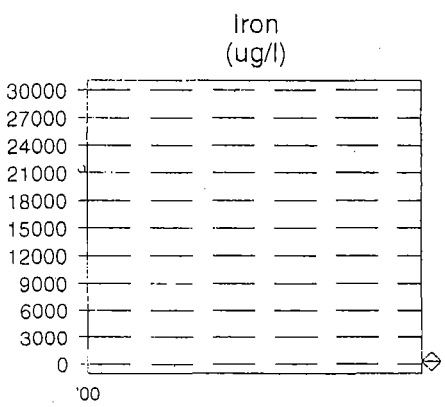
Source 3 of 5

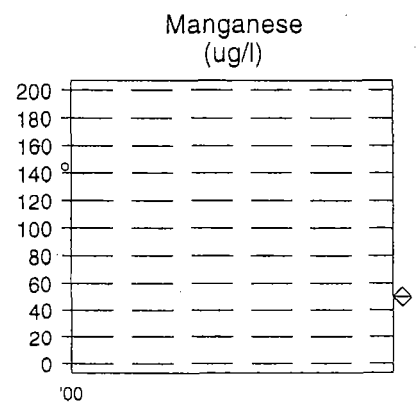
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

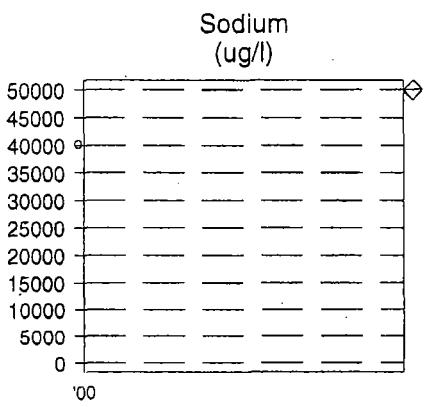


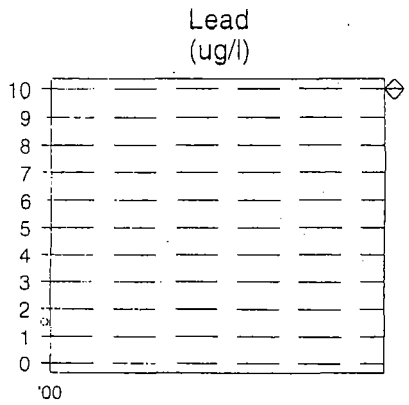


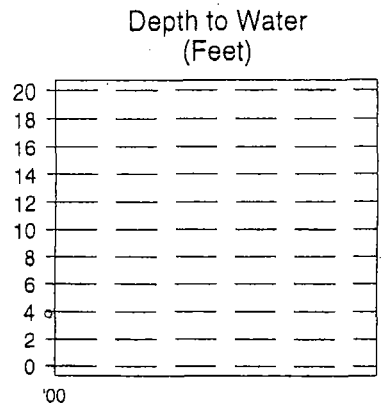












SOURCE: 0080MW03

Sampling Dates:
10/27/2000 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 3 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Chromium	Iron	Mang anese	Sodium	Lead	Depth to Water				Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	100	300	50	50000	10	-				-
10/27/2000	FMETL	22.2	211000	2220	1190000	2.03	3.67				V,S,P,M

SOURCE: 0080MW04

Sampling Dates:
10/27/2000 - 10/27/2000

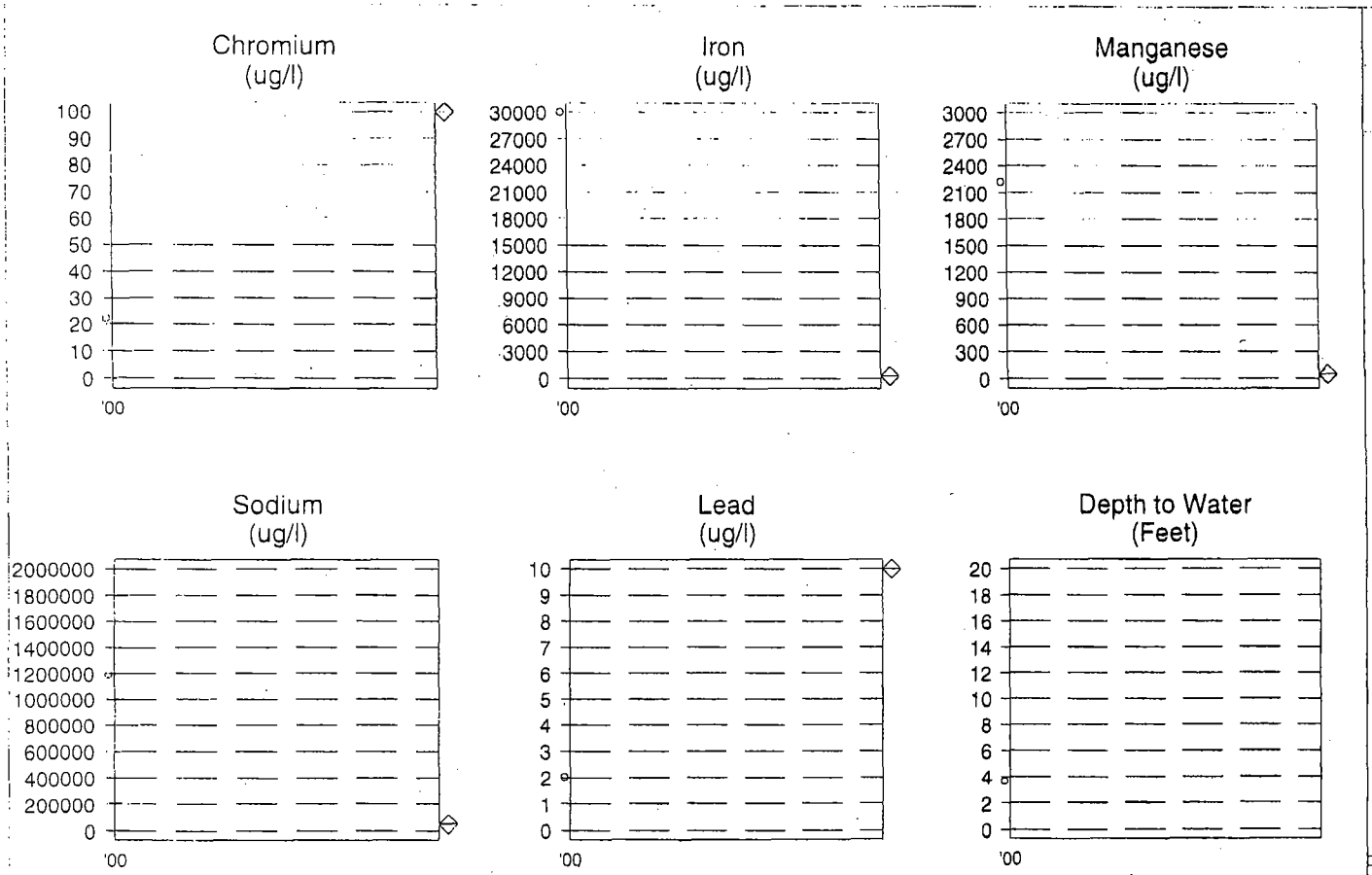
NOTES:

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 4 of 5

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV



SOURCE: 0080MW04

Sampling Dates:
10/27/2000 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 4 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\vntech46\fm\80\gw\80.wsf

	Lab	Chromium	Iron	Mang anese	Sodium	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	100	300	50	50000	-					-
10/27/2000	FMETL	82.6	30100	673	2590000	3.58					V,S,P,M

SOURCE: 0080MW05

Sampling Dates:
10/27/2000 - 10/27/2000

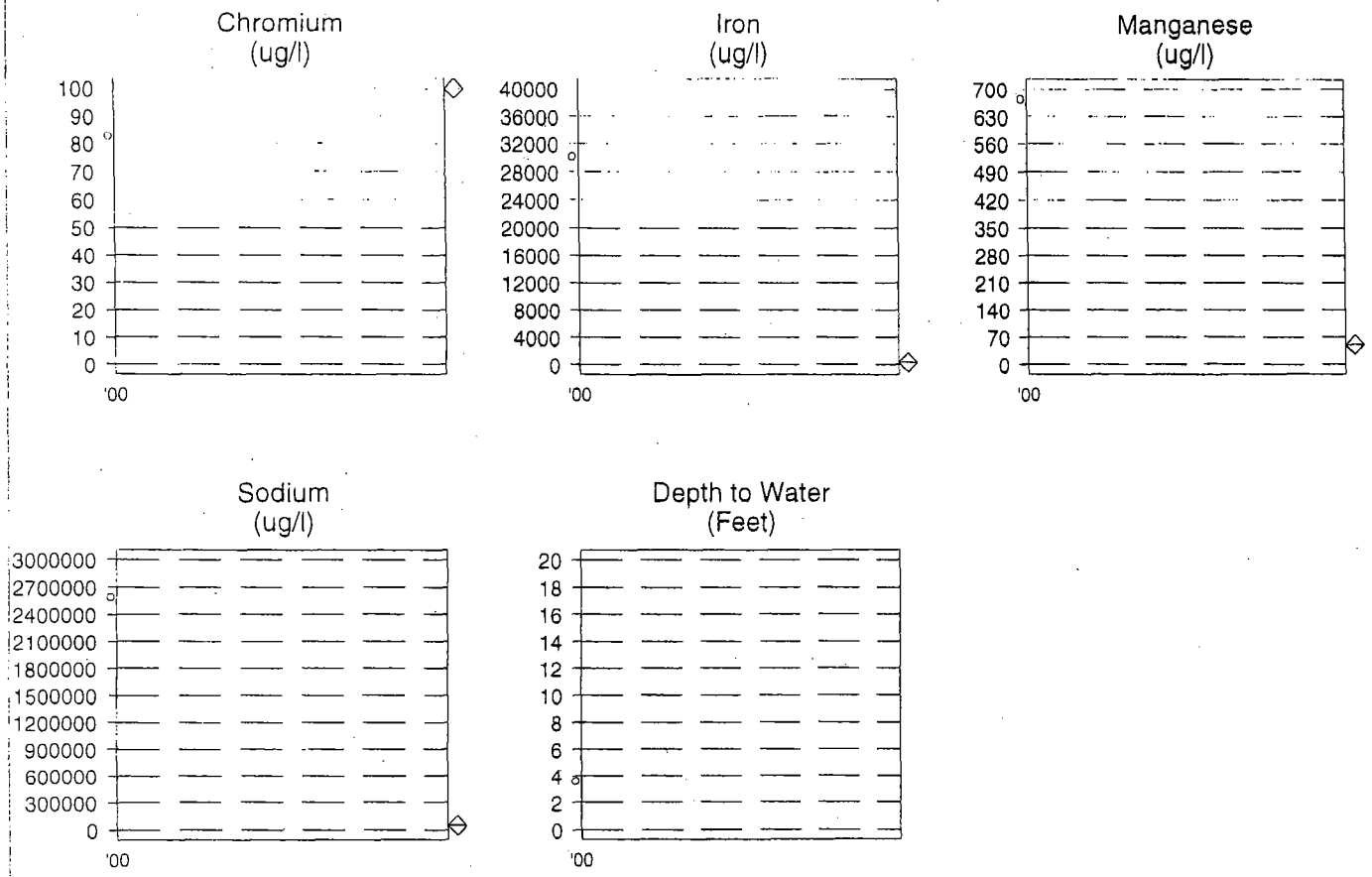
NOTES:

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 5 of 5

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV



SOURCE: 0080MW05

Sampling Dates:
10/27/2000 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 5 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chlorobenzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/1997	FMETL	ND	ND	ND	2.40	-	-	-	-	-	V,Pb
08/20/1997	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	V,S,P,M
08/24/1998	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	V,S,P,M
11/20/1998	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	V,S,P,M
02/09/1999	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	V,S,P,M
05/26/1999	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	0.048	0.049	2.44	4.56	2310	V,S,P,M
12/17/1999	FMETL	ND	ND	1.28	ND	ND	ND	2.95	4.75	10300	V,S,P,M
03/06/2000	FMETL	ND	ND	1.68	ND	ND	ND	1.25	6.79	18300	V,S,P,M
03/06/2000D	FMETL	ND	ND	1.13	ND	ND	ND	2.14	6.46	22100	V,S,P,M
05/09/2000	FMETL	ND	ND	ND	ND	ND	ND	2.79	11.3	9300	V,S,P,M
08/16/2000	FMETL	ND	ND	ND	ND	ND	ND	1.21	3.11	6260	V,S,P,M
10/27/2000	FMETL	ND	ND	1.10	ND	ND	ND	4.58	23.7	20100	V,S,P,M
10/27/2000D	FMETL	ND	ND	1.15	ND	ND	ND	4.11	18.6	17900	V,S,P,M

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 10/27/2000

NOTES:

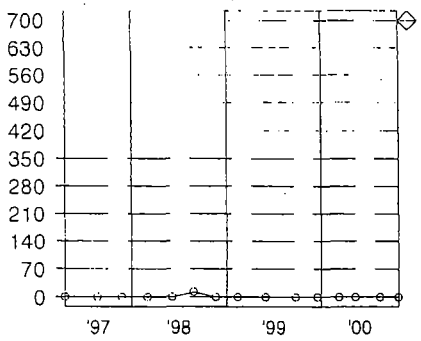
Page 1 of 2.

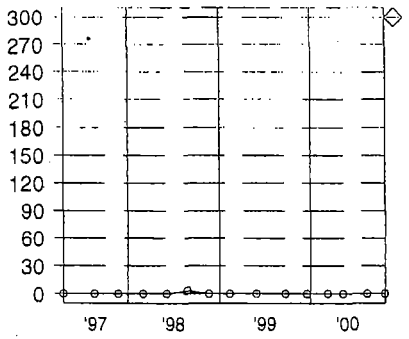
FORT MONMOUTH

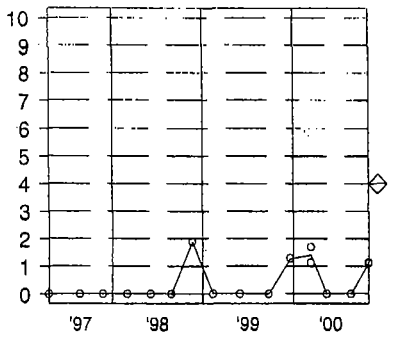
GW MONITORING
Bldg. 166

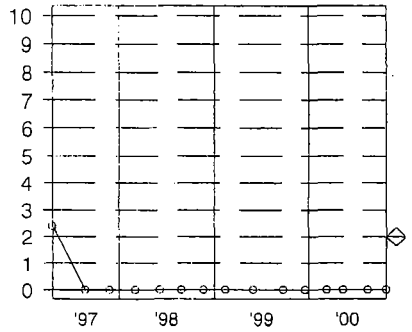
Source 1 of 1

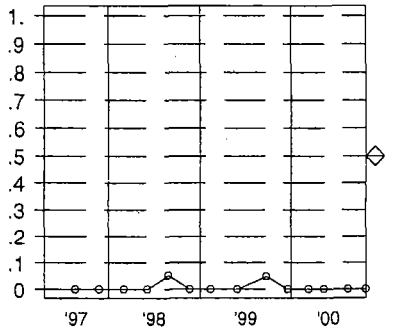
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

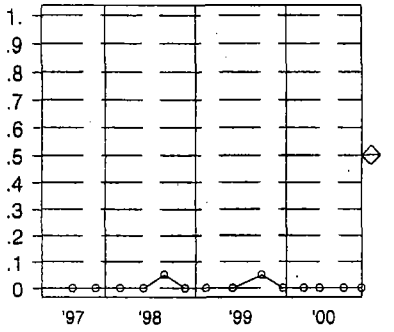


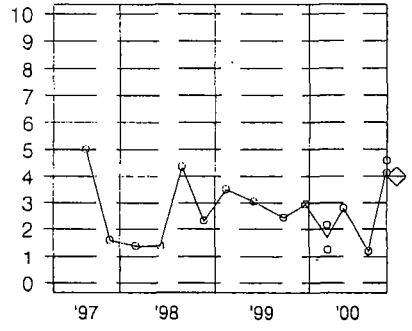


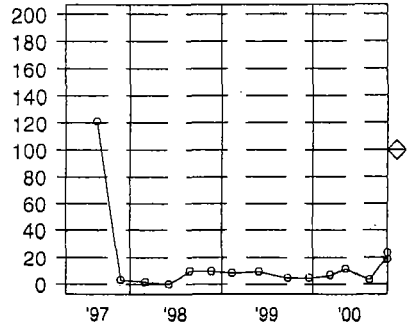


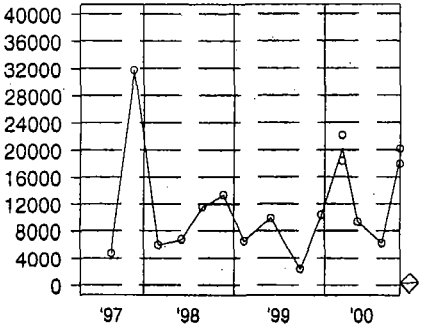












SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\mtech46\fm\166\gw\166.wsf

	Lab	Mang anese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/1997	FMETL	-	-	-	2.10	2.51					V,Pb
08/20/1997	FMETL	336	26	83750	1.6	3.20					V,S,P,M
11/24/1997	FMETL	287	ND	200200	15.0	2.25					V,S,P,M
02/27/1998	FMETL	246	ND	29310	ND	1.00					V,S,P,M
06/02/1998	FMETL	235	ND	27800	2.3	1.97					V,S,P,M
08/24/1998	FMETL	397	ND	58200	12.4	3.42					V,S,P,M
11/20/1998	FMETL	669	ND	114000	4.23	3.99					V,S,P,M
02/09/1999	FMETL	413	ND	108000	ND	2.73					V,S,P,M
05/26/1999	FMETL	368	ND	72900	11.4	2.90					V,S,P,M
09/22/1999	FMETL	214	ND	46500	7.95	2.71					V,S,P,M
12/17/1999	FMETL	377	ND	60300	ND	2.57					V,S,P,M
03/06/2000	FMETL	603	ND	66500	4.21	2.61					V,S,P,M
03/06/2000D	FMETL	582	ND	59900	2.93	2.61					V,S,P,M
05/09/2000	FMETL	239	ND	62300	17.3	2.31					V,S,P,M
08/16/2000	FMETL	204	ND	33600	5.12	1.54					V,S,P,M
10/27/2000	FMETL	587	ND	121000	16.4	2.95					V,S,P,M
10/27/2000D	FMETL	589	ND	83500	36.5	2.95					V,S,P,M

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 10/27/2000

NOTES:

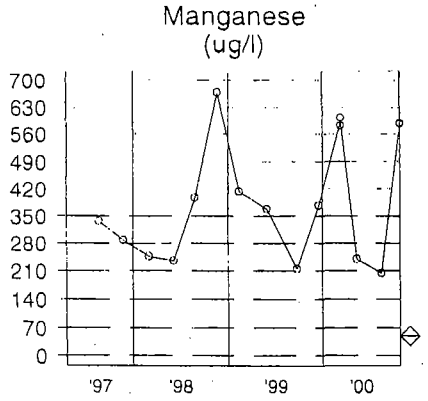
Page 2 of 2.

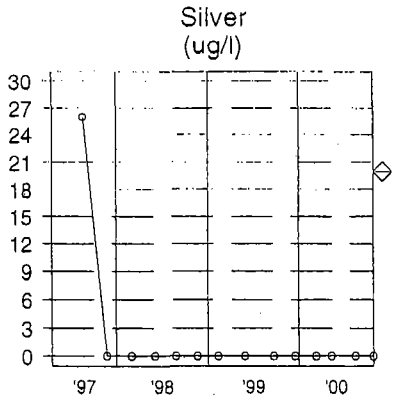
FORT MONMOUTH

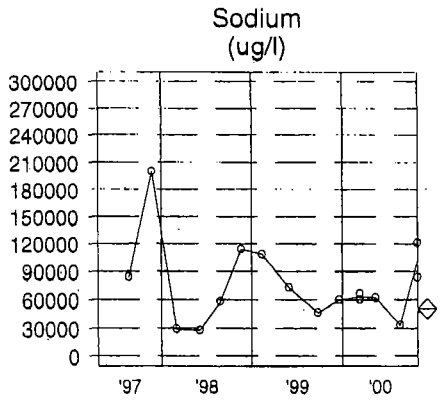
GW MONITORING
Bldg. 166

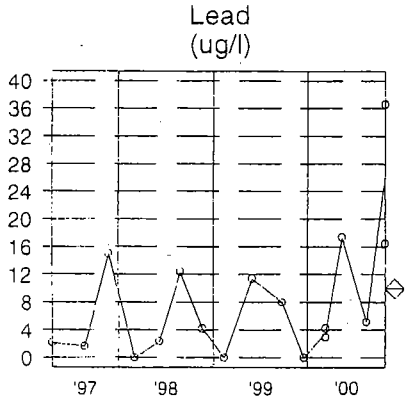
Source 1 of 1

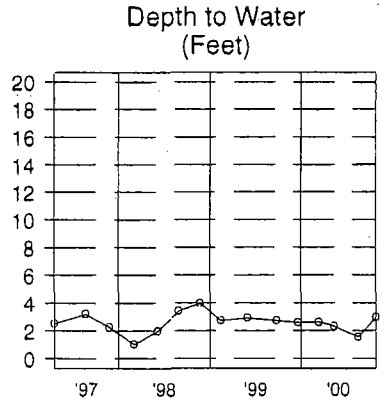
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 10/27/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-16-2000 x:\mtech46\fm\166\gw\166.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-6224 FAX: (732)532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT: DERA/UST
Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 80,166

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
346	0080MW01	29-31774	01/24/01
347	0080MW02	29-43199	01/24/01
348	0080MW03	29-43201	01/24/01
349	0080MW04	29-43200	01/24/01
350	0080MW05	29-43202	01/24/01
345	0166MW01	29-31773	01/24/01

NJDEP Laboratory Certification # 13461

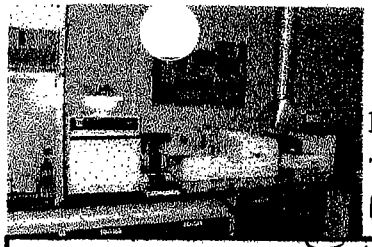
2-16-

Daniel Wright/Date:
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organcis by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: T. FAHLON
Phone #: X24223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 80/166 wells 1st Qtr '01

Samplers Name / Company: Corey McCormack, TVS

Lims Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL mtls	Pest/PCB's	BNA +25				Haz Read	Remarks / Preservation Method
342 .01	Trip	1/24/01	0737	AQ	2	✓							—	
343 .02	Field Blank		0900		5	✓	✓	✓	✓				—	
344 .03	Dupe		—		5	✓	✓	✓	✓				—	
345 .04	166 mw01 *		0918		5	✓	✓	✓	✓				0.0	29-31773
346 .05	80 mw01		1002		5	✓	✓	✓	✓				0.0	29-31774
347 .06	80 mw02		0949		5	✓	✓	✓	✓				0.0	29-43199
348 .07	80 mw03		1135		5	✓	✓	✓	✓				0.0	29-43201
349 .08	80 mw04		1315		5	✓	✓	✓	✓				0.0	29-43200
350 .09	80 mw05	↓	1330	↓	5	✓	✓	✓	✓				0.0	29-43202

Comments: HCL/HNO3/4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	1/24/01 1420				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:
Tide: N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW01
NJDEP ID #: 29-31774
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/24/01
WEATHER: Sunny, cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.09 ft
DEPTH OF WELL: 12.40 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 10.31 ft
(10.31) X .65 X 3 =20.10
GALLONS OF H2O TO BE PURGED: 20 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 08:34
pH 6.74 su
TEMP 12.4 °C
DISSOLVED O_2 5.71 ppm
SPECIFIC CONDUCTIVITY 671 us/cm

PURGE END TIME: 10:01
pH 6.74 su
TEMP 12.1 °C
DISSOLVED O_2 5.21 ppm
SPECIFIC CONDUCTIVITY 673 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.57 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 20 gal

SAMPLE START TIME: 10:02
pH. 6.74 su
TEMP 12.1 °C
DISSOLVED O_2 5.20 ppm
SPECIFIC CONDUCTIVITY 672 us/cm

SAMPLE END TIME: 10:09

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW02
NJDEP ID #: 29-43199
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/24/01
WEATHER: Sunny, cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.87 ft
DEPTH OF WELL: 12.35 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 9.48 ft
(9.48) X .65 X 3 =18.48
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 08:30
pH 6.29 su
TEMP 12.5 °C
DISSOLVED O_2 5.31 ppm
SPECIFIC CONDUCTIVITY 376 us/cm

PURGE END TIME: 09:48
pH 6.32 su
TEMP 12.1 °C
DISSOLVED O_2 4.51 ppm
SPECIFIC CONDUCTIVITY 377 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 3.19 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 09:49
pH. 6.33 su
TEMP 12.1 °C
DISSOLVED O_2 4.50 ppm
SPECIFIC CONDUCTIVITY 374 us/cm

SAMPLE END TIME: 09:55

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW03
NJDEP ID #: 29-431201
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/24/01
WEATHER: Sunny, cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.57 ft
DEPTH OF WELL: 11:25 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.68 ft
(8.68) X .65 X 3 =16.92
GALLONS OF H2O TO BE PURGED: 17 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 10:20
pH 6.71 su — TEMP 12.7 °C
DISSOLVED O_2 5.59 ppm — SPECIFIC CONDUCTIVITY 276 us/cm

PURGE END TIME: 11:34
pH 6.71 su — TEMP 12.5 °C
DISSOLVED O_2 5.10 ppm — SPECIFIC CONDUCTIVITY 271 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.67 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 17 gal

SAMPLE START TIME: 11:35
pH. 6.70 su — TEMP 12.4 °C
DISSOLVED O_2 5.07 ppm — SPECIFIC CONDUCTIVITY 270 us/cm

SAMPLE END TIME: 11:40

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW04
NJDEP ID #: 29-431200
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/24/01
WEATHER: Sunny, cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 3.10 ft
DEPTH OF WELL: 12.08 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 8.98 ft
(8.98) X .65 X 3 =17.51
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 10:38
pH 6.34 su
TEMP 12.6 °C
DISSOLVED O_2 5.76 ppm
SPECIFIC CONDUCTIVITY 817 us/cm

PURGE END TIME: 11:56
pH 6.37 su
TEMP 12.1 °C
DISSOLVED O_2 5.03 ppm
SPECIFIC CONDUCTIVITY 811 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 4.31 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 13:15
pH. 6.38 su
TEMP 12.2 °C
DISSOLVED O_2 4.99 ppm
SPECIFIC CONDUCTIVITY 811 us/cm

SAMPLE END TIME: 13:20

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 80
MW#: 0080MW05
NJDEP ID #: 29-431202
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/24/01
WEATHER: Sunny, cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 2.40 ft
DEPTH OF WELL: 11.76 ft
DEPTH TO TOP OF SCREEN: 2.00 ft
HEIGHT OF WATER: 9.36 ft
(9.36) X .65 X 3 =18.25
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 10:41
pH 6.27 su
TEMP 12.6 °C
DISSOLVED O_2 5.94 ppm
SPECIFIC CONDUCTIVITY 1374 us/cm

PURGE END TIME: 11:59
pH 6.31 su
TEMP 12.1 °C
DISSOLVED O_2 5.01 ppm
SPECIFIC CONDUCTIVITY 1370 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.47 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 13:30
pH. 6.32 su
TEMP 12.1 °C
DISSOLVED O_2 5.00 ppm
SPECIFIC CONDUCTIVITY 1370 us/cm

SAMPLE END TIME: 13:55

COMMENTS: Yellow color.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 166
MW#: 0166MW01
NJDEP ID #: 29-31773
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/24/01
WEATHER: Sunny, cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: 6.96 ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 1.99 ft
DEPTH OF WELL: 7.90 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 5.91 ft
(5.91) X .65 X 3 =11.52
GALLONS OF H2O TO BE PURGED: 12 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.3 ppm

PURGE START TIME: 08:25
pH 7.33 su
TEMP 12.6 °C
DISSOLVED O_2 5.13 ppm
SPECIFIC CONDUCTIVITY 364 us/cm

PURGE END TIME: 09:17
pH 7.37 su
TEMP 12.4 °C
DISSOLVED O_2 4.71 ppm
SPECIFIC CONDUCTIVITY 364 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 2.14 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 12 gal

SAMPLE START TIME: 09:18
pH 7.37 su
TEMP 12.1 °C
DISSOLVED O_2 4.70 ppm
SPECIFIC CONDUCTIVITY 361 us/cm

SAMPLE END TIME: 09:25

COMMENTS: DUP. Here. Cloudy orange particles.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	:	**Method Detection Limit**
J	:	**Compound identified below detection limit**
B	:	**Compound found in blank**
D	:	**Results are from a dilution of the sample**
U	:	**Compound searched for but not detected**
E	:	**Compound exceeds calibration limit**
PQL	:	**Practical Quantitation Limit**
NLE	:	**No limit established**
RT	:	**Retention time**

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004802.D**	Sample Name	**MB**
Operator	**Skelton**	Field ID	**MB 010131**
Date Aquired	**31-Jan-01**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 010131**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

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

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004802.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC004807.D	Sample Name	342
Operator	Skelton	Field ID	Trip Blank
Date Aquired	31-Jan-01	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 342

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004807.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004808.D**	Sample Name	**343**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**31-Jan-01**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 343

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004808.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004809.D**	Sample Name	**344**
Operator	**Skelton**	Field ID	**Dupe**
Date Aquired	**31-Jan-01**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 344

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004809.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC004810.D	Sample Name	345
Operator	Skelton	Field ID	166MW01
Date Aquired	31-Jan-01	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **166MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 345

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004810.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004811.D**	Sample Name	**346**
Operator	**Skelton**	Field ID	**080MW01**
Date Aquired	**31-Jan-01**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.34	1688963	7.34 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	33.96	280663	2.00 ug/L	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 346

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004811.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 2

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	33.76	7	JN
2. 027133-93-3	2,3-Dihydro-1-methylindene	34.94	4	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004812.D**	Sample Name	**347**
Operator	**Skelton**	Field ID	**080MW02**
Date Aquired	**31-Jan-01**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 347

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004812.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004813.D**	Sample Name	**348**
Operator	**Skelton**	Field ID	**080MW03**
Date Aquired	**31-Jan-01**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 348

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004813.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC004814.D	Sample Name	349
Operator	Skelton	Field ID	080MW04
Date Aquired	31-Jan-01	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80MW04**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 349

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004814.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	VC004815.D	Sample Name	350
Operator	Skelton	Field ID	080MW05
Date Aquired	31-Jan-01	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

2/2/01 1:40 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **80MW05**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 342-350 Location: 80/166 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 350

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004815.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: not dec. _____ Date Analyzed: 1/31/01

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04904.D**	Sample Name	**398-MB**
Operator	**Bhaskar**	Misc Info	**MB-010129**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04904.D**	Sample Name	**398-MB**
Operator	**Bhaskar**	Misc Info	**MB-010129**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **MB-398**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 398-MB

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04904.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	10	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04906.D**	Sample Name	**343**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04906.D**	Sample Name	**343**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 343

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04906.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.10	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04907.D**	Sample Name	**344**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04907.D**	Sample Name	**344**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 344

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04907.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04908.D**	Sample Name	**345**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04908.D**	Sample Name	**345**
Operator	**Bhaskar**	Misc Info	**0166MW01**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **166MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 345

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04908.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.10	15	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BNA04909.D	Sample Name	346
Operator	Bhaskar	Misc Info	0080MW01
Date Acquired	31-Jan-01	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene	10.90	24286	1.62 ug/L	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene	15.16	44402	1.50 ug/L	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene	17.79	26583	1.17 ug/L	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04909.D**	Sample Name	**346**
Operator	**Bhaskar**	Misc Info	**0080MW01**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 346

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04909.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	14	J
2. 027133-93-3	2,3-Dihydro-1-methylindene	12.83	5	JN
3. 000090-12-0	Naphthalene, 1-methyl-	15.40	10	JN
4.	unknown	19.56	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04910.D**	Sample Name	**347**
Operator	**Bhaskar**	Misc Info	**0080MW02**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04910.D**	Sample Name	**347**
Operator	**Bhaskar**	Misc Info	**0080MW02**
Date Acquired	**31-Jan-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 347

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04910.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	13	J
2.	unknown	7.83	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04911.D**	Sample Name	**348**
Operator	**Bhaskar**	Misc Info	**0080MW03**
Date Acquired	**1-Feb-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04911.D**	Sample Name	**348**
Operator	**Bhaskar**	Misc Info	**0080MW03**
Date Acquired	**1-Feb-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 348

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04911.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/1/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	12	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04912.D**	Sample Name	**349**
Operator	**Bhaskar**	Misc Info	**0080MW04**
Date Acquired	**1-Feb-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04912.D**	Sample Name	**349**
Operator	**Bhaskar**	Misc Info	**0080MW04**
Date Acquired	**1-Feb-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW04**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 349

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04912.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/1/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	14	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04913.D**	Sample Name	**350**
Operator	**Bhaskar**	Misc Info	**0080MW05**
Date Acquired	**1-Feb-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.69	ug/L	
62-53-3	Aniline			not detected	NLE	1.85	ug/L	
108-95-2	Phenol			not detected	4000	0.52	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.63	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.61	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.62	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.58	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.62	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.65	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.59	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.57	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.48	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.64	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.34	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.51	ug/L	
78-59-1	Isophorone			not detected	100	0.45	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	0.52	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.48	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.39	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.15	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.54	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.72	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.78	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.43	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.71	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.55	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.76	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.59	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.96	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.53	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.04	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.04	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.70	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.92	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.93	ug/L	
83-32-9	Acenaphthene			not detected	400	0.62	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	1.84	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.73	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.41	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04913.D**	Sample Name	**350**
Operator	**Bhaskar**	Misc Info	**0080MW05**
Date Acquired	**1-Feb-01**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.41	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.54	ug/L	
86-73-7	Fluorene			not detected	300	0.98	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.86	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.96	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	2.10	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.44	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.28	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.74	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.73	ug/L	
120-12-7	Anthracene			not detected	2000	1.85	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	2.49	ug/L	
206-44-0	Fluoranthene			not detected	300	1.48	ug/L	
92-87-5	Benzidine			not detected	50	2.15	ug/L	
129-00-0	Pyrene			not detected	200	1.53	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.24	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	2.68	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.60	ug/L	
218-01-9	Chrysene			not detected	20	1.14	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.34	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.44	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.32	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.15	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	2.43	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.24	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.94	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	2.04	ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **80MW05**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 343-350 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 350

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04913.D

Level: (low/med) LOW Date Received: 1/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/29/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/1/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.11	14	J

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	MB-359
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	343
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Field Blank
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	344
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	Dupe
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	**ND**
beta-BHC	1		0.20	0.0050	**ND**
gamma-BHC	1		0.20	0.0013	**ND**
delta-BHC	1		NLE	0.0016	**ND**
Heptachlor	1		0.40	0.0035	**ND**
Aldrin	1		0.04	0.0026	**ND**
Heptachlor Epoxide	1		0.20	0.0020	**ND**
Endosulfan I	1		0.40	0.0016	**ND**
4,4'-DDE	1		0.10	0.0021	**ND**
Dieldrin	1		0.03	0.0020	**ND**
Endrin	1		2.00	0.0032	**ND**
Endrin Ketone	1		NLE	0.0026	**ND**
Endosulfan II	1		0.40	0.0022	**ND**
4,4'-DDD	1		0.10	0.0020	**ND**
4,4'-DDT	1		0.10	0.0052	**ND**
Endosulfan-Sulfate	1		0.40	0.0026	**ND**
Alpha-chlordane	1	16.33	0.50	0.0036	**0.024**
Gamma-chlordane	1	17.01	0.50	0.0007	**0.024**
Toxaphene	1		3.00	0.1517	**ND**
Arochlor 1016	1		0.50	0.0683	**ND**
Arochlor 1221	1		0.50	0.0666	**ND**
Arochlor 1232	1		0.50	0.0648	**ND**
Arochlor 1242	1		0.50	0.0485	**ND**
Arochlor 1248	1		0.50	0.0544	**ND**
Arochlor 1254	1		0.50	0.0608	**ND**
Arochlor 1260	1		0.50	0.0732	**ND**

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	345
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	166MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1	16.65	0.50	0.0036	**0.028**
Gamma-chlordane	1	16.33	0.50	0.0007	**0.024**
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	346
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW01
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1	18.76	0.10	0.0020	**0.084**
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	347
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW02
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	10	2.72	0.50	0.0036	1.625
Gamma-chlordane	10	1.62	0.50	0.0007	2.719
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected

MDL = Method Detection Limit

NLE = No Limit Established

PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um

Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	348
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW03
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	349
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW04
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	350
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/24/01
	Bldg. 173	**Extraction Date:**	1/24/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	2/6/01
Analysis:	EPA Method 608	**Location :**	80/166 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	80MW05
Ext. Meth:	Sep. Funnel		

Pesticide/PCB	Dilution Factor	Retention Time	Regulatory Level * (ug/L)	MDL (ug/L)	Result (ug/L)
alpha-BHC	1		0.02	0.0011	ND
beta-BHC	1		0.20	0.0050	ND
gamma-BHC	1		0.20	0.0013	ND
delta-BHC	1		NLE	0.0016	ND
Heptachlor	1		0.40	0.0035	ND
Aldrin	1		0.04	0.0026	ND
Heptachlor Epoxide	1		0.20	0.0020	ND
Endosulfan I	1		0.40	0.0016	ND
4,4'-DDE	1		0.10	0.0021	ND
Dieldrin	1		0.03	0.0020	ND
Endrin	1		2.00	0.0032	ND
Endrin Ketone	1		NLE	0.0026	ND
Endosulfan II	1		0.40	0.0022	ND
4,4'-DDD	1		0.10	0.0020	ND
4,4'-DDT	1		0.10	0.0052	ND
Endosulfan-Sulfate	1		0.40	0.0026	ND
Alpha-chlordane	1		0.50	0.0036	ND
Gamma-chlordane	1		0.50	0.0007	ND
Toxaphene	1		3.00	0.1517	ND
Arochlor 1016	1		0.50	0.0683	ND
Arochlor 1221	1		0.50	0.0666	ND
Arochlor 1232	1		0.50	0.0648	ND
Arochlor 1242	1		0.50	0.0485	ND
Arochlor 1248	1		0.50	0.0544	ND
Arochlor 1254	1		0.50	0.0608	ND
Arochlor 1260	1		0.50	0.0732	ND

* Higher of PQL's and ground water criteria as per NJAC 7:9-6

ND = Not Detected
MDL = Method Detection Limit
NLE = No Limit Established
PQL = Practical Quantitation Limit

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um

METALS

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 343-350
Sample Prepared: 02/05/01

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	ND	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	ND	8	2.0
Barium	02/07/01	ND	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	ND	4	0.5
Calcium	02/07/01	ND	NLE	20.0
Chromium	02/07/01	ND	100	0.5
Cobalt	02/07/01	ND	NLE	0.5
Copper	02/07/01	183	1000	2.0
Iron	02/07/01	56.0	300	2.0
Lead	02/07/01	26.8	10	2.0
Magnesium	02/07/01	ND	NLE	10.0
Manganese	02/07/01	ND	50	0.5
Mercury	02/02/01	ND	2	0.1
Nickel	02/07/01	3.67	100	1.0
Potassium	02/07/01	ND	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	ND	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	ND	NLE	0.5
Zinc	02/07/01	242	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 343
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	ND	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	ND	8	2.0
Barium	02/07/01	ND	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	ND	4	0.5
Calcium	02/07/01	ND	NLE	20.0
Chromium	02/07/01	ND	100	0.5
Cobalt	02/07/01	ND	NLE	0.5
Copper	02/07/01	ND	1000	2.0
Iron	02/07/01	ND	300	2.0
Lead	02/07/01	ND	10	2.0
Magnesium	02/07/01	98.5	NLE	10.0
Manganese	02/07/01	ND	50	0.5
Mercury	02/02/01	ND	2	0.1
Nickel	02/07/01	ND	100	1.0
Potassium	02/07/01	ND	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	ND	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	ND	NLE	0.5
Zinc	02/07/01	ND	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 344
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	ND	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	3.03	8	2.0
Barium	02/07/01	32.5	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	2.57	4	0.5
Calcium	02/07/01	98400	NLE	20.0
Chromium	02/07/01	7.08	100	0.5
Cobalt	02/07/01	ND	NLE	0.5
Copper	02/07/01	6.44	1000	2.0
Iron	02/07/01	7420	300	2.0
Lead	02/07/01	ND	10	2.0
Magnesium	02/07/01	24200	NLE	10.0
Manganese	02/07/01	341	50	0.5
Mercury	02/02/01	0.2	2	0.1
Nickel	02/07/01	1.53	100	1.0
Potassium	02/07/01	5020	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	148000	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	1.95	NLE	0.5
Zinc	02/07/01	273	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 345
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0166MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	43.1	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	4.83	8	2.0
Barium	02/07/01	34.5	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	4.15	4	0.5
Calcium	02/07/01	101000	NLE	20.0
Chromium	02/07/01	7.28	100	0.5
Cobalt	02/07/01	ND	NLE	0.5
Copper	02/07/01	9.15	1000	2.0
Iron	02/07/01	9140	300	2.0
Lead	02/07/01	ND	10	2.0
Magnesium	02/07/01	24800	NLE	10.0
Manganese	02/07/01	360	50	0.5
Mercury	02/02/01	ND	2	0.1
Nickel	02/07/01	1.72	100	1.0
Potassium	02/07/01	5100	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	154000	50000	20.0
Thallium	02/07/01	4.13	10	2.0
Vanadium	02/07/01	2.66	NLE	0.5
Zinc	02/07/01	301	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 346
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	28.2	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	32.4	8	2.0
Barium	02/07/01	77.6	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	5.66	4	0.5
Calcium	02/07/01	53300	NLE	20.0
Chromium	02/07/01	5.43	100	0.5
Cobalt	02/07/01	1.95	NLE	0.5
Copper	02/07/01	12.6	1000	2.0
Iron	02/07/01	69800	300	2.0
Lead	02/07/01	1.87	10	2.0
Magnesium	02/07/01	14000	NLE	10.0
Manganese	02/07/01	579	50	0.5
Mercury	02/02/01	0.2	2	0.1
Nickel	02/07/01	ND	100	1.0
Potassium	02/07/01	4140	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	574000	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	2.85	NLE	0.5
Zinc	02/07/01	76.9	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 347
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	256	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	2.69	8	2.0
Barium	02/07/01	43.6	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	5.36	4	0.5
Calcium	02/07/01	12700	NLE	20.0
Chromium	02/07/01	1.01	100	0.5
Cobalt	02/07/01	10.4	NLE	0.5
Copper	02/07/01	3.38	1000	2.0
Iron	02/07/01	729	300	2.0
Lead	02/07/01	ND	10	2.0
Magnesium	02/07/01	6250	NLE	10.0
Manganese	02/07/01	412	50	0.5
Mercury	02/02/01	0.3	2	0.1
Nickel	02/07/01	3.70	100	1.0
Potassium	02/07/01	2020	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	164000	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	ND	NLE	0.5
Zinc	02/07/01	40.3	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 348
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	97.9	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	2.28	8	2.0
Barium	02/07/01	53.0	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	3.89	4	0.5
Calcium	02/07/01	79800	NLE	20.0
Chromium	02/07/01	4.17	100	0.5
Cobalt	02/07/01	0.747	NLE	0.5
Copper	02/07/01	4.31	1000	2.0
Iron	02/07/01	5710	300	2.0
Lead	02/07/01	ND	10	2.0
Magnesium	02/07/01	18600	NLE	10.0
Manganese	02/07/01	51.5	50	0.5
Mercury	02/02/01	ND	2	0.1
Nickel	02/07/01	ND	100	1.0
Potassium	02/07/01	10700	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	71500	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	1.28	NLE	0.5
Zinc	02/07/01	27.9	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 349
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW04

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	1260	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	4.18	8	2.0
Barium	02/07/01	162	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	0.945	4	0.5
Calcium	02/07/01	209000	NLE	20.0
Chromium	02/07/01	18.6	100	0.5
Cobalt	02/07/01	9.68	NLE	0.5
Copper	02/07/01	180	1000	2.0
Iron	02/07/01	264000	300	2.0
Lead	02/07/01	20.0	10	2.0
Magnesium	02/07/01	125000	NLE	10.0
Manganese	02/07/01	2070	50	0.5
Mercury	02/02/01	0.2	2	0.1
Nickel	02/07/01	16.3	100	1.0
Potassium	02/07/01	8450	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	1360000	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	ND	NLE	0.5
Zinc	02/07/01	485	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 350
Sample Received: 01/24/01
Sample Matrix: Aqueous

Site: 80/166
Ft. Monmouth, New Jersey

Field ID#: 0080MW05

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	02/07/01	2500	200	10.0
Antimony	02/07/01	ND	20	2.0
Arsenic	02/07/01	5.85	8	2.0
Barium	02/07/01	54.5	2000	0.5
Beryllium	02/07/01	ND	20	0.5
Cadmium	02/07/01	11.1	4	0.5
Calcium	02/07/01	87500	NLE	20.0
Chromium	02/07/01	22.1	100	0.5
Cobalt	02/07/01	5.37	NLE	0.5
Copper	02/07/01	11.6	1000	2.0
Iron	02/07/01	10700	300	2.0
Lead	02/07/01	ND	10	2.0
Magnesium	02/07/01	18200	NLE	10.0
Manganese	02/07/01	491	50	0.5
Mercury	02/02/01	ND	2	0.1
Nickel	02/07/01	4.16	100	1.0
Potassium	02/07/01	35700	NLE	40.0
Selenium	02/07/01	ND	50	3.0
Silver	02/07/01	ND	20	1.0
Sodium	02/07/01	1810000	50000	20.0
Thallium	02/07/01	ND	10	2.0
Vanadium	02/07/01	12.9	NLE	0.5
Zinc	02/07/01	325	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

LTM

	Lab	Acetone	2-Butanone	Benzene	Chlorobenzene	4,4'-DDD	Cadmium	Chromium	Iron	Manganese	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	1	4	0.1	4	100	300	50	-
08/20/1997	FMETL	ND	ND	ND	ND	ND	8.0	148	7490	136	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	2.26	ND	ND	1.2	9062	553	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	3.26	ND	8.0	1.3	70680	456	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	3.9	ND	8409	117	V,S,P,M
08/24/1998	FMETL	10.27	3.32	ND	5.20	0.059	4.49	3.12	67400	605	V,S,P,M
11/20/1998	FMETL	ND	ND	ND	4.88	0.093	1.96	9.77	68800	647	V,S,P,M
02/09/1999	FMETL	ND	ND	1.26	5.71	0.090	24.6	8.00	17600	407	V,S,P,M
05/26/1999	FMETL	2.28	ND	1.31	5.58	0.148	3.64	5.70	56700	564	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	ND	3.31	4.65	10500	228	V,S,P,M
12/17/1999	FMETL	ND	ND	ND	1.95	0.04	6.69	2.82	28500	424	V,S,P,M
03/06/2000	FMETL	ND	ND	ND	3.83	ND	0.585	15.6	52900	529	V,S,P,M
05/09/2000	FMETL	ND	ND	ND	4.49	0.176	4.44	11.0	22200	318	V,S,P,M
08/16/2000	FMETL	ND	ND	ND	5.90	ND	ND	4.05	48600	444	V,S,P,M
10/27/2000	FMETL	ND	4.87	ND	2.23	ND	ND	5.21	26200	396	V,S,P,M
01/24/2001	FMETL	ND	ND	ND	7.34	0.084	5.66	5.43	69800	579	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 01/24/2001

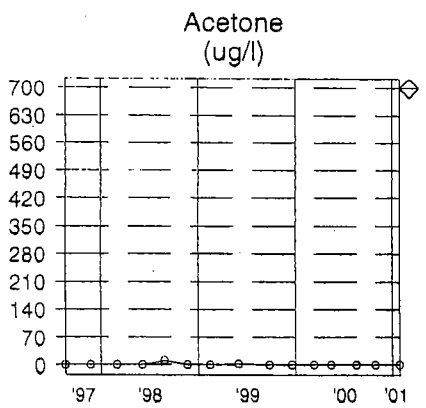
NOTES:

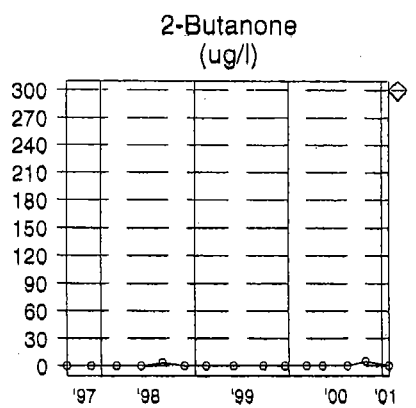
FORT MONMOUTH

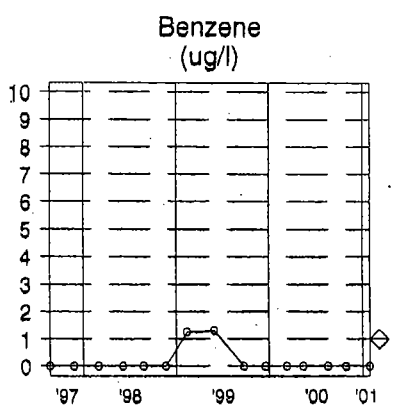
GW MONITORING
Bldg. 80

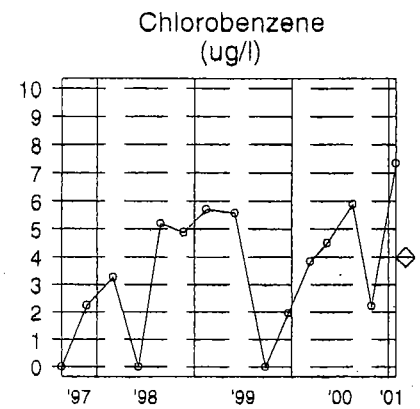
Source 1 of 5

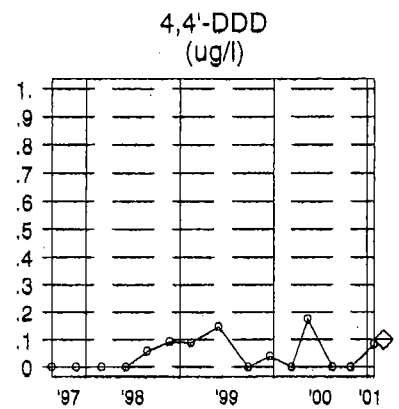
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

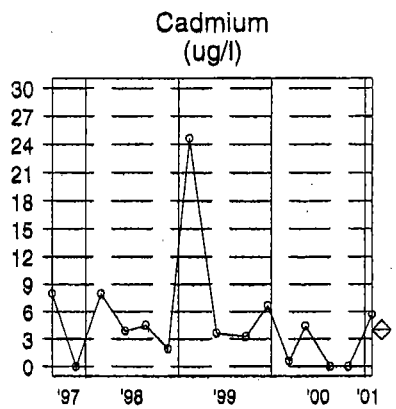


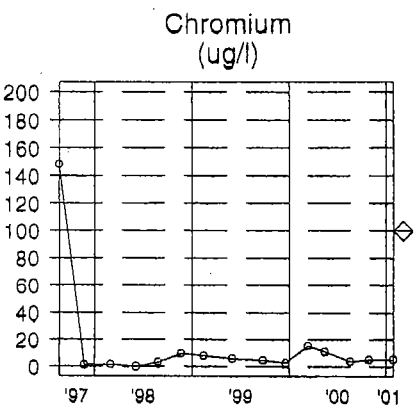


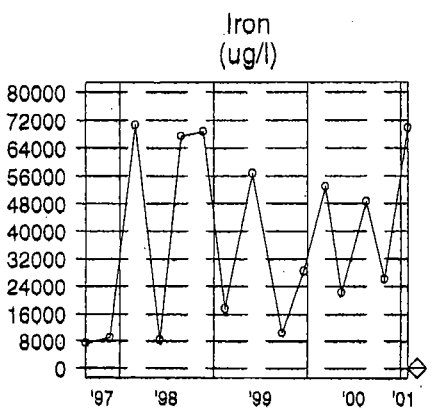


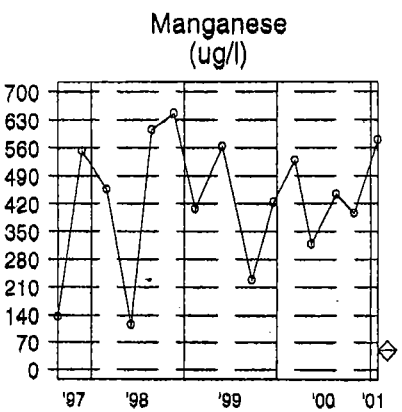












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 1 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-16-2001 x:\mtech48\fm\80\gw\80.wsf

	Lab	silver	Sodium	Lead	Acenaph thene	Dibenzo furan	Fluorene	2-Methyl naph thalene	1,2-Di chloro benzene	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	20	50000	10	400	NLE	300	NLE	600	-	-
08/20/1997	FMETL	8.0	110750	4.0	-	-	-	-	-	2.60	V,S,P,M
11/24/1997	FMETL	ND	97380	14	-	-	-	-	-	2.40	V,S,P,M
02/27/1998	FMETL	ND	279400	6.0	-	-	-	-	-	1.40	V,S,P,M
06/02/1998	FMETL	ND	147200	3.3	-	-	-	-	-	2.09	V,S,P,M
08/24/1998	FMETL	ND	533000	10.4	-	-	-	-	-	3.43	V,S,P,M
11/20/1998	FMETL	ND	530000	2.86	-	-	-	-	-	4.04	V,S,P,M
02/09/1999	FMETL	ND	306000	ND	-	-	-	-	-	3.84	V,S,P,M
05/26/1999	FMETL	ND	457000	5.34	-	-	-	-	-	2.61	V,S,P,M
09/22/1999	FMETL	ND	181000	5.15	-	-	-	-	-	2.73	V,S,P,M
12/17/1999	FMETL	ND	359000	ND	-	-	-	-	-	2.52	V,S,P,M
03/06/2000	FMETL	ND	315000	3.67	-	-	-	-	-	2.76	V,S,P,M
05/09/2000	FMETL	ND	648000	26.7	1.75	1.24	2.12	ND	-	2.36	V,S,P,M
08/16/2000	FMETL	ND	331000	2.63	1.54	1.19	1.98	2.91	1.81	1.80	V,S,P,M
10/27/2000	FMETL	ND	431000	3.16	ND	ND	ND	ND	ND	2.98	V,S,P,M
01/24/2001	FMETL	ND	574000	1.87	1.17	ND	ND	1.50	2.00	2.09	V,S,P,M

SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 01/24/2001

NOTES:

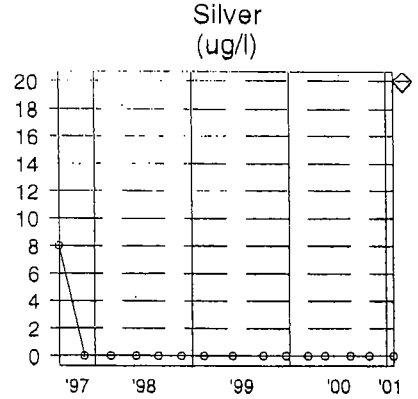
Page 2 of 2.

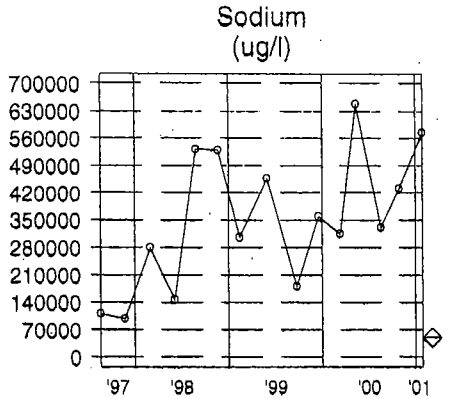
FORT MONMOUTH

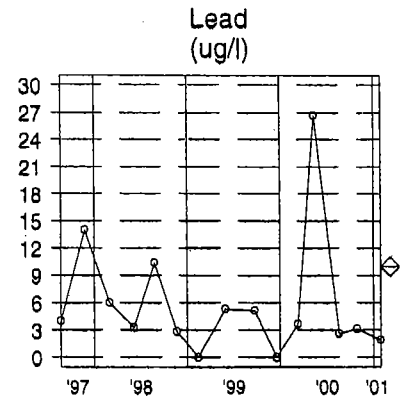
GW MONITORING
Bldg. 80

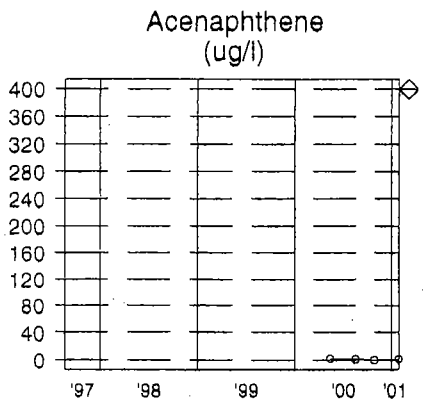
Source 1 of 5

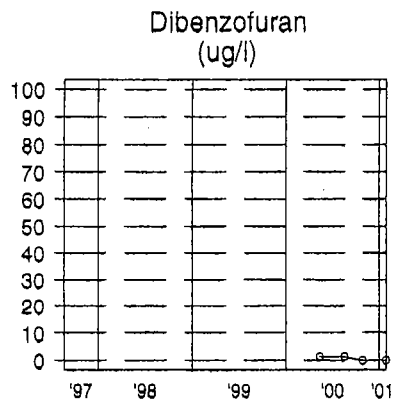
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

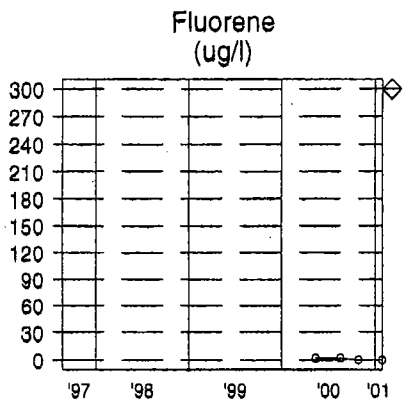


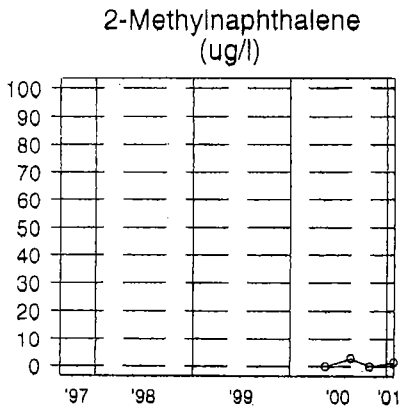


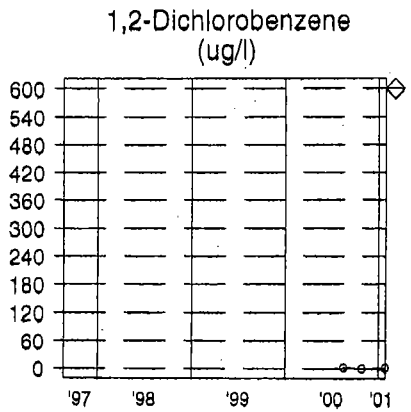


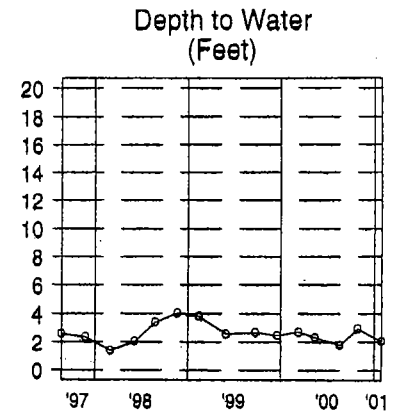












SOURCE: 0080MW01

Sampling Dates:
08/20/1997 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 1 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	alpha Chlordane	gamma Chlordane	Cadmium	Chromium	Iron	Manganese	Sodium	Lead	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	0.5	0.5	4	100	300	50	50000	10	-	-
10/27/2000	FMETL	ND	ND	ND	5.80	1320	419	170000	1.70	3.77	V,S,P,M
01/24/2001	FMETL	1.625	2.719	5.36	1.01	729	412	164000	ND	2.87	V,S,P,M

SOURCE: 0080MW02

Sampling Dates:
10/27/2000 - 01/24/2001

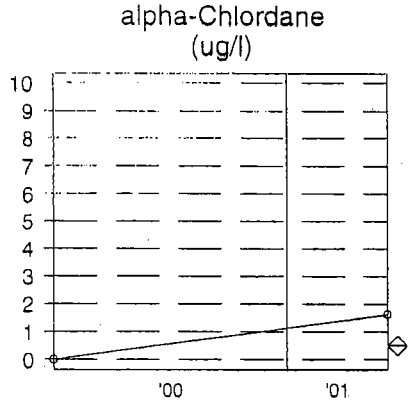
NOTES:

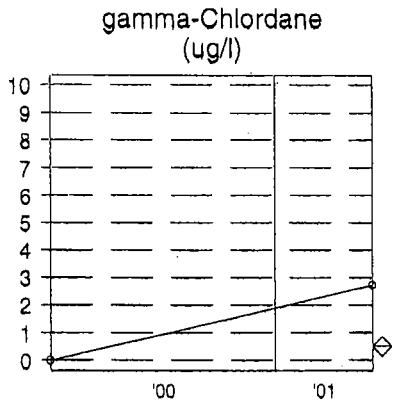
FORT MONMOUTH

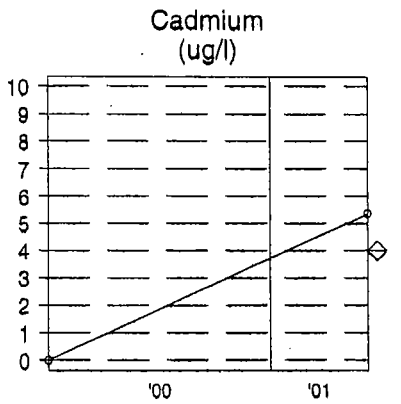
GW MONITORING
Bldg. 80

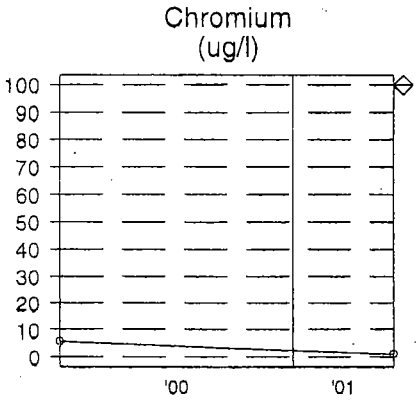
Source 2 of 5

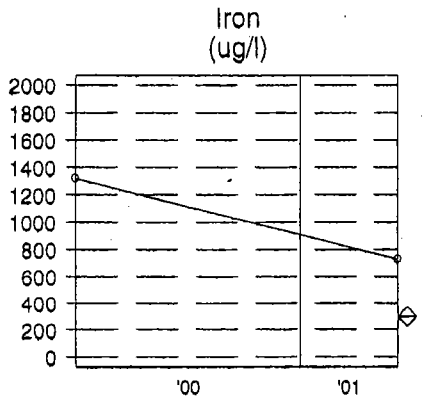
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

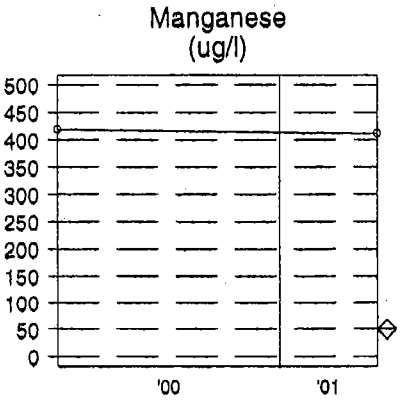


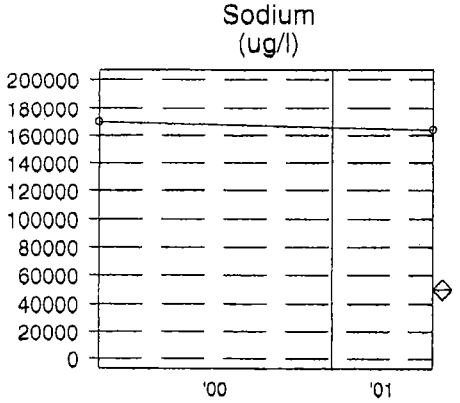


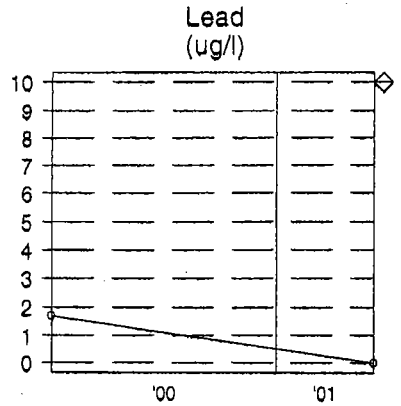


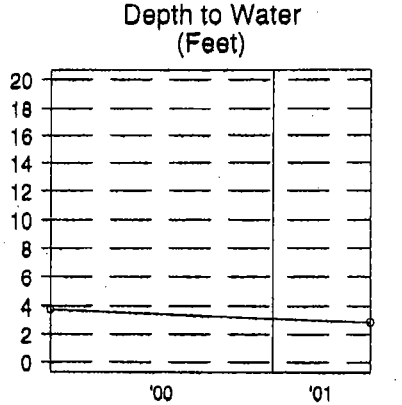












SOURCE: 0080MW02

Sampling Dates:
10/27/2000 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 2 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-16-2001 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Cadmium	Chromium	Iron	Manganese	Sodium	Lead	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	700	300	4	100	300	50	50000	10	-	-
10/27/2000	FMETL	5.12	3.30	ND	13.2	21400	144	40200	1.52	3.83	V,S,P,M
01/24/2001	FMETL	ND	ND	3.89	4.17	5710	51.5	71500	ND	2.57	V,S,P,M

SOURCE: 0080MW03

Sampling Dates:
10/27/2000 - 01/24/2001

NOTES:

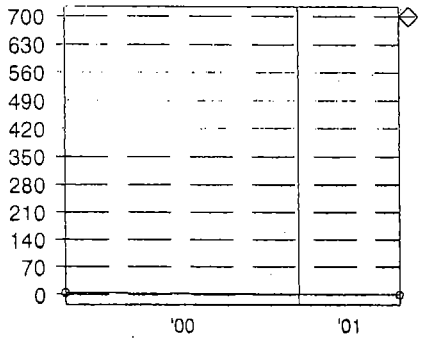
FORT MONMOUTH

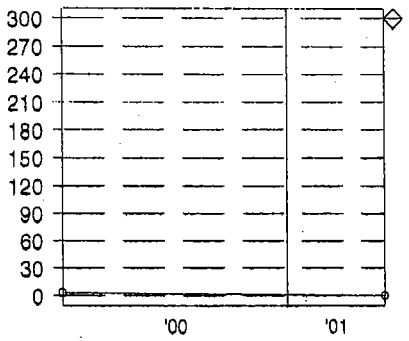
GW MONITORING
Bldg. 80

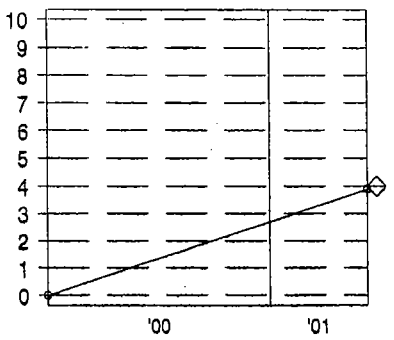
Source 3 of 5

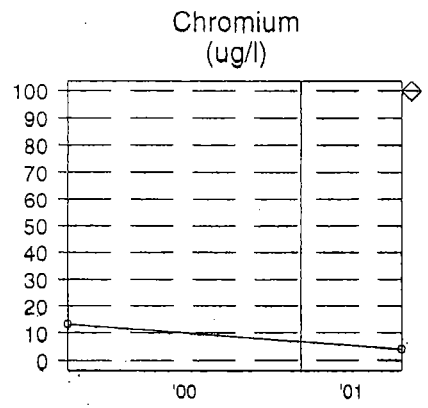
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

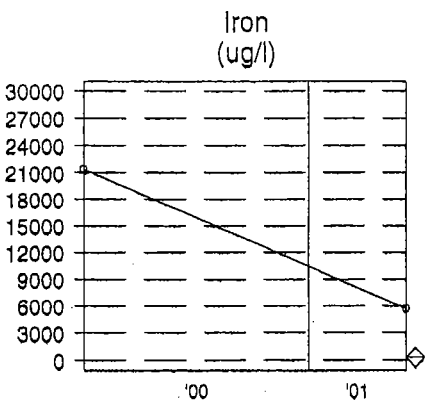
02-16-2001 x:\mtech46\fm\80\gw\80.wsf

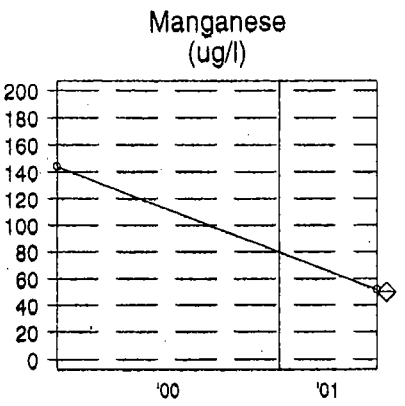


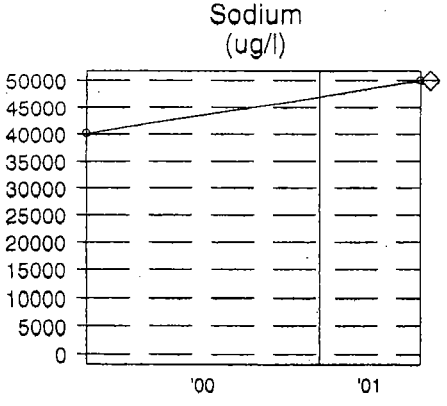


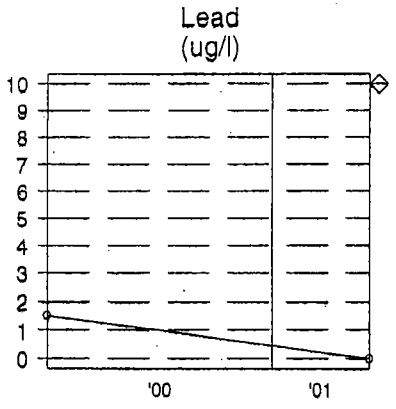


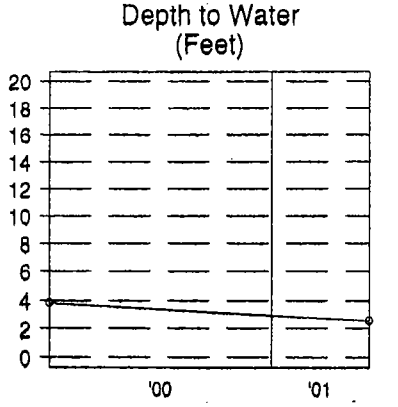












SOURCE: 0080MW03

Sampling Dates:
10/27/2000 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 3 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-16-2001 x:\mtech46\fm\80\gw\80.wsf

	Lab	Cadmium	Chromium	Iron	Mang anese	Sodium	Lead	Depth to Water			Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet			-
NJDEP Criteria:	-	4	100	300	50	50000	10	-			-
10/27/2000	FMETL	ND	22.2	211000	2220	1190000	2.03	3.67			V,S,P,M
01/24/2001	FMETL	0.945	18.6	264000	2070	1360000	20.0	3.10			V,S,P,M

SOURCE: 0080MW04

Sampling Dates:
10/27/2000 - 01/24/2001

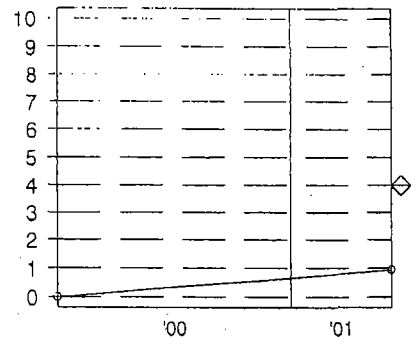
NOTES:

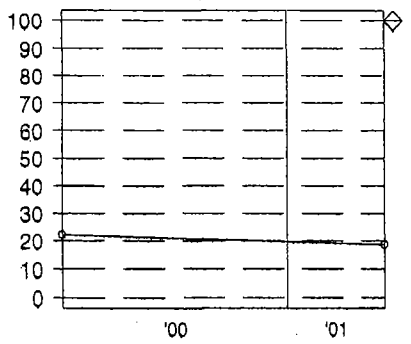
FORT MONMOUTH

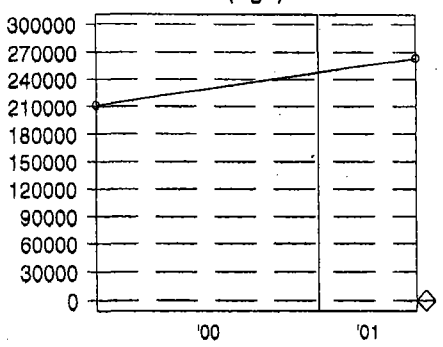
GW MONITORING
Bldg. 80

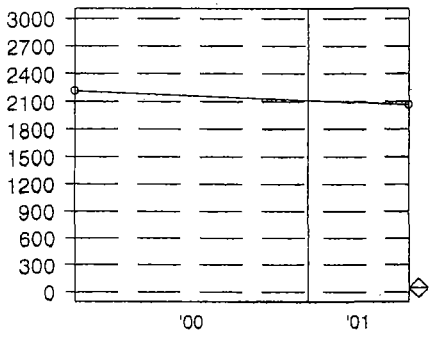
Source 4 of 5

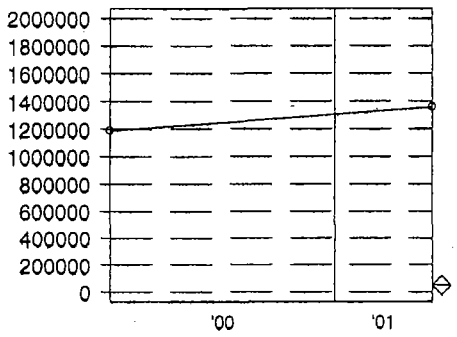
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

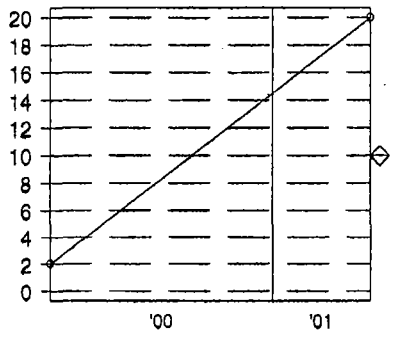


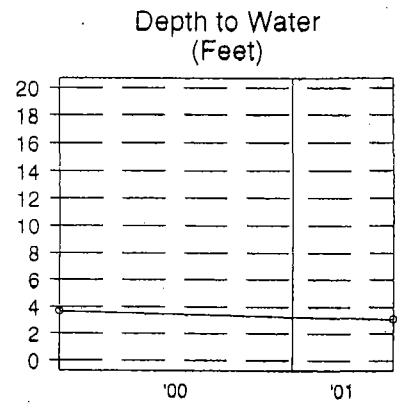












SOURCE: 0080MW04

Sampling Dates:
10/27/2000 - 01/24/2001

LEGEND:

PARAMETER

b = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 4 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-16-2001 x:\mtech46\fm\80\gw\80.wsf

	Lab	Cadmium	Chromium	Iron	Mang anese	Sodium	Depth to Water				Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	4	100	300	50	50000	-				-
10/27/2000	FMETL	ND	82.6	30100	673	2590000	3.58				V,S,P,M
01/24/2001	FMETL	11.1	22.1	10700	491	1810000	2.40				V,S,P,M

SOURCE: 0080MW05

Sampling Dates:
10/27/2000 - 01/24/2001

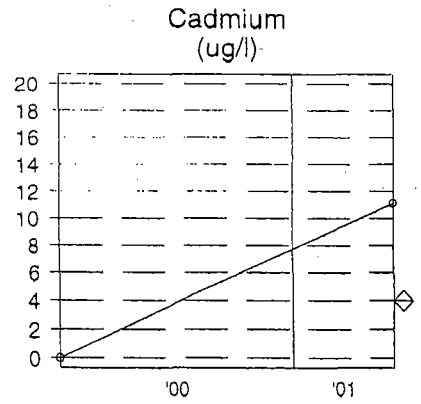
NOTES:

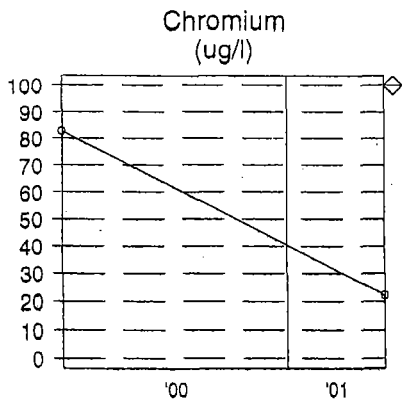
FORT MONMOUTH

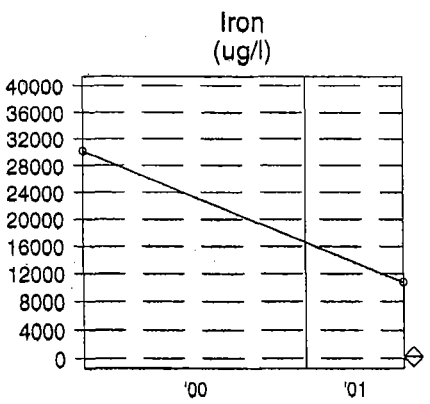
GW MONITORING
Bldg. 80

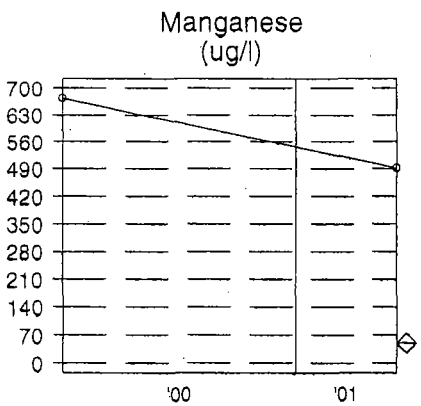
Source 5 of 5

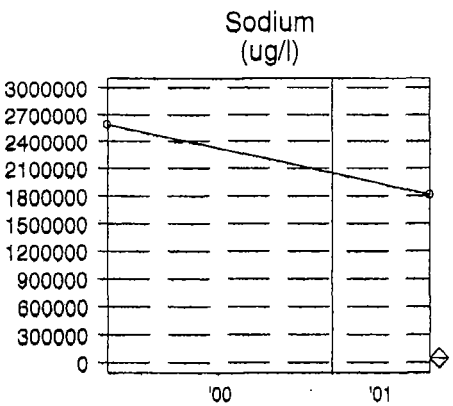
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

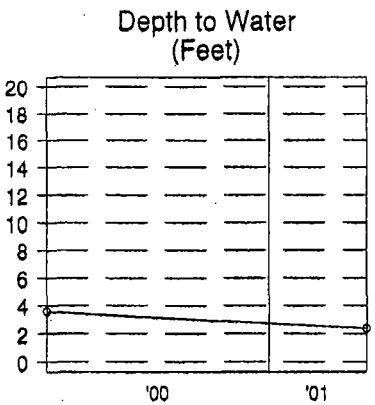












SOURCE: 0080MW05

Sampling Dates:
10/27/2000 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 80

Source 5 of 5, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-16-2001 x:\mtech46\fm\80\gw\80.wsf

	Lab	Acetone	2-Butanone	Chlorobenzene	Methylene Chloride	alpha-Chlordane	gamma-Chlordane	Cadmium	Chromium	Iron	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	700	300	4	2	0.5	0.5	4.0	100	300	-
04/16/1997	FMETL	ND	ND	ND	2.40	-	-	-	-	-	V,Pb
08/20/1997	FMETL	ND	ND	ND	ND	ND	ND	5.0	121	4750	V,S,P,M
11/24/1997	FMETL	ND	ND	ND	ND	ND	ND	1.6	3.0	31700	V,S,P,M
02/27/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	1.5	5976	V,S,P,M
06/02/1998	FMETL	ND	ND	ND	ND	ND	ND	1.4	ND	6776	V,S,P,M
08/24/1998	FMETL	13.03	3.19	ND	ND	0.052	0.05	4.35	9.58	11500	V,S,P,M
11/20/1998	FMETL	ND	ND	1.88	ND	ND	ND	2.31	9.49	13300	V,S,P,M
02/09/1999	FMETL	ND	ND	ND	ND	ND	ND	3.51	8.3	6510	V,S,P,M
05/26/1999	FMETL	ND	ND	ND	ND	ND	ND	3.04	9.16	9880	V,S,P,M
09/22/1999	FMETL	ND	ND	ND	ND	0.048	0.049	2.44	4.56	2310	V,S,P,M
12/17/1999	FMETL	ND	ND	1.28	ND	ND	ND	2.95	4.75	10300	V,S,P,M
03/06/2000	FMETL	ND	ND	1.68	ND	ND	ND	1.25	6.79	18300	V,S,P,M
03/06/2000D	FMETL	ND	ND	1.13	ND	ND	ND	2.14	6.46	22100	V,S,P,M
05/09/2000	FMETL	ND	ND	ND	ND	ND	ND	2.79	11.3	9300	V,S,P,M
08/16/2000	FMETL	ND	ND	ND	ND	ND	ND	1.21	3.11	6260	V,S,P,M
10/27/2000	FMETL	ND	ND	1.10	ND	ND	ND	4.58	23.7	20100	V,S,P,M
10/27/2000D	FMETL	ND	ND	1.15	ND	ND	ND	4.11	18.6	17900	V,S,P,M
01/24/2001	FMETL	ND	ND	ND	ND	0.028	0.024	4.15	7.28	9140	V,S,P,M
01/24/2001D	FMETL	ND	ND	ND	ND	0.024	0.024	2.57	7.08	7420	V,S,P,M

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 01/24/2001

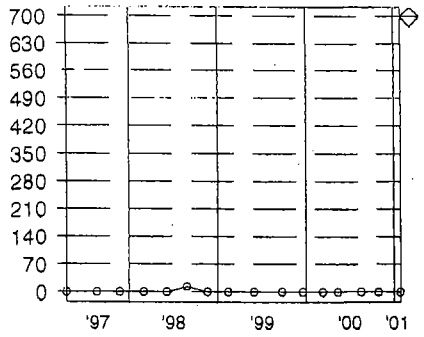
NOTES:

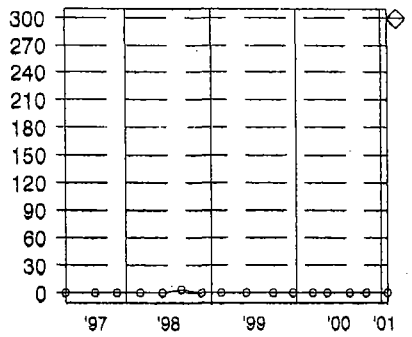
FORT MONMOUTH

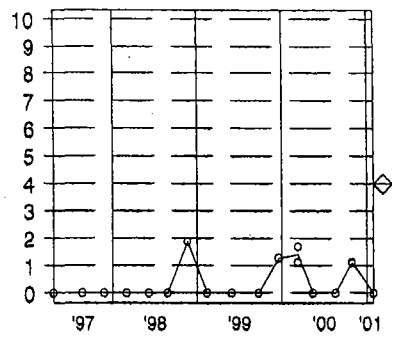
GW MONITORING
Bldg. 166

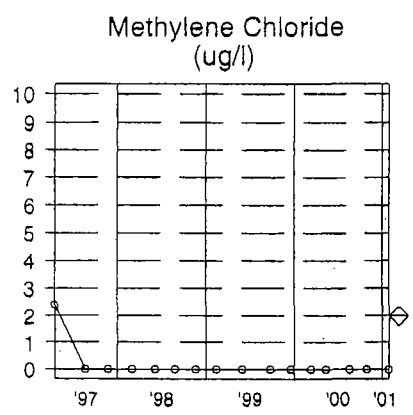
Source 1 of 1

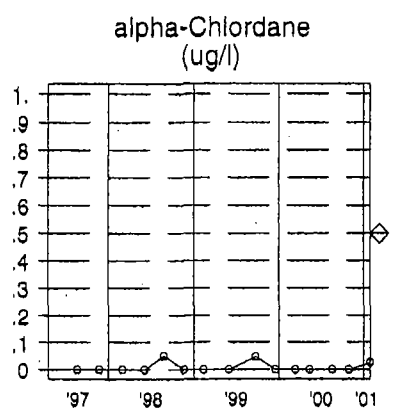
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

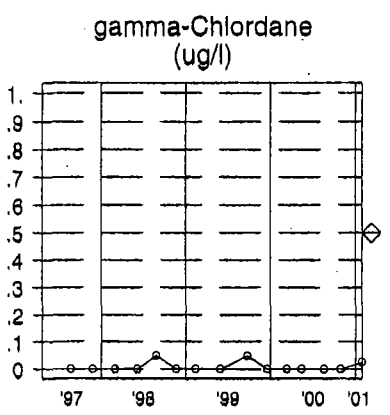


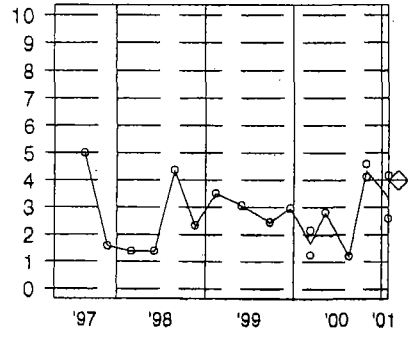


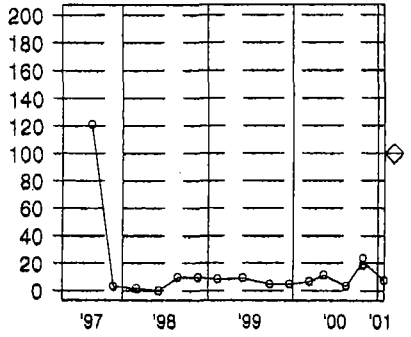


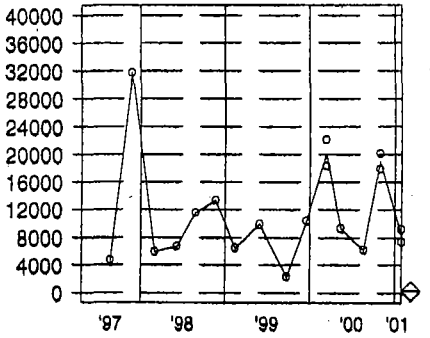












SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Mang anese	Silver	Sodium	Lead	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	50	20	50000	10	-					-
04/16/1997	FMETL	-	-	-	2.10	2.51					V,Pb
08/20/1997	FMETL	336	26	83750	1.6	3.20					V,S,P,M
11/24/1997	FMETL	287	ND	200200	15.0	2.25					V,S,P,M
02/27/1998	FMETL	246	ND	29310	ND	1.00					V,S,P,M
06/02/1998	FMETL	235	ND	27800	2.3	1.97					V,S,P,M
08/24/1998	FMETL	397	ND	58200	12.4	3.42					V,S,P,M
11/20/1998	FMETL	669	ND	114000	4.23	3.99					V,S,P,M
02/09/1999	FMETL	413	ND	108000	ND	2.73					V,S,P,M
05/26/1999	FMETL	368	ND	72900	11.4	2.90					V,S,P,M
09/22/1999	FMETL	214	ND	46500	7.95	2.71					V,S,P,M
12/17/1999	FMETL	377	ND	60300	ND	2.57					V,S,P,M
03/06/2000	FMETL	603	ND	66500	4.21	2.61					V,S,P,M
03/06/2000D	FMETL	582	ND	59900	2.93	2.61					V,S,P,M
05/09/2000	FMETL	239	ND	62300	17.3	2.31					V,S,P,M
08/16/2000	FMETL	204	ND	33600	5.12	1.54					V,S,P,M
10/27/2000	FMETL	587	ND	121000	16.4	2.95					V,S,P,M
10/27/2000D	FMETL	589	ND	83500	36.5	2.95					V,S,P,M
01/24/2001	FMETL	360	ND	154000	ND	1.99					V,S,P,M
01/24/2001D	FMETL	341	ND	148000	ND	1.99					V,S,P,M

SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 01/24/2001

NOTES:

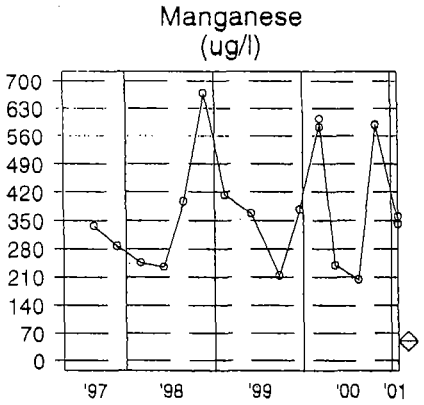
Page 2 of 2.

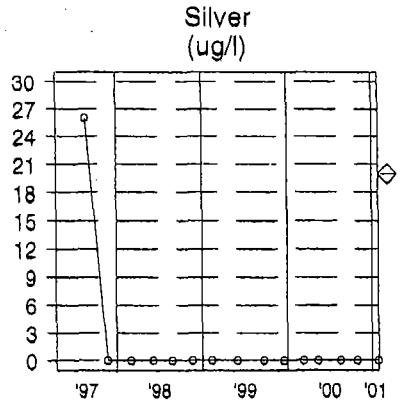
FORT MONMOUTH

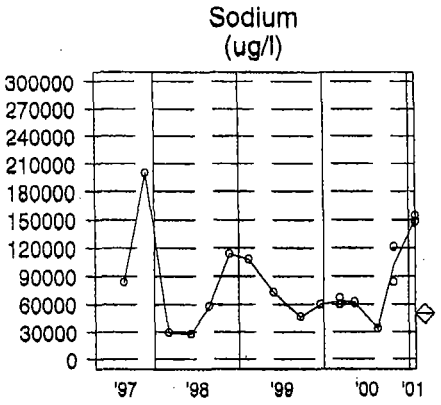
GW MONITORING
Bldg. 166

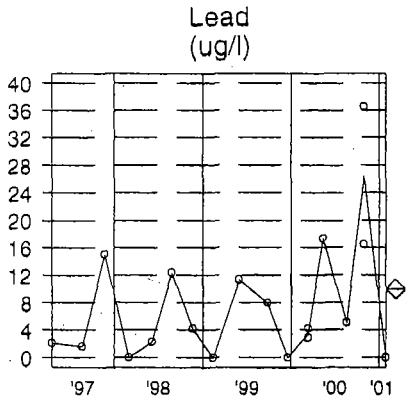
Source 1 of 1

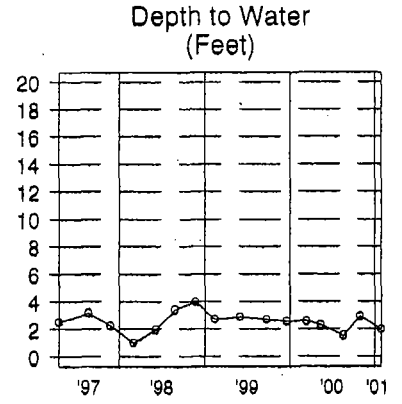
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0166MW01

Sampling Dates:
04/16/1997 - 01/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg. 166

Source 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-16-2001 x:\mtech46\fm\166\gw\166.wsf

Appendix G

Laboratory Data Sheets for Geoprobe® Soil and Groundwater Samples

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732) 532-6224 FAX: (732) 532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING
CERTIFICATIONS: NJDEP #13461, NYSDOH #11699



ANALYTICAL DATA REPORT
Fort Monmouth Environmental Laboratory
ENVIRONMENTAL DIVISION
Fort Monmouth, New Jersey
PROJECT: Bldg. 80/166

Bldg. 80/166

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
Trip Blank	5241.01	Methanol	13-Mar-00	03/13/00
Field Blank	5241.02	Aqueous	13-Mar-00 09:50	03/13/00
1-48"	5241.03	Soil	13-Mar-00 10:30	03/13/00
1-3-7'	5241.04	Aqueous	13-Mar-00 11:00	03/13/00
2-48"	5241.05	Soil	13-Mar-00 11:45	03/13/00
2-3-7'	5241.06	Aqueous	13-Mar-00 13:15	03/13/00
3-48"	5241.07	Soil	13-Mar-00 13:35	03/13/00
3-3-7'	5241.08	Aqueous	13-Mar-00 13:50	03/13/00
4-48"	5241.09	Soil	13-Mar-00 14:30	03/13/00
4-3-7'	5241.10	Aqueous	13-Mar-00 14:50	03/13/00
Trip Blank	5246.01	Methanol	14-Mar-00	03/14/00
Field Blank	5246.02	Aqueous	14-Mar-00 09:15	03/14/00
5-42"	5246.03	Soil	14-Mar-00 09:45	03/14/00
5-3-7'	5246.04	Aqueous	14-Mar-00 14:45	03/14/00
6-42"	5246.05	Soil	14-Mar-00 10:20	03/14/00
6-3-7'	5246.06	Aqueous	14-Mar-00 14:55	03/14/00
7-42"	5246.07	Soil	14-Mar-00 11:10	03/14/00
7-3-7'	5246.08	Aqueous	14-Mar-00 15:00	03/14/00
8-42"	5246.09	Soil	14-Mar-00 11:45	03/14/00
8-3-7'	5246.10	Aqueous	14-Mar-00 15:05	03/14/00
9-48"	5246.11	Soil	14-Mar-00 13:40	03/14/00
9-3-7'	5246.12	Aqueous	14-Mar-00 15:10	03/14/00
10-42"	5246.13	Soil	14-Mar-00 14:20	03/14/00
10-3-7'	5246.14	Aqueous	14-Mar-00 15:15	03/14/00
Trip Blank	5248.01	Methanol	15-Mar-00	03/15/00
Field Blank	5248.02	Aqueous	15-Mar-00 08:30	03/15/00
11-48"	5248.03	Soil	15-Mar-00 10:15	03/15/00
11-3-7'	5248.04	Aqueous	15-Mar-00 11:42	03/15/00
12-48"	5248.05	Soil	15-Mar-00 11:20	03/15/00
12-3-7'	5248.06	Aqueous	15-Mar-00 15:00	03/15/00
13-48"	5248.07	Soil	15-Mar-00 13:30	03/15/00

SAMPLE LOCATION AND IDENTIFICATION

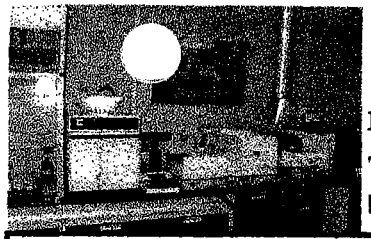
13-3-7'	5248.08	Aqueous	15-Mar-00 15:15	03/15/00
14-48"	5248.09	Soil	15-Mar-00 14:13	03/15/00
15-48"	5248.11	Soil	15-Mar-00 14:38	03/15/00
15-3-7'	5248.12	Aqueous	15-Mar-00 15:30	03/15/00
F.D.-48"	5248.13	Soil	15-Mar-00	03/15/00
14-3-7'	5256.01	Aqueous	17-Mar-00 10:50	03/17/00
F.D.-3-7'	5256.02	Aqueous	17-Mar-00	03/17/00

ANALYSIS:
FORT MONMOUTH ENVIRONMENTAL LAB
VOA+15, %SOLIDS



Daniel Wright/Date
Laboratory Director

CHAIN OF CUSTODY



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. FALCON
Phone #: X26823
(✓)DERA ( )OMA ( )Other:_____
Project No:
Location: 80/166
Samplers Name / Company: MARK LAURA - TVS- PWS 07

Analysis Parameters: VOA + IS; % SOLID; PID; FID

Comments: Cal. TVA 1000 O.K (M)

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA+IS	%SOLID	PID	FID	Remarks / Preservation Method
5241. 1	TRIP BLANK	3-13-00	—	METH	1	X				V00835 <4°C
2	Field BLANK	"	0950	AQ.	2	X				HCL
3	1 - 48"	"	1030	SOIL	2	X	X	60.02	40.07	V00836 <4°C
4	1 - 3-7'	"	1100	AQ.	2	X		—	—	HCL
5	2 - 48"	"	1145	SOIL	2	X	X	12.96	526	V00837 <4°C
6	2 - 3-7'	"	1315	AQ.	2	X		—	—	HCL
7	3 - 42"	"	1335	SOIL	2	X	X	433	548	V00838 <4°C
8	3 - 3-7'	"	~~1345~~ 1350	AQ.	2	X		—	—	HCL
9	4 - 48"	"	1430	SOIL	2	X	X	4.63	1100	V00839 <4°C
10	4 - 3-7'	"	1450	AQ.	2	X		—	—	HCL

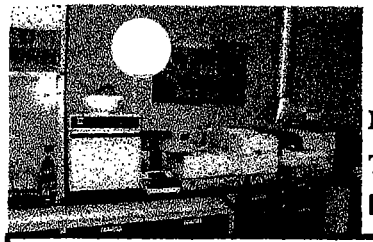
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	3-13-00 1500	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks:

print legibly

Coc.xls2/8/00



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: 26623
(✓)DERA ( )OMA ( )Other:_____

Project No:
Location: 50/166

Samplers Name / Company: Mark Lowra - TVS - PWS07

Analysis Parameters

Comments: Cal. TVA 1000 (see back)

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA + 15	% SOLID					PID	FID	Remarks / Preservation Method
524p. 1	TRIP BLANK	3-14-00	—	METH	1	X								V00840 <4°C
2	Field Blank	"	0915	AQ.	2	X								HCl
3	5 42"	"	0945	SOIL	"	X	X					1.99	3.89	V00841 <4°C
4	" 3-7'	"	1445	AQ.	"	X						—	—	HCl
5	6 42"	"	1020	SOIL	"	X	X					8.45	9.92	V00842 <4°C
6	" 3-7'	"	1455	AQ.	"	X						—	—	HCl
7	7 42"	"	1110	SOIL	"	X	X					3.29	3.14	V00850 <4°C
8	" 3-7'	"	1500	AQ	"	X						—	—	HCl
9	8 42"	"	1145	SOIL	"	X	X					26.25	65.83	V00881 <4°C
10	" 3-7'	"	1505	AQ.	"	X						—	—	HCl
11	9 48"	"	1340	SOIL	"	X	X					4.52	47.05	V00882 <4°C
12	" 3-7'	"	1510	AQ	"	X						—	—	HCl
13	10 42"	"	1420	SOIL	"	X	X							<4°C
14	" 3-7'	"	1515	AQ.	"	X								HCl

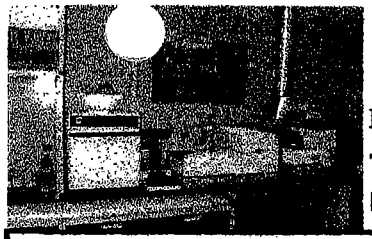
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	3-14-00 1530	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:

print legibly

Coc.xls2/8/00



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: 26623
(✓)DERA ( )OMA ( )Other:_____
Project No:
Location: 80/166
Samplers Name / Company: Mark Laura - TVS - PWS 07

Analysis Parameters: VOA + 15 | % Solid

Comments: Cal. TVA 1000 O.K. (MJ)

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	% Solid	Remarks / Preservation Method
5245. 1	Trip Blank	3-15-00	—	Meth	1	X		V00884 <4°C
2	Field Blank	"	0830	AQ.	2	X		HCL
3	11 48"	"	1015	soil	"	X	X	V00885 <4°C
4	" 3-7'	"	1142	AQ	"	X		HCL
5	12 48"	"	1120	Soil	"	X	X	V00886 <4°C
6	" 3-7'	"	1500	AQ	"	X		HCL
* 7	13 32"	"	1330	Soil	"	X	X	V00887 <4°C
8	" 3-7'	"	1515	AQ.	"	X		HCL
1 9	14 48"	"	1413	Soil	"	X	X	V00888 <4°C
~~10~~	~~" 3-7'~~	~~"~~	~~1510~~	~~AQ.~~	~~"~~	X		Cancelled HCL
11	15 48"	"	1438	soil	"	X	X	V00890 <4°C
12	" 3-7'	"	1530	AQ	"	X		HCL
13	Field Dup 48"	"	—	soil	"	X	X	V00889 <4°C
~~14~~	~~" 3-7'~~	~~"~~	~~—~~	~~AQ~~	~~"~~			~~Cancelled~~ HCL

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	3-15-00 1350	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks: * PEST. LIKE ODOR

Change of Chain of Custody

Lab Project ID#: 5248.14 Site/Project Name: _____

Date Received: 3/15/00 Date of Change: 3/16/00

Requested by: print P. Skelton Sign: _____

Turnaround Time: Normal

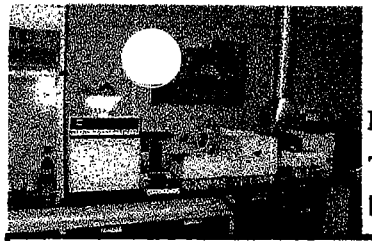
1. Were the correct containers and/or preservatives used for the tests indicated? Yes No
2. Was a sufficient amount of sample sent for the tests indicated? Yes No
3. Are samples Within Holding time for new analysis? Yes No
4. Was the change documented in the sample receipt log book? Yes No

Received by: print _____ Sign: _____

Sample ID#	New Analysis		Sample ID#	New Analysis
5248.14	Cancelled.			
# 10	Insufficient Volume			

Comments: _____

\\lcp-system\c\My Documents\Change of Chain of Custody.doc 09/14/98



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: 26623
(✓)DERA ( )OMA ( )Other:_____

Project No:
Location: 60/166

Samplers Name / Company: Mark Laura - TVS - PWS 07

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA + 15								Remarks / Preservation Method
5256 1	14 3-7'	3-17-00	1050	AQ.	2	2								HCl
2	F.D. 3-7'	"	—	"	"	"								"

Analysis Parameters

Comments:

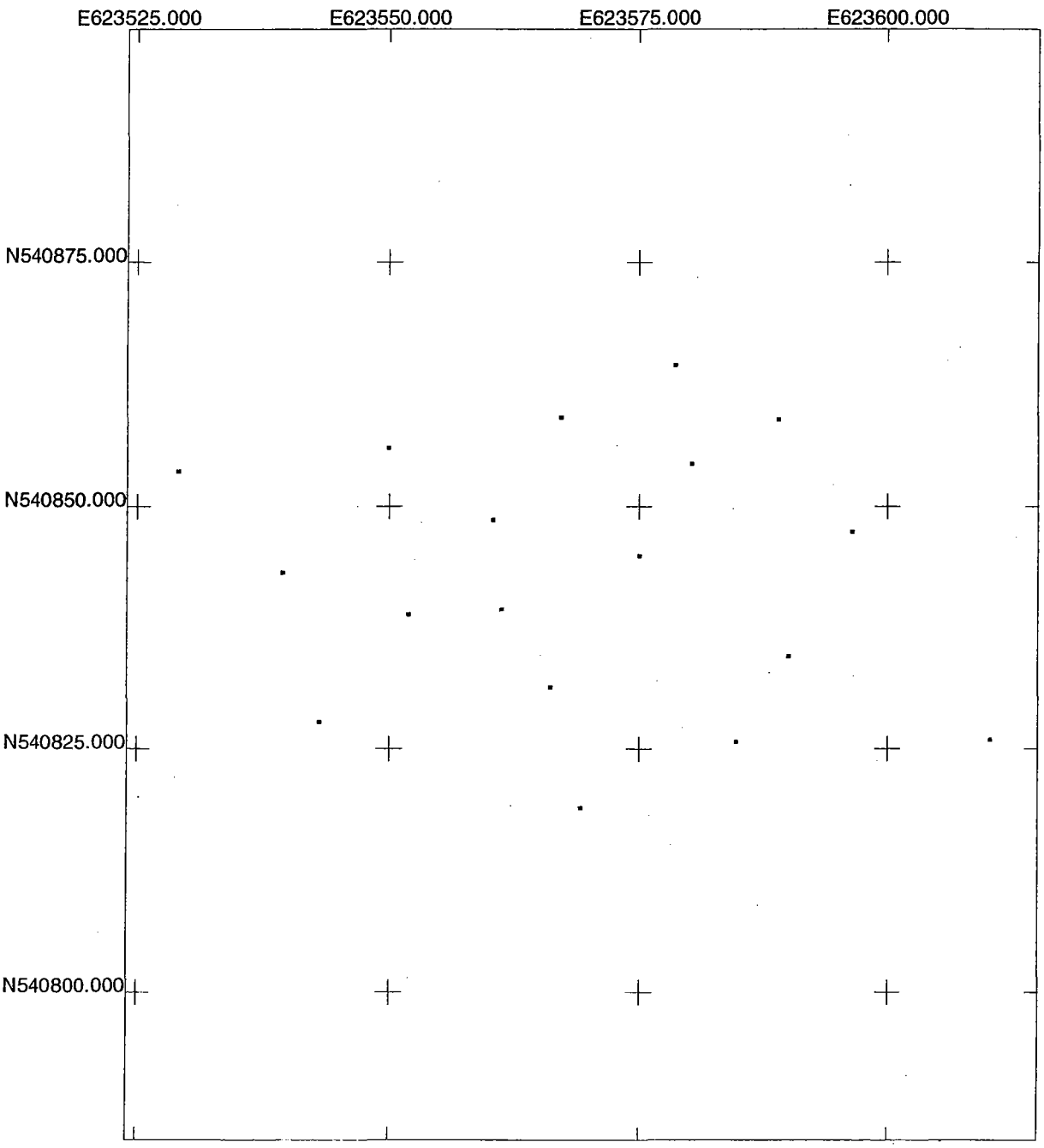
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
	3-17-00 1105				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: resample #14 w/ field dup. too much sediment

print legibly

Coc.xls2/18/00



80 / 166 Sample Point GPS Positions Map

US State Plane 1983
New Jersey (NY East) 2900
NAD 1983 (Conus)

N

Scale 1:200
0 25.00
US Survey Feet

r031619a.cor
04/20/2000
Pathfinder Office
Trimble

80 / 166 SAMPLE POINTS GPS POSITION & COORDINATES

US STATE PLANE 1983 NJ (NY EAST) 2900 NAD 1983 (CONUS)

(IN US SURVEY FEET)

SAMPLE POINTS

POSITION / DESC.	Y COORD. (NORTHING)	X COORD. (EASTING)
1	540848.707	623560.236
2	540838.936	623551.904
3	540831.408	623566.045
4	540844.994	623574.981
5	540856.12	623549.834
6	540843.287	623539.272
7	540827.862	623542.92
8	540818.966	623569.027
9	540859.244	623567.04
10	540854.479	623580.226
11	540864.59	623578.617
12	540859.024	623588.943
13	540847.507	623596.409
14	540834.598	623590.007
15	540825.805	623584.706

REFERENCE POINTS

POSITION / DESC.	Y COORD. (NORTHING)	X COORD. (EASTING)
STORM GRATE	540826.022	623610.37
STORM GRATE	540853.692	623528.932
80MW01	540839.485	623561.129

Field Duplicate Identification

Sample ID	Lab ID	Field Duplicate
14 48"	5248.09	5248.13
14 3-7'	5256.01	5256.02

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	: Method Detection Limit
J	: Compound Identified Below Detection Limit
B	: Compound is in Both Sample and Blank
D	: Results are from a Dilution of the Sample
U	: Compound Searched for but not Detected
E	: Compound Exceeds Calibration Limit

AQUEOUS

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006099.D**	Sample Name	**Vblk186**
Operator	**Skelton**	Field ID	**Vblk186**
Date Acquired	**15 Mar 2000 5:21 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 10:00 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk186**

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk186

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006099.D

Level: (low/med) LOW Date Received: 3/13/00

% Moisture: not dec. Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006250.D**	Sample Name	**Vblk192**
Operator	**Skelton**	Field ID	**Vblk192**
Date Acquired	**22 Mar 2000 7:56 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:20 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk192**

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk192

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006250.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/22/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006115.D**	Sample Name	**5241.02s**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**16 Mar 2000 3:55 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 10:00 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5241.02s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006115.D

Level: (low/med) LOW Date Received: 3/13/00

% Moisture: not dec. Date Analyzed: 3/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006258.D**	Sample Name	**5246.02s**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**23 Mar 2000 1:14 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.02s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006258.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006265.D**	Sample Name	**5248.02s**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**23 Mar 2000 5:52 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:35 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5248.02s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006265.D

Level: (low/med) LOW Date Received: 3/15/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000939-27-5	Naphthalene, 2-ethyl-	33.34	8	JN
2. 000090-12-0	Naphthalene, 1-methyl-	33.65	8	JN
3. 000581-42-0	Naphthalene, 2,6-dimethyl-	34.07	10	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006272.D**	Sample Name	**5256.02s**
Operator	**Skelton**	Field ID	**FD**
Date Acquired	**23 Mar 2000 11:26 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	175878	1.47 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **FD**

Lab Name: FMETL Project: 100004

NJDEP#: 13461 Case No.: 5256 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5256.02s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006272.D

Level: (low/med) LOW Date Received: 3/17/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 027133-93-3	2,3-Dihydro-1-methylindene	28.51	7	JN
2. 000873-49-4	Benzene, cyclopropyl-	33.97	11	JN
3. 000575-43-9	Naphthalene, 1,6-dimethyl-	34.09	7	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006116.D**	Sample Name	**5241.04s**
Operator	**Skelton**	Field ID	**1**
Date Acquired	**16 Mar 2000 4:34 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.14	66335	7.40 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 10:00 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 1

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5241.04s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006116.D

Level: (low/med) LOW Date Received: 3/13/00

% Moisture: not dec. Date Analyzed: 3/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000098-82-8	Benzene, (1-methylethyl)-	29.84	7	JN
2.	unknown	30.26	8	J
3. 000103-65-1	Benzene, propyl-	30.82	13	JN
4. 002847-72-5	Decane, 4-methyl-	31.08	7	JN
5. 000526-73-8	Benzene, 1,2,3-trimethyl-	32.13	8	JN
6.	unknown	32.36	12	J
7. 000135-98-8	Benzene, (1-methylpropyl)-	32.52	19	JN
8. 000526-73-8	Benzene, 1,2,3-trimethyl-	33.24	10	JN
9.	unknown	33.38	15	J
10. 000135-01-3	Benzene, 1,2-diethyl-	33.57	69	JN
11. 000135-01-3	Benzene, 1,2-diethyl-	33.77	43	JN
12.	unknown	33.86	8	J
13. 000496-11-7	Indane	33.97	86	JN
14. 000135-01-3	Benzene, 1,2-diethyl-	34.08	30	JN
15.	unknown	34.64	96	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006117.D**	Sample Name	**5241.06s**
Operator	**Skelton**	Field ID	**2**
Date Acquired	**16 Mar 2000 5:13 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether	12.11	350080	4.16 ug/L	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.27	122026	12.99 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene	18.82	152364	1.13 ug/L	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	474271	5.01 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 10:00 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 2

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5241.06s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006117.D

Level: (low/med) LOW Date Received: 3/13/00

% Moisture: not dec. Date Analyzed: 3/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 14

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000110-82-7	Cyclohexane	17.66	7	JN
2. 000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	27.04	40	JN
3. 000488-23-3	Benzene, 1,2,3,4-tetramethyl-	27.79	55	JN
4. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	28.53	92	JN
5. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	30.16	31	JN
6. 000645-59-0	Benzenepropanenitrile	30.83	16	JN
7. 056253-64-6	Benzene, (2-methyl-1-butenyl)-	31.49	11	JN
8. 017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	31.61	13	JN
9. 000091-20-3	Naphthalene	32.64	9	JN
10. 003877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2	33.02	10	JN
11. 000141-93-5	Benzene, 1,3-diethyl-	33.57	8	JN
12. 000496-11-7	Indane	33.97	15	JN
13. 006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	34.38	10	JN
14. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	34.64	12	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006118.D**	Sample Name	**5241.08s**
Operator	**Skelton**	Field ID	**3**
Date Acquired	**16 Mar 2000 5:53 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether	12.09	485579	5.89 ug/L	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene	18.82	921935	6.84 ug/L	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	189718	2.06 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene	27.67	439897	2.69 ug/L	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 3

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5241.08s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006118.D

Level: (low/med) LOW Date Received: 3/13/00

% Moisture: not dec. Date Analyzed: 3/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 004076-36-2	1H-Tetrazole, 5-methyl-	15.41	9	JN
2. 000110-82-7	Cyclohexane	17.66	15	JN
3. 000108-87-2	Cyclohexane, methyl-	20.68	11	JN
4. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	28.53	24	JN
5. 000098-82-8	Benzene, (1-methylethyl)-	29.84	21	JN
6. 000103-65-1	Benzene, propyl-	30.81	35	JN
7. 056253-64-6	Benzene, (2-methyl-1-butenyl)-	31.51	6	JN
8. 000135-98-8	Benzene, (1-methylpropyl)-	32.52	14	JN
9. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	33.38	7	JN
10. 000141-93-5	Benzene, 1,3-diethyl-	33.57	27	JN
11. 049826-53-1	Bicyclo[3.2.1]oct-2-ene, 3-methyl-	33.77	16	JN
12. 000496-11-7	Indane	33.97	100	JN
13. 000135-01-3	Benzene, 1,2-diethyl-	34.08	8	JN
14. 004175-53-5	1H-Indene, 2,3-dihydro-1,3-dimet	34.38	8	JN
15. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	34.64	43	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006119.D**	Sample Name	**5241.10s**
Operator	**Skelton**	Field ID	**4**
Date Acquired	**16 Mar 2000 6:32 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.16	85740	9.38 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 10:00 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 4

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5241.10s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006119.D

Level: (low/med) LOW Date Received: 3/13/00

% Moisture: not dec. Date Analyzed: 3/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 14

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 027133-93-3	2,3-Dihydro-1-methylindene	27.06	47	JN
2. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	27.81	46	JN
3. 027133-93-3	2,3-Dihydro-1-methylindene	28.54	110	JN
4. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	30.17	10	JN
5. 000103-65-1	Benzene, propyl-	30.82	20	JN
6.	unknown	31.50	12	J
7.	unknown	31.64	8	J
8. 003877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2	33.03	11	JN
9.	unknown	33.38	6	J
10. 000141-93-5	Benzene, 1,3-diethyl-	33.58	7	JN
11. 000264-09-5	Benzocycloheptatriene	33.67	43	JN
12. 000496-11-7	Indane	33.97	10	JN
13.	unknown	34.39	14	J
14. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	34.64	14	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006259.D**	Sample Name	**5246.04s**
Operator	**Skelton**	Field ID	**5**
Date Acquired	**23 Mar 2000 1:54 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.45	134317	1.77 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:20 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 5

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.04s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006259.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006260.D**	Sample Name	**5246.06s**
Operator	**Skelton**	Field ID	**6**
Date Acquired	**23 Mar 2000 2:34 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.18	87145	8.32 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.44	99869	1.32 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	472484	3.69 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 6

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.06s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006260.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000103-65-1	Benzene, propyl-	30.82	7	JN
2. 000135-01-3	Benzene, 1,2-diethyl-	33.58	7	JN
3. 000496-11-7	Indane	33.97	9	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006261.D**	Sample Name	**5246.08s**
Operator	**Skelton**	Field ID	**7**
Date Acquired	**23 Mar 2000 3:13 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.21	102837	9.81 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	514555	3.78 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:20 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 7

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.08s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006261.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	27.76	13	JN
2. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	28.50	16	JN
3. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	30.14	10	JN
4. 000645-59-0	Benzenepropanenitrile	30.83	8	JN
5. 000135-98-8	Benzene, (1-methylpropyl)-	32.53	6	JN
6. 000275-51-4	Azulene	32.62	9	JN
7. 000099-87-6	Benzene, 1-methyl-4-(1-methylet	33.38	6	JN
8. 000135-01-3	Benzene, 1,2-diethyl-	33.58	15	JN
9. 000496-11-7	Indane	33.97	13	JN
10. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	34.64	15	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006262.D**	Sample Name	**5246.10s**
Operator	**Skelton**	Field ID	**8**
Date Acquired	**23 Mar 2000 3:53 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.16	80900	7.95 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.44	133590	1.82 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:20 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 8

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.10s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006262.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 027133-93-3	2,3-Dihydro-1-methylindene	27.00	9	JN
2. 000488-23-3	Benzene, 1,2,3,4-tetramethyl-	27.77	18	JN
3. 027133-93-3	2,3-Dihydro-1-methylindene	28.50	14	JN
4. 000103-65-1	Benzene, propyl-	30.82	16	JN
5. 004175-53-5	1H-Indene, 2,3-dihydro-1,3-dimet	31.49	9	JN
6. 000141-93-5	Benzene, 1,3-diethyl-	33.58	10	JN
7. 000496-11-7	Indane	33.97	14	JN
8. 000135-01-3	Benzene, 1,2-diethyl-	34.09	9	JN
9. 006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	34.38	8	JN
10. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	34.64	12	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006263.D**	Sample Name	**5246.12s**
Operator	**Skelton**	Field ID	**9**
Date Acquired	**23 Mar 2000 4:33 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.17	167343	16.85 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.45	100661	1.41 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:20 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 9

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.12s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006263.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 6

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000767-58-8	Indan, 1-methyl-	27.01	10	JN
2. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	27.76	16	JN
3. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	28.50	28	JN
4. 000091-57-6	Naphthalene, 2-methyl-	31.65	7	JN
5. 000090-12-0	Naphthalene, 1-methyl-	33.64	37	JN
6. 006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	34.38	7	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006264.D**	Sample Name	**5246.14s**
Operator	**Skelton**	Field ID	**10**
Date Acquired	**23 Mar 2000 5:12 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.15	161053	16.37 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:21 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 10

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5246.14s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006264.D

Level: (low/med) LOW Date Received: 3/14/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000090-12-0	Naphthalene, 1-methyl-	31.68	24	JN
2. 000090-12-0	Naphthalene, 1-methyl-	33.64	30	JN
3. 000575-37-1	Naphthalene, 1,7-dimethyl-	34.07	16	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006266.D**	Sample Name	**5248.04s**
Operator	**Skelton**	Field ID	**11**
Date Acquired	**23 Mar 2000 6:32 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.15	129745	13.40 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:35 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 11

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5248.04s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006266.D

Level: (low/med) LOW Date Received: 3/15/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006267.D**	Sample Name	**5248.06s**
Operator	**Skelton**	Field ID	**12**
Date Acquired	**23 Mar 2000 7:12 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.16	54149	5.62 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	790692	6.54 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:35 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 12

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5248.06s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006267.D

Level: (low/med) LOW Date Received: 3/15/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006269.D**	Sample Name	**5248.08**
Operator	**Skelton**	Field ID	**13**
Date Acquired	**23 Mar 2000 9:27 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.26	365607	36.64 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide	11.39	385402	3.17 ug/L	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:35 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 13

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5248.08

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006269.D

Level: (low/med) LOW Date Received: 3/15/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	34.64	10	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006271.D**	Sample Name	**5256.01**
Operator	**Skelton**	Field ID	**14**
Date Acquired	**23 Mar 2000 10:46 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	177925	1.48 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/5/00 2:51 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 14

Lab Name: FMETL Project: 100004

NJDEP#: 13461 Case No.: 5256 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5256.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006271.D

Level: (low/med) LOW Date Received: 3/17/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000090-12-0	Naphthalene, 1-methyl-	31.70	10	JN
2. 000090-12-0	Naphthalene, 1-methyl-	33.65	16	JN
3. 000496-11-7	Indane	33.97	10	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006270.D**	Sample Name	**5248.12**
Operator	**Skelton**	Field ID	**15**
Date Acquired	**23 Mar 2000 10:07 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	326624	2.70 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

4/10/00 11:35 AM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. 15

Lab Name: FMETL Project: UST

NJDEP#: 13461 Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5248.12

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006270.D

Level: (low/med) LOW Date Received: 3/15/00

% Moisture: not dec. Date Analyzed: 3/23/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000488-23-3	Benzene, 1,2,3,4-tetramethyl-	27.79	10	JN
2. 027133-93-3	2,3-Dihydro-1-methylindene	28.52	10	JN
3. 000091-20-3	Naphthalene	32.64	13	JN

SOILS

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk185

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk185

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006069.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk185

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk185

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006069.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk185**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk185

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006069.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk232

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk232

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VA007437.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk232

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk232

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VA007437.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk232**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk232

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VA007437.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk189

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk189

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006183.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk189

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk189

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006183.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk189**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk189

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006183.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk190

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk190

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006201.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk190

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk190

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006201.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk190**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk190

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006201.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006075.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	1300	
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006075.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006075.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 0 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: **Trip Blank**

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006191.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006191.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006191.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006202.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006202.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006202.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 0 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Dup

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.13

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006208.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 24 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2300	U
107131	Acrylonitrile	2300	U
75650	tert-Butyl alcohol	4300	U
1634044	Methyl-tert-Butyl ether	980	U
108203	Di-isopropyl ether	660	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	330	U
75-01-4	Vinyl Chloride	980	U
74-83-9	Bromomethane	660	U
75-00-3	Chloroethane	980	U
75-69-4	Trichlorofluoromethane	660	U
75-35-4	1,1-Dichloroethene	330	U
67-64-1	Acetone	660	U
75-15-0	Carbon Disulfide	330	U
75-09-2	Methylene Chloride	660	U
156-60-5	trans-1,2-Dichloroethene	660	U
75-35-3	1,1-Dichloroethane	330	U
108-05-4	Vinyl Acetate	980	U
78-93-3	2-Butanone	980	U
	cis-1,2-Dichloroethene	330	U
67-66-3	Chloroform	330	U
75-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	660	U
71-43-2	Benzene	330	U
107-06-2	1,2-Dichloroethane	660	U
79-01-6	Trichloroethene	330	U
78-87-5	1,2-Dichloropropane	330	U
75-27-4	Bromodichloromethane	330	U
110-75-8	2-Chloroethyl vinyl ether	660	U
10061-01-5	cis-1,3-Dichloropropene	330	U
108-10-1	4-Methyl-2-Pentanone	660	U
108-88-3	Toluene	330	U
10061-02-6	trans-1,3-Dichloropropene	660	U
79-00-5	1,1,2-Trichloroethane	660	U
127-18-4	Tetrachloroethene	330	U
591-78-6	2-Hexanone	660	U
126-48-1	Dibromochloromethane	660	U
108-90-7	Chlorobenzene	330	U
100-41-4	Ethylbenzene	660	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Dup

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.13

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006208.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 24 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	980	U
1330-20-7	o-Xylene	660	U
100-42-5	Styrene	660	U
75-25-2	Bromoform	660	U
79-34-5	1,1,2,2-Tetrachloroethane	660	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Dup**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.13

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006208.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 24 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.03

Sample wt/vol: 10.2 (g/ml) G Lab File ID: VB006076.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 16.1 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2000	U
107131	Acrylonitrile	2000	U
75650	tert-Butyl alcohol	3800	U
1634044	Methyl-tert-Butyl ether	880	U
108203	Di-isopropyl ether	580	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	290	U
75-01-4	Vinyl Chloride	880	U
74-83-9	Bromomethane	580	U
75-00-3	Chloroethane	880	U
75-69-4	Trichlorofluoromethane	580	U
75-35-4	1,1-Dichloroethene	290	U
67-64-1	Acetone	580	U
75-15-0	Carbon Disulfide	290	U
75-09-2	Methylene Chloride	580	U
156-60-5	trans-1,2-Dichloroethene	580	U
75-35-3	1,1-Dichloroethane	290	U
108-05-4	Vinyl Acetate	880	U
78-93-3	2-Butanone	1300	
	cis-1,2-Dichloroethene	290	U
67-66-3	Chloroform	290	U
75-55-6	1,1,1-Trichloroethane	290	U
56-23-5	Carbon Tetrachloride	580	U
71-43-2	Benzene	290	U
107-06-2	1,2-Dichloroethane	580	U
79-01-6	Trichloroethene	290	U
78-87-5	1,2-Dichloropropane	290	U
75-27-4	Bromodichloromethane	290	U
110-75-8	2-Chloroethyl vinyl ether	580	U
10061-01-5	cis-1,3-Dichloropropene	290	U
108-10-1	4-Methyl-2-Pentanone	580	U
108-88-3	Toluene	290	U
10061-02-6	trans-1,3-Dichloropropene	580	U
79-00-5	1,1,2-Trichloroethane	580	U
127-18-4	Tetrachloroethene	290	U
591-78-6	2-Hexanone	580	U
126-48-1	Dibromochloromethane	580	U
108-90-7	Chlorobenzene	290	U
100-41-4	Ethylbenzene	580	U

1A

FIELD ID: 1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.03

Sample wt/vol: 10.2 (g/ml) G Lab File ID: VB006076.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 16.1 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	880	U
1330-20-7	o-Xylene	580	U
100-42-5	Styrene	580	U
75-25-2	Bromoform	580	U
79-34-5	1,1,2,2-Tetrachloroethane	580	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 1

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.03

Sample wt/vol: 10.2 (g/ml) G Lab File ID: VB006076.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 16.1 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 002216-33-3	Octane, 3-methyl-	26.15	2600	JN
2. 015869-94-0	Octane, 3,6-dimethyl-	28.30	2900	JN
3. 005911-04-6	Nonane, 3-methyl-	29.60	3100	JN
4. 006783-92-2	Cyclohexane, 1,1,2,3-tetramethyl-	30.27	2700	JN
5.	unknown	30.84	3700	J
6. 002847-72-5	Decane, 4-methyl-	31.09	3900	JN
7. 000611-14-3	Benzene, 1-ethyl-2-methyl-	32.13	4500	JN
8.	unknown	32.28	2600	J
9. 001678-93-9	Cyclohexane, butyl-	32.37	4100	JN
10. 013151-34-3	Decane, 3-methyl-	32.53	3900	JN
11. 000095-36-3	1,2,4-Trimethylbenzene	33.24	4000	JN
12.	unknown	33.86	2600	J
13.	unknown	33.97	3700	J
14.	unknown	34.06	3900	J
15.	unknown	34.64	2900	J

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

2

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.05

Sample wt/vol: 9.0 (g/ml) G Lab File ID: VA007441.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 17.42 Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2400	U
107131	Acrylonitrile	2400	U
75650	tert-Butyl alcohol	4400	U
1634044	Methyl-tert-Butyl ether	1000	U
108203	Di-isopropyl ether	670	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	340	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	670	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	670	U
75-35-4	1,1-Dichloroethene	340	U
67-64-1	Acetone	670	U
75-15-0	Carbon Disulfide	340	U
75-09-2	Methylene Chloride	670	U
156-60-5	trans-1,2-Dichloroethene	670	U
75-35-3	1,1-Dichloroethane	340	U
108-05-4	Vinyl Acetate	1000	U
78-93-3	2-Butanone	1000	U
	cis-1,2-Dichloroethene	340	U
67-66-3	Chloroform	340	U
75-55-6	1,1,1-Trichloroethane	340	U
56-23-5	Carbon Tetrachloride	670	U
71-43-2	Benzene	340	U
107-06-2	1,2-Dichloroethane	670	U
79-01-6	Trichloroethene	340	U
78-87-5	1,2-Dichloropropane	340	U
75-27-4	Bromodichloromethane	340	U
110-75-8	2-Chloroethyl vinyl ether	670	U
10061-01-5	cis-1,3-Dichloropropene	340	U
108-10-1	4-Methyl-2-Pentanone	670	U
108-88-3	Toluene	340	U
10061-02-6	trans-1,3-Dichloropropene	670	U
79-00-5	1,1,2-Trichloroethane	670	U
127-18-4	Tetrachloroethene	340	U
591-78-6	2-Hexanone	670	U
126-48-1	Dibromochloromethane	670	U
108-90-7	Chlorobenzene	340	U
100-41-4	Ethylbenzene	670	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

2

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.05

Sample wt/vol: 9.0 (g/ml) G Lab File ID: VA007441.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 17.42 Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	1000	U
1330-20-7	o-Xylene	670	U
100-42-5	Styrene	670	U
75-25-2	Bromoform	670	U
79-34-5	1,1,2,2-Tetrachloroethane	670	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 2

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.05

Sample wt/vol: 9.0 (g/ml) G Lab File ID: VA007441.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 17.42 Date Analyzed: 3/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.07s

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006077.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 24.44 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2300	U
107131	Acrylonitrile	2300	U
75650	tert-Butyl alcohol	4300	U
1634044	Methyl-tert-Butyl ether	980	U
108203	Di-isopropyl ether	660	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	330	U
75-01-4	Vinyl Chloride	980	U
74-83-9	Bromomethane	660	U
75-00-3	Chloroethane	980	U
75-69-4	Trichlorofluoromethane	660	U
75-35-4	1,1-Dichloroethene	330	U
67-64-1	Acetone	660	U
75-15-0	Carbon Disulfide	330	U
75-09-2	Methylene Chloride	660	U
156-60-5	trans-1,2-Dichloroethene	660	U
75-35-3	1,1-Dichloroethane	330	U
108-05-4	Vinyl Acetate	980	U
78-93-3	2-Butanone	980	U
	cis-1,2-Dichloroethene	330	U
67-66-3	Chloroform	330	U
75-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	660	U
71-43-2	Benzene	330	U
107-06-2	1,2-Dichloroethane	660	U
79-01-6	Trichloroethene	330	U
78-87-5	1,2-Dichloropropane	330	U
75-27-4	Bromodichloromethane	330	U
110-75-8	2-Chloroethyl vinyl ether	660	U
10061-01-5	cis-1,3-Dichloropropene	330	U
108-10-1	4-Methyl-2-Pentanone	660	U
108-88-3	Toluene	330	U
10061-02-6	trans-1,3-Dichloropropene	660	U
79-00-5	1,1,2-Trichloroethane	660	U
127-18-4	Tetrachloroethene	330	U
591-78-6	2-Hexanone	660	U
126-48-1	Dibromochloromethane	660	U
108-90-7	Chlorobenzene	330	U
100-41-4	Ethylbenzene	660	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

3

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.07s

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006077.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 24.44 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	980	U
1330-20-7	o-Xylene	660	U
100-42-5	Styrene	660	U
75-25-2	Bromoform	660	U
79-34-5	1,1,2,2-Tetrachloroethane	660	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 3

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.07s

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006077.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 24.44 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000591-21-9	Cyclohexane, 1,3-dimethyl-	23.06	17000	JN
2. 001678-91-7	Cyclohexane, ethyl-	25.66	19000	JN
3. 002216-34-4	Octane, 4-methyl-	25.82	29000	JN
4. 002216-33-3	Octane, 3-methyl-	26.15	30000	JN
5. 001678-92-8	Cyclohexane, propyl-	29.20	57000	JN
6.	unknown	30.27	21000	J
7.	unknown	30.65	17000	J
8.	unknown	30.83	31000	J
9. 001678-93-9	Cyclohexane, butyl-	32.37	28000	JN
10. 000135-98-8	Benzene, (1-methylpropyl)-	32.53	16000	JN
11. 000141-93-5	Benzene, 1,3-diethyl-	33.58	28000	JN
12.	unknown	33.77	24000	J
13.	unknown	33.87	34000	J
14.	unknown	33.97	29000	J
15. 000135-01-3	Benzene, 1,2-diethyl-	34.07	16000	JN

1A

FIELD ID: 4

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.09s

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006078.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 12.91 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2000	U
107131	Acrylonitrile	2000	U
75650	tert-Butyl alcohol	3700	U
1634044	Methyl-tert-Butyl ether	860	U
108203	Di-isopropyl ether	570	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	290	U
75-01-4	Vinyl Chloride	860	U
74-83-9	Bromomethane	570	U
75-00-3	Chloroethane	860	U
75-69-4	Trichlorofluoromethane	570	U
75-35-4	1,1-Dichloroethene	290	U
67-64-1	Acetone	570	U
75-15-0	Carbon Disulfide	290	U
75-09-2	Methylene Chloride	570	U
156-60-5	trans-1,2-Dichloroethene	570	U
75-35-3	1,1-Dichloroethane	290	U
108-05-4	Vinyl Acetate	860	U
78-93-3	2-Butanone	860	U
	cis-1,2-Dichloroethene	290	U
67-66-3	Chloroform	290	U
75-55-6	1,1,1-Trichloroethane	290	U
56-23-5	Carbon Tetrachloride	570	U
71-43-2	Benzene	290	U
107-06-2	1,2-Dichloroethane	570	U
79-01-6	Trichloroethene	290	U
78-87-5	1,2-Dichloropropane	290	U
75-27-4	Bromodichloromethane	290	U
110-75-8	2-Chloroethyl vinyl ether	570	U
10061-01-5	cis-1,3-Dichloropropene	290	U
108-10-1	4-Methyl-2-Pentanone	570	U
108-88-3	Toluene	290	U
10061-02-6	trans-1,3-Dichloropropene	570	U
79-00-5	1,1,2-Trichloroethane	570	U
127-18-4	Tetrachloroethene	290	U
591-78-6	2-Hexanone	570	U
126-48-1	Dibromochloromethane	570	U
108-90-7	Chlorobenzene	290	U
100-41-4	Ethylbenzene	570	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

4

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.09s

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006078.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 12.91 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	860	U
1330-20-7	o-Xylene	570	U
100-42-5	Styrene	570	U
75-25-2	Bromoform	570	U
79-34-5	1,1,2,2-Tetrachloroethane	570	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 4

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5241 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5241.09s

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006078.D

Level: (low/med) MED Date Received: 3/13/00

% Moisture: not dec. 12.91 Date Analyzed: 3/14/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	27.76	32000	JN
2. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	28.50	74000	JN
3. 000769-25-5	Benzene, 2-ethenyl-1,3,5-trimethy	30.12	7800	JN
4. 001559-81-5	Naphthalene, 1,2,3,4-tetrahydro-1	30.84	23000	JN
5.	unknown	31.49	22000	J
6.	unknown	32.32	11000	J
7.	unknown	33.02	26000	J
8.	unknown	33.51	7000	J
9.	unknown	33.65	32000	J
10.	unknown	34.38	20000	J

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

5

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.03

Sample wt/vol: 9.5 (g/ml) G Lab File ID: VB006192.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 14.44 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2100	U
107131	Acrylonitrile	2100	U
75650	tert-Butyl alcohol	4000	U
1634044	Methyl-tert-Butyl ether	920	U
108203	Di-isopropyl ether	610	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	920	U
74-83-9	Bromomethane	610	U
75-00-3	Chloroethane	920	U
75-69-4	Trichlorofluoromethane	610	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	610	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	610	U
156-60-5	trans-1,2-Dichloroethene	610	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	920	U
78-93-3	2-Butanone	1700	
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	310	U
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	610	U
71-43-2	Benzene	310	U
107-06-2	1,2-Dichloroethane	610	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	610	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	610	U
108-88-3	Toluene	310	U
10061-02-6	trans-1,3-Dichloropropene	610	U
79-00-5	1,1,2-Trichloroethane	610	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	610	U
126-48-1	Dibromochloromethane	610	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	610	U

1A

FIELD ID: 5

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.03

Sample wt/vol: 9.5 (g/ml) G Lab File ID: VB006192.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 14.44 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	920	U
1330-20-7	o-Xylene	610	U
100-42-5	Styrene	610	U
75-25-2	Bromoform	610	U
79-34-5	1,1,2,2-Tetrachloroethane	610	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 5

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.03

Sample wt/vol: 9.5 (g/ml) G Lab File ID: VB006192.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 14.44 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 6

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.05

Sample wt/vol: 9.8 (g/ml) G Lab File ID: VB006193.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 15.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2100	U
107131	Acrylonitrile	2100	U
75650	tert-Butyl alcohol	3900	U
1634044	Methyl-tert-Butyl ether	910	U
108203	Di-isopropyl ether	600	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	300	U
75-01-4	Vinyl Chloride	910	U
74-83-9	Bromomethane	600	U
75-00-3	Chloroethane	910	U
75-69-4	Trichlorofluoromethane	600	U
75-35-4	1,1-Dichloroethene	300	U
67-64-1	Acetone	600	U
75-15-0	Carbon Disulfide	300	U
75-09-2	Methylene Chloride	600	U
156-60-5	trans-1,2-Dichloroethene	600	U
75-35-3	1,1-Dichloroethane	300	U
108-05-4	Vinyl Acetate	910	U
78-93-3	2-Butanone	1600	
	cis-1,2-Dichloroethene	300	U
67-66-3	Chloroform	300	U
75-55-6	1,1,1-Trichloroethane	300	U
56-23-5	Carbon Tetrachloride	600	U
71-43-2	Benzene	300	U
107-06-2	1,2-Dichloroethane	600	U
79-01-6	Trichloroethene	300	U
78-87-5	1,2-Dichloropropane	300	U
75-27-4	Bromodichloromethane	300	U
110-75-8	2-Chloroethyl vinyl ether	600	U
10061-01-5	cis-1,3-Dichloropropene	300	U
108-10-1	4-Methyl-2-Pentanone	600	U
108-88-3	Toluene	300	U
10061-02-6	trans-1,3-Dichloropropene	600	U
79-00-5	1,1,2-Trichloroethane	600	U
127-18-4	Tetrachloroethene	300	U
591-78-6	2-Hexanone	600	U
126-48-1	Dibromochloromethane	600	U
108-90-7	Chlorobenzene	300	U
100-41-4	Ethylbenzene	600	U

1A

FIELD ID: 6

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.05

Sample wt/vol: 9.8 (g/ml) G Lab File ID: VB006193.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 15.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	910	U
1330-20-7	o-Xylene	600	U
100-42-5	Styrene	600	U
75-25-2	Bromoform	600	U
79-34-5	1,1,2,2-Tetrachloroethane	600	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 6

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.05

Sample wt/vol: 9.8 (g/ml) G Lab File ID: VB006193.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 15.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 7

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.07

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB006194.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 7.9 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3400	U
1634044	Methyl-tert-Butyl ether	790	U
108203	Di-isopropyl ether	530	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	260	U
75-01-4	Vinyl Chloride	790	U
74-83-9	Bromomethane	530	U
75-00-3	Chloroethane	790	U
75-69-4	Trichlorofluoromethane	530	U
75-35-4	1,1-Dichloroethene	260	U
67-64-1	Acetone	530	U
75-15-0	Carbon Disulfide	260	U
75-09-2	Methylene Chloride	530	U
156-60-5	trans-1,2-Dichloroethene	530	U
75-35-3	1,1-Dichloroethane	260	U
108-05-4	Vinyl Acetate	790	U
78-93-3	2-Butanone	1500	
	cis-1,2-Dichloroethene	260	U
67-66-3	Chloroform	260	U
75-55-6	1,1,1-Trichloroethane	260	U
56-23-5	Carbon Tetrachloride	530	U
71-43-2	Benzene	260	U
107-06-2	1,2-Dichloroethane	530	U
79-01-6	Trichloroethene	260	U
78-87-5	1,2-Dichloropropane	260	U
75-27-4	Bromodichloromethane	260	U
110-75-8	2-Chloroethyl vinyl ether	530	U
10061-01-5	cis-1,3-Dichloropropene	260	U
108-10-1	4-Methyl-2-Pentanone	530	U
108-88-3	Toluene	260	U
10061-02-6	trans-1,3-Dichloropropene	530	U
79-00-5	1,1,2-Trichloroethane	530	U
127-18-4	Tetrachloroethene	260	U
591-78-6	2-Hexanone	530	U
126-48-1	Dibromochloromethane	530	U
108-90-7	Chlorobenzene	260	U
100-41-4	Ethylbenzene	530	U

1A

FIELD ID: 7

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.07

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB006194.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 7.9 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	790	U
1330-20-7	o-Xylene	530	U
100-42-5	Styrene	530	U
75-25-2	Bromoform	530	U
79-34-5	1,1,2,2-Tetrachloroethane	530	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 7

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.07

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB006194.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 7.9 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 8

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.09

Sample wt/vol: 9.0 (g/ml) G Lab File ID: VB006195.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 17.53 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2400	U
107131	Acrylonitrile	2400	U
75650	tert-Butyl alcohol	4400	U
1634044	Methyl-tert-Butyl ether	1000	U
108203	Di-isopropyl ether	680	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	340	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	680	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	680	U
75-35-4	1,1-Dichloroethene	340	U
67-64-1	Acetone	680	U
75-15-0	Carbon Disulfide	340	U
75-09-2	Methylene Chloride	680	U
156-60-5	trans-1,2-Dichloroethene	680	U
75-35-3	1,1-Dichloroethane	340	U
108-05-4	Vinyl Acetate	1000	U
78-93-3	2-Butanone	1000	U
	cis-1,2-Dichloroethene	340	U
67-66-3	Chloroform	340	U
75-55-6	1,1,1-Trichloroethane	340	U
56-23-5	Carbon Tetrachloride	680	U
71-43-2	Benzene	340	U
107-06-2	1,2-Dichloroethane	680	U
79-01-6	Trichloroethene	340	U
78-87-5	1,2-Dichloropropane	340	U
75-27-4	Bromodichloromethane	340	U
110-75-8	2-Chloroethyl vinyl ether	680	U
10061-01-5	cis-1,3-Dichloropropene	340	U
108-10-1	4-Methyl-2-Pentanone	680	U
108-88-3	Toluene	340	U
10061-02-6	trans-1,3-Dichloropropene	680	U
79-00-5	1,1,2-Trichloroethane	680	U
127-18-4	Tetrachloroethene	340	U
591-78-6	2-Hexanone	680	U
126-48-1	Dibromochloromethane	680	U
108-90-7	Chlorobenzene	340	U
100-41-4	Ethylbenzene	680	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

8

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.09

Sample wt/vol: 9.0 (g/ml) G Lab File ID: VB006195.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 17.53 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	1000	U
1330-20-7	o-Xylene	680	U
100-42-5	Styrene	680	U
75-25-2	Bromoform	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 8

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.09

Sample wt/vol: 9.0 (g/ml) G Lab File ID: VB006195.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 17.53 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 002216-34-4	Octane, 4-methyl-	25.82	4100	JN
2. 002216-33-3	Octane, 3-methyl-	26.15	4800	JN
3. 015869-94-0	Octane, 3,6-dimethyl-	28.30	4000	JN
4.	unknown	28.72	2800	J
5.	unknown	29.13	2800	J
6.	unknown	30.27	3500	J
7.	unknown	30.73	2800	J
8.	unknown	30.83	4800	J
9. 002847-72-5	Decane, 4-methyl-	31.09	4300	JN
10. 001678-93-9	Cyclohexane, butyl-	32.36	5200	JN
11.	unknown	33.48	3000	J
12.	unknown	33.86	3100	J
13.	unknown	33.97	4600	J
14.	unknown	34.06	4800	J
15. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	34.64	3600	JN

1A

FIELD ID: 9

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.11

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006196.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 14.46 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2000	U
107131	Acrylonitrile	2000	U
75650	tert-Butyl alcohol	3800	U
1634044	Methyl-tert-Butyl ether	870	U
108203	Di-isopropyl ether	580	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	290	U
75-01-4	Vinyl Chloride	870	U
74-83-9	Bromomethane	580	U
75-00-3	Chloroethane	870	U
75-69-4	Trichlorofluoromethane	580	U
75-35-4	1,1-Dichloroethene	290	U
67-64-1	Acetone	580	U
75-15-0	Carbon Disulfide	290	U
75-09-2	Methylene Chloride	580	U
156-60-5	trans-1,2-Dichloroethene	580	U
75-35-3	1,1-Dichloroethane	290	U
108-05-4	Vinyl Acetate	870	U
78-93-3	2-Butanone	870	U
	cis-1,2-Dichloroethene	290	U
67-66-3	Chloroform	290	U
75-55-6	1,1,1-Trichloroethane	290	U
56-23-5	Carbon Tetrachloride	580	U
71-43-2	Benzene	290	U
107-06-2	1,2-Dichloroethane	580	U
79-01-6	Trichloroethene	290	U
78-87-5	1,2-Dichloropropane	290	U
75-27-4	Bromodichloromethane	290	U
110-75-8	2-Chloroethyl vinyl ether	580	U
10061-01-5	cis-1,3-Dichloropropene	290	U
108-10-1	4-Methyl-2-Pentanone	580	U
108-88-3	Toluene	290	U
10061-02-6	trans-1,3-Dichloropropene	580	U
79-00-5	1,1,2-Trichloroethane	580	U
127-18-4	Tetrachloroethene	290	U
591-78-6	2-Hexanone	580	U
126-48-1	Dibromochloromethane	580	U
108-90-7	Chlorobenzene	290	U
100-41-4	Ethylbenzene	580	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

9

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.11

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006196.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 14.46 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	870	U
1330-20-7	o-Xylene	580	U
100-42-5	Styrene	580	U
75-25-2	Bromoform	580	U
79-34-5	1,1,2,2-Tetrachloroethane	580	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 9

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.11

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006196.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 14.46 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	30.86	2800	JN
2. 003877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2	33.04	2300	JN
3. 006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	34.40	2600	JN

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.13

Sample wt/vol: 8.7 (g/ml) G Lab File ID: VB006197.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 16.86 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2400	U
107131	Acrylonitrile	2400	U
75650	tert-Butyl alcohol	4500	U
1634044	Methyl-tert-Butyl ether	1000	U
108203	Di-isopropyl ether	690	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	350	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	690	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	690	U
75-35-4	1,1-Dichloroethene	350	U
67-64-1	Acetone	690	U
75-15-0	Carbon Disulfide	350	U
75-09-2	Methylene Chloride	690	U
156-60-5	trans-1,2-Dichloroethene	690	U
75-35-3	1,1-Dichloroethane	350	U
108-05-4	Vinyl Acetate	1000	U
78-93-3	2-Butanone	1000	U
	cis-1,2-Dichloroethene	350	U
67-66-3	Chloroform	350	U
75-55-6	1,1,1-Trichloroethane	350	U
56-23-5	Carbon Tetrachloride	690	U
71-43-2	Benzene	350	U
107-06-2	1,2-Dichloroethane	690	U
79-01-6	Trichloroethene	350	U
78-87-5	1,2-Dichloropropane	350	U
75-27-4	Bromodichloromethane	350	U
110-75-8	2-Chloroethyl vinyl ether	690	U
10061-01-5	cis-1,3-Dichloropropene	350	U
108-10-1	4-Methyl-2-Pentanone	690	U
108-88-3	Toluene	350	U
10061-02-6	trans-1,3-Dichloropropene	690	U
79-00-5	1,1,2-Trichloroethane	690	U
127-18-4	Tetrachloroethene	350	U
591-78-6	2-Hexanone	690	U
126-48-1	Dibromochloromethane	690	U
108-90-7	Chlorobenzene	350	U
100-41-4	Ethylbenzene	690	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.13

Sample wt/vol: 8.7 (g/ml) G Lab File ID: VB006197.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 16.86 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	1000	U
1330-20-7	o-Xylene	690	U
100-42-5	Styrene	690	U
75-25-2	Bromoform	690	U
79-34-5	1,1,2,2-Tetrachloroethane	690	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 10

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5246 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5246.13

Sample wt/vol: 8.7 (g/ml) G Lab File ID: VB006197.D

Level: (low/med) MED Date Received: 3/14/00

% Moisture: not dec. 16.86 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

11

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.03

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB006203.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 16.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2100	U
107131	Acrylonitrile	2100	U
75650	tert-Butyl alcohol	3800	U
1634044	Methyl-tert-Butyl ether	880	U
108203	Di-isopropyl ether	590	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	290	U
75-01-4	Vinyl Chloride	880	U
74-83-9	Bromomethane	590	U
75-00-3	Chloroethane	880	U
75-69-4	Trichlorofluoromethane	590	U
75-35-4	1,1-Dichloroethene	290	U
67-64-1	Acetone	590	U
75-15-0	Carbon Disulfide	290	U
75-09-2	Methylene Chloride	590	U
156-60-5	trans-1,2-Dichloroethene	590	U
75-35-3	1,1-Dichloroethane	290	U
108-05-4	Vinyl Acetate	880	U
78-93-3	2-Butanone	880	U
	cis-1,2-Dichloroethene	290	U
67-66-3	Chloroform	290	U
75-55-6	1,1,1-Trichloroethane	290	U
56-23-5	Carbon Tetrachloride	590	U
71-43-2	Benzene	290	U
107-06-2	1,2-Dichloroethane	590	U
79-01-6	Trichloroethene	290	U
78-87-5	1,2-Dichloropropane	290	U
75-27-4	Bromodichloromethane	290	U
110-75-8	2-Chloroethyl vinyl ether	590	U
10061-01-5	cis-1,3-Dichloropropene	290	U
108-10-1	4-Methyl-2-Pentanone	590	U
108-88-3	Toluene	290	U
10061-02-6	trans-1,3-Dichloropropene	590	U
79-00-5	1,1,2-Trichloroethane	590	U
127-18-4	Tetrachloroethene	290	U
591-78-6	2-Hexanone	590	U
126-48-1	Dibromochloromethane	590	U
108-90-7	Chlorobenzene	290	U
100-41-4	Ethylbenzene	590	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

11

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.03

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB006203.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 16.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	880	U
1330-20-7	o-Xylene	590	U
100-42-5	Styrene	590	U
75-25-2	Bromoform	590	U
79-34-5	1,1,2,2-Tetrachloroethane	590	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 11

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.03

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB006203.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 16.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

12

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.05

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006204.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 17.39 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2100	U
107131	Acrylonitrile	2100	U
75650	tert-Butyl alcohol	3900	U
1634044	Methyl-tert-Butyl ether	910	U
108203	Di-isopropyl ether	600	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	300	U
75-01-4	Vinyl Chloride	910	U
74-83-9	Bromomethane	600	U
75-00-3	Chloroethane	910	U
75-69-4	Trichlorofluoromethane	600	U
75-35-4	1,1-Dichloroethene	300	U
67-64-1	Acetone	600	U
75-15-0	Carbon Disulfide	300	U
75-09-2	Methylene Chloride	600	U
156-60-5	trans-1,2-Dichloroethene	600	U
75-35-3	1,1-Dichloroethane	300	U
108-05-4	Vinyl Acetate	910	U
78-93-3	2-Butanone	910	U
	cis-1,2-Dichloroethene	300	U
67-66-3	Chloroform	300	U
75-55-6	1,1,1-Trichloroethane	300	U
56-23-5	Carbon Tetrachloride	600	U
71-43-2	Benzene	300	U
107-06-2	1,2-Dichloroethane	600	U
79-01-6	Trichloroethene	300	U
78-87-5	1,2-Dichloropropane	300	U
75-27-4	Bromodichloromethane	300	U
110-75-8	2-Chloroethyl vinyl ether	600	U
10061-01-5	cis-1,3-Dichloropropene	300	U
108-10-1	4-Methyl-2-Pentanone	600	U
108-88-3	Toluene	300	U
10061-02-6	trans-1,3-Dichloropropene	600	U
79-00-5	1,1,2-Trichloroethane	600	U
127-18-4	Tetrachloroethene	300	U
591-78-6	2-Hexanone	600	U
126-48-1	Dibromochloromethane	600	U
108-90-7	Chlorobenzene	300	U
100-41-4	Ethylbenzene	600	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

12

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.05

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006204.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 17.39 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	910	U
1330-20-7	o-Xylene	600	U
100-42-5	Styrene	600	U
75-25-2	Bromoform	600	U
79-34-5	1,1,2,2-Tetrachloroethane	600	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 12

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.05

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006204.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 17.39 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

13

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.07

Sample wt/vol: 8.9 (g/ml) G Lab File ID: VB006205.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 13.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2300	U
107131	Acrylonitrile	2300	U
75650	tert-Butyl alcohol	4300	U
1634044	Methyl-tert-Butyl ether	980	U
108203	Di-isopropyl ether	660	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	330	U
75-01-4	Vinyl Chloride	980	U
74-83-9	Bromomethane	660	U
75-00-3	Chloroethane	980	U
75-69-4	Trichlorofluoromethane	660	U
75-35-4	1,1-Dichloroethene	330	U
67-64-1	Acetone	660	U
75-15-0	Carbon Disulfide	330	U
75-09-2	Methylene Chloride	660	U
156-60-5	trans-1,2-Dichloroethene	660	U
75-35-3	1,1-Dichloroethane	330	U
108-05-4	Vinyl Acetate	980	U
78-93-3	2-Butanone	980	U
	cis-1,2-Dichloroethene	330	U
67-66-3	Chloroform	330	U
75-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	660	U
71-43-2	Benzene	330	U
107-06-2	1,2-Dichloroethane	660	U
79-01-6	Trichloroethene	330	U
78-87-5	1,2-Dichloropropane	330	U
75-27-4	Bromodichloromethane	330	U
110-75-8	2-Chloroethyl vinyl ether	660	U
10061-01-5	cis-1,3-Dichloropropene	330	U
108-10-1	4-Methyl-2-Pentanone	660	U
108-88-3	Toluene	330	U
10061-02-6	trans-1,3-Dichloropropene	660	U
79-00-5	1,1,2-Trichloroethane	660	U
127-18-4	Tetrachloroethene	330	U
591-78-6	2-Hexanone	660	U
126-48-1	Dibromochloromethane	660	U
108-90-7	Chlorobenzene	330	U
100-41-4	Ethylbenzene	660	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

13

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.07

Sample wt/vol: 8.9 (g/ml) G Lab File ID: VB006205.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 13.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	980	U
1330-20-7	o-Xylene	660	U
100-42-5	Styrene	660	U
75-25-2	Bromoform	660	U
79-34-5	1,1,2,2-Tetrachloroethane	660	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 13

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.07

Sample wt/vol: 8.9 (g/ml) G Lab File ID: VB006205.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 13.54 Date Analyzed: 3/18/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 015869-94-0	Octane, 3,6-dimethyl-	28.30	4300	JN
2. 014676-29-0	Heptane, 3-ethyl-2-methyl-	28.73	3200	JN
3.	unknown	30.27	5200	J
4.	unknown	30.65	3100	J
5.	unknown	30.73	4500	J
6.	unknown	30.84	6300	J
7. 002847-72-5	Decane, 4-methyl-	31.09	11000	JN
8. 004291-79-6	Cyclohexane, 1-methyl-2-propyl-	31.32	4100	JN
9. 013151-34-3	Decane, 3-methyl-	31.67	3200	JN
10. 001678-93-9	Cyclohexane, butyl-	32.37	11000	JN
11.	unknown	33.00	5700	J
12.	unknown	33.49	5900	J
13.	unknown	33.86	9800	J
14.	unknown	33.97	7000	J
15.	unknown	34.06	11000	J

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

14

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.09

Sample wt/vol: 9.4 (g/ml) G Lab File ID: VB006206.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 25.78 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2500	U
107131	Acrylonitrile	2500	U
75650	tert-Butyl alcohol	4700	U
1634044	Methyl-tert-Butyl ether	1100	U
108203	Di-isopropyl ether	720	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	360	U
75-01-4	Vinyl Chloride	1100	U
74-83-9	Bromomethane	720	U
75-00-3	Chloroethane	1100	U
75-69-4	Trichlorofluoromethane	720	U
75-35-4	1,1-Dichloroethene	360	U
67-64-1	Acetone	720	U
75-15-0	Carbon Disulfide	360	U
75-09-2	Methylene Chloride	720	U
156-60-5	trans-1,2-Dichloroethene	720	U
75-35-3	1,1-Dichloroethane	360	U
108-05-4	Vinyl Acetate	1100	U
78-93-3	2-Butanone	1100	U
	cis-1,2-Dichloroethene	360	U
67-66-3	Chloroform	360	U
75-55-6	1,1,1-Trichloroethane	360	U
56-23-5	Carbon Tetrachloride	720	U
71-43-2	Benzene	360	U
107-06-2	1,2-Dichloroethane	720	U
79-01-6	Trichloroethene	360	U
78-87-5	1,2-Dichloropropane	360	U
75-27-4	Bromodichloromethane	360	U
110-75-8	2-Chloroethyl vinyl ether	720	U
10061-01-5	cis-1,3-Dichloropropene	360	U
108-10-1	4-Methyl-2-Pentanone	720	U
108-88-3	Toluene	360	U
10061-02-6	trans-1,3-Dichloropropene	720	U
79-00-5	1,1,2-Trichloroethane	720	U
127-18-4	Tetrachloroethene	360	U
591-78-6	2-Hexanone	720	U
126-48-1	Dibromochloromethane	720	U
108-90-7	Chlorobenzene	360	U
100-41-4	Ethylbenzene	720	U

1A

FIELD ID: 14

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.09

Sample wt/vol: 9.4 (g/ml) G Lab File ID: VB006206.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 25.78 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	1100	U
1330-20-7	o-Xylene	720	U
100-42-5	Styrene	720	U
75-25-2	Bromoform	720	U
79-34-5	1,1,2,2-Tetrachloroethane	720	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 14

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.09

Sample wt/vol: 9.4 (g/ml) G Lab File ID: VB006206.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 25.78 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

15

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.11

Sample wt/vol: 9.5 (g/ml) G Lab File ID: VB006207.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 15.56 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2200	U
107131	Acrylonitrile	2200	U
75650	tert-Butyl alcohol	4100	U
1634044	Methyl-tert-Butyl ether	940	U
108203	Di-isopropyl ether	630	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	940	U
74-83-9	Bromomethane	630	U
75-00-3	Chloroethane	940	U
75-69-4	Trichlorofluoromethane	630	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	630	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	630	U
156-60-5	trans-1,2-Dichloroethene	630	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	940	U
78-93-3	2-Butanone	940	U
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	310	U
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	630	U
71-43-2	Benzene	310	U
107-06-2	1,2-Dichloroethane	630	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	630	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	630	U
108-88-3	Toluene	310	U
10061-02-6	trans-1,3-Dichloropropene	630	U
79-00-5	1,1,2-Trichloroethane	630	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	630	U
126-48-1	Dibromochloromethane	630	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	630	U

1A

FIELD ID: 15

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.11

Sample wt/vol: 9.5 (g/ml) G Lab File ID: VB006207.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 15.56 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	940	U
1330-20-7	o-Xylene	630	U
100-42-5	Styrene	630	U
75-25-2	Bromoform	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 15

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 5248 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5248.11

Sample wt/vol: 9.5 (g/ml) G Lab File ID: VB006207.D

Level: (low/med) MED Date Received: 3/15/00

% Moisture: not dec. 15.56 Date Analyzed: 3/19/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732) 532-6224 FAX: (732) 532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING
CERTIFICATIONS: NJDEP #13461, NYSDOH #11699



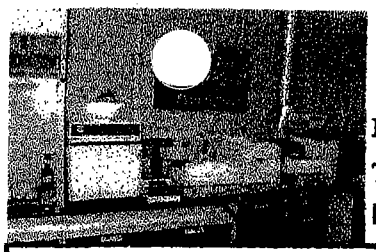
ANALYTICAL DATA REPORT
Fort Monmouth Environmental Laboratory
ENVIRONMENTAL DIVISION
Fort Monmouth, New Jersey
PROJECT: Bldg. 80/166

Bldg. 80/166

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
Trip Blank	5416.01	Methanol	15-May-00	05/15/00
Field Blank	5416.02	Aqueous	15-May-00 09:30	05/15/00
16 36"	5416.03	Soil	15-May-00 10:20	05/15/00
16 3.4-8'	5416.04	Aqueous	15-May-00 13:10	05/15/00
17 36"	5416.05	Soil	15-May-00 10:50	05/15/00
17 3-8'	5416.06	Aqueous	15-May-00 13:25	05/15/00
18 36"	5416.07	Soil	15-May-00 11:35	05/15/00
18 3-8'	5416.09	Aqueous	15-May-00 13:30	05/15/00
FD 36"	5416.09	Soil	15-May-00	05/15/00
FD 3-8'	5416.10	Aqueous	15-May-00	05/15/00

ANALYSIS:
FORT MONMOUTH ENVIRONMENTAL LABS
VOA+15, % SOLIDS

5-18-00
Daniel Wright/Date
Laboratory Director



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. FALLON
Phone #: 26623
(✓)DERA ( )OMA ( )Other:_____

Project No:
Location: 80/166

Samplers Name / Company: MARK LAURA - TVS - PWS07

Analysis Parameters (PPM)

Comments: Cal. TVA - 1000 O.K. (MW)

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA + 15	% SOLID					PID	FID	Remarks / Preservation Method
54160. 1	TRIP BLANK	5/15/00	—	METH.	1	X						—	—	V001701 — <4°C
2	FIELD BLANK	"	0930	AQ.	2	X						—	—	HCL
3	16 — 36"	"	1020	soil	2	X	X					1.79	284	V001702 10.06 <4°C
4	" — 3.4-8'	"	1310	AQ.	"	X						—	—	HCL
1 5	17 — 36"	"	1050	soil	"	X	X					1.75	680	V001703 1717 8.95 <4°C
6	" — 3-8'	"	1325	AQ	"	X						—	—	HCL
7	18 — 36"	"	1135	soil	"	X	X					1.93	2.44	V001704 9.18 <4°C
8	" — 3-8'	"	1330	AQ.	"	X						—	—	HCL
9	FD — 36"	"	—	soil	"	X	X					—	—	V001717 1703 8.54 <4°C
10	" — 3-8'	"	—	AQ.	"	X						—	—	HCL

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	5-15-00 1400	[signature]			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
		[signature]			

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: ( )Standard 3 wks, (X)Rush 5 Days, ( )ASAP Verbal ____ Hrs.

Remarks:

print legibly

FIELD DUPLICATE IDENTIFICATION

Field Duplicate Identification

Sample ID	Lab ID	Field Duplicate
17 36"	5416.05	5416.09
17 3-8'	5416.06	5416.10

AQUEOUS

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006856.D**	Sample Name	**Vblk209**
Operator	**Skelton**	Field ID	**Vblk209**
Date Acquired	**15 May 2000 3:22 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/17/00 1:50 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk209**

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk209

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006856.D

Level: (low/med) LOW Date Received: 5/15/00

% Moisture: not dec. Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006868.D**	Sample Name	**5416.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**15 May 2000 11:35 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/17/00 1:50 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5416.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006868.D

Level: (low/med) LOW Date Received: 5/15/00

% Moisture: not dec. Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006872.D**	Sample Name	**5416.10**
Operator	**Skelton**	Field ID	**FD**
Date Acquired	**16 May 2000 2:15 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.21	113088	19.23 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.56	287958	5.46 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/17/00 1:50 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: FD

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5416.10

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006872.D

Level: (low/med) LOW Date Received: 5/15/00

% Moisture: not dec. Date Analyzed: 5/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006869.D**	Sample Name	**5416.04**
Operator	**Skelton**	Field ID	**16**
Date Acquired	**16 May 2000 12:15 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/17/00 1:50 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 16

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5416.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006869.D

Level: (low/med) LOW Date Received: 5/15/00

% Moisture: not dec. Date Analyzed: 5/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006870.D**	Sample Name	**5416.06**
Operator	**Skelton**	Field ID	**17**
Date Acquired	**16 May 2000 12:55 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	9.27	110106	17.99 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	27.57	283695	5.31 ug/L	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/17/00 1:50 PM

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 17

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5416.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006870.D

Level: (low/med) LOW Date Received: 5/15/00

% Moisture: not dec. Date Analyzed: 5/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB006871.D**	Sample Name	**5416.08**
Operator	**Skelton**	Field ID	**18**
Date Acquired	**16 May 2000 1:35 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.45	185176	5.60 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane	21.59	45633	2.06 ug/L	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-97

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time

5/17/00 1:50 P

C:\Hpchem\Custrpt\Volatile\624fy99.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 18

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5416.08

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006871.D

Level: (low/med) LOW Date Received: 5/15/00

% Moisture: not dec. Date Analyzed: 5/16/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

SOIL

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk209

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk209

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006856.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 0 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Vblk209

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk209

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006856.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 0 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Vblk209**

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Vblk209

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006856.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 0 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006861.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 0 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	1900	
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	2400	
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	350	
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006861.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 0 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB006861.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 0 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

FD

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.09

Sample wt/vol: 8.5 (g/ml) G Lab File ID: VB006865.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 16.38 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2400	U
107131	Acrylonitrile	2400	U
75650	tert-Butyl alcohol	4500	U
1634044	Methyl-tert-Butyl ether	1000	U
108203	Di-isopropyl ether	700	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	350	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	700	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	700	U
75-35-4	1,1-Dichloroethene	350	U
67-64-1	Acetone	700	U
75-15-0	Carbon Disulfide	350	U
75-09-2	Methylene Chloride	700	U
156-60-5	trans-1,2-Dichloroethene	700	U
75-35-3	1,1-Dichloroethane	350	U
108-05-4	Vinyl Acetate	1000	U
78-93-3	2-Butanone	3000	
	cis-1,2-Dichloroethene	350	U
67-66-3	Chloroform	350	U
75-55-6	1,1,1-Trichloroethane	350	U
56-23-5	Carbon Tetrachloride	700	U
71-43-2	Benzene	350	U
107-06-2	1,2-Dichloroethane	700	U
79-01-6	Trichloroethene	350	U
78-87-5	1,2-Dichloropropane	350	U
75-27-4	Bromodichloromethane	350	U
110-75-8	2-Chloroethyl vinyl ether	700	U
10061-01-5	cis-1,3-Dichloropropene	350	U
108-10-1	4-Methyl-2-Pentanone	700	U
108-88-3	Toluene	350	U
10061-02-6	trans-1,3-Dichloropropene	700	U
79-00-5	1,1,2-Trichloroethane	700	U
127-18-4	Tetrachloroethene	350	U
591-78-6	2-Hexanone	700	U
126-48-1	Dibromochloromethane	700	U
108-90-7	Chlorobenzene	350	U
100-41-4	Ethylbenzene	700	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

FD

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.09

Sample wt/vol: 8.5 (g/ml) G Lab File ID: VB006865.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 16.38 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	1000	U
1330-20-7	o-Xylene	700	U
100-42-5	Styrene	700	U
75-25-2	Bromoform	700	U
79-34-5	1,1,2,2-Tetrachloroethane	700	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: FD

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.09

Sample wt/vol: 8.5 (g/ml) G Lab File ID: VB006865.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 16.38 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 16

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.03

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006862.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 17.82 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2100	U
107131	Acrylonitrile	2100	U
75650	tert-Butyl alcohol	3900	U
1634044	Methyl-tert-Butyl ether	910	U
108203	Di-isopropyl ether	610	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	300	U
75-01-4	Vinyl Chloride	910	U
74-83-9	Bromomethane	610	U
75-00-3	Chloroethane	910	U
75-69-4	Trichlorofluoromethane	610	U
75-35-4	1,1-Dichloroethene	300	U
67-64-1	Acetone	610	U
75-15-0	Carbon Disulfide	300	U
75-09-2	Methylene Chloride	960	
156-60-5	trans-1,2-Dichloroethene	610	U
75-35-3	1,1-Dichloroethane	300	U
108-05-4	Vinyl Acetate	910	U
78-93-3	2-Butanone	2800	
	cis-1,2-Dichloroethene	300	U
67-66-3	Chloroform	420	
75-55-6	1,1,1-Trichloroethane	300	U
56-23-5	Carbon Tetrachloride	610	U
71-43-2	Benzene	300	U
107-06-2	1,2-Dichloroethane	610	U
79-01-6	Trichloroethene	300	U
78-87-5	1,2-Dichloropropane	300	U
75-27-4	Bromodichloromethane	300	U
110-75-8	2-Chloroethyl vinyl ether	610	U
10061-01-5	cis-1,3-Dichloropropene	300	U
108-10-1	4-Methyl-2-Pentanone	610	U
108-88-3	Toluene	300	U
10061-02-6	trans-1,3-Dichloropropene	610	U
79-00-5	1,1,2-Trichloroethane	610	U
127-18-4	Tetrachloroethene	300	U
591-78-6	2-Hexanone	610	U
126-48-1	Dibromochloromethane	610	U
108-90-7	Chlorobenzene	300	U
100-41-4	Ethylbenzene	610	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

16

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.03

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006862.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 17.82 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	910	U
1330-20-7	o-Xylene	610	U
100-42-5	Styrene	610	U
75-25-2	Bromoform	610	U
79-34-5	1,1,2,2-Tetrachloroethane	610	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 16

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.03

Sample wt/vol: 10.1 (g/ml) G Lab File ID: VB006862.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 17.82 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 17

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.05

Sample wt/vol: 8.9 (g/ml) G Lab File ID: VB006863.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 14.72 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2300	U
107131	Acrylonitrile	2300	U
75650	tert-Butyl alcohol	4300	U
1634044	Methyl-tert-Butyl ether	990	U
108203	Di-isopropyl ether	660	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	330	U
75-01-4	Vinyl Chloride	990	U
74-83-9	Bromomethane	660	U
75-00-3	Chloroethane	990	U
75-69-4	Trichlorofluoromethane	660	U
75-35-4	1,1-Dichloroethene	330	U
67-64-1	Acetone	660	U
75-15-0	Carbon Disulfide	330	U
75-09-2	Methylene Chloride	710	
156-60-5	trans-1,2-Dichloroethene	660	U
75-35-3	1,1-Dichloroethane	330	U
108-05-4	Vinyl Acetate	990	U
78-93-3	2-Butanone	990	U
	cis-1,2-Dichloroethene	330	U
67-66-3	Chloroform	330	U
75-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	660	U
71-43-2	Benzene	330	U
107-06-2	1,2-Dichloroethane	660	U
79-01-6	Trichloroethene	330	U
78-87-5	1,2-Dichloropropane	330	U
75-27-4	Bromodichloromethane	330	U
110-75-8	2-Chloroethyl vinyl ether	660	U
10061-01-5	cis-1,3-Dichloropropene	330	U
108-10-1	4-Methyl-2-Pentanone	660	U
108-88-3	Toluene	330	U
10061-02-6	trans-1,3-Dichloropropene	660	U
79-00-5	1,1,2-Trichloroethane	660	U
127-18-4	Tetrachloroethene	330	U
591-78-6	2-Hexanone	660	U
126-48-1	Dibromochloromethane	660	U
108-90-7	Chlorobenzene	330	U
100-41-4	Ethylbenzene	660	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

17

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.05

Sample wt/vol: 8.9 (g/ml) G Lab File ID: VB006863.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 14.72 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	990	U
1330-20-7	o-Xylene	660	U
100-42-5	Styrene	660	U
75-25-2	Bromoform	660	U
79-34-5	1,1,2,2-Tetrachloroethane	660	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: 17

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.05

Sample wt/vol: 8.9 (g/ml) G Lab File ID: VB006863.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 14.72 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

FIELD ID: 18

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.07

Sample wt/vol: 9.2 (g/ml) G Lab File ID: VB006864.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 13.14 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107028	Acrolein	2200	U
107131	Acrylonitrile	2200	U
75650	tert-Butyl alcohol	4100	U
1634044	Methyl-tert-Butyl ether	940	U
108203	Di-isopropyl ether	630	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	940	U
74-83-9	Bromomethane	630	U
75-00-3	Chloroethane	940	U
75-69-4	Trichlorofluoromethane	630	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	630	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	630	U
156-60-5	trans-1,2-Dichloroethene	630	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	940	U
78-93-3	2-Butanone	3000	
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	440	
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	630	U
71-43-2	Benzene	310	U
107-06-2	1,2-Dichloroethane	630	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	630	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	630	U
108-88-3	Toluene	310	U
10061-02-6	trans-1,3-Dichloropropene	630	U
79-00-5	1,1,2-Trichloroethane	630	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	630	U
126-48-1	Dibromochloromethane	630	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	630	U

1A

FIELD ID:

VOLATILE ORGANICS ANALYSIS DATA SHEET

18

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.07

Sample wt/vol: 9.2 (g/ml) G Lab File ID: VB006864.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 13.14 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	m+p-Xylenes	940	U
1330-20-7	o-Xylene	630	U
100-42-5	Styrene	630	U
75-25-2	Bromoform	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **18**

Lab Name: FMETL NJDEP#: 13461

Project: 100004 Case No.: 5416 Location: 80/166 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 5416.07

Sample wt/vol: 9.2 (g/ml) G Lab File ID: VB006864.D

Level: (low/med) MED Date Received: 5/15/00

% Moisture: not dec. 13.14 Date Analyzed: 5/15/00

GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

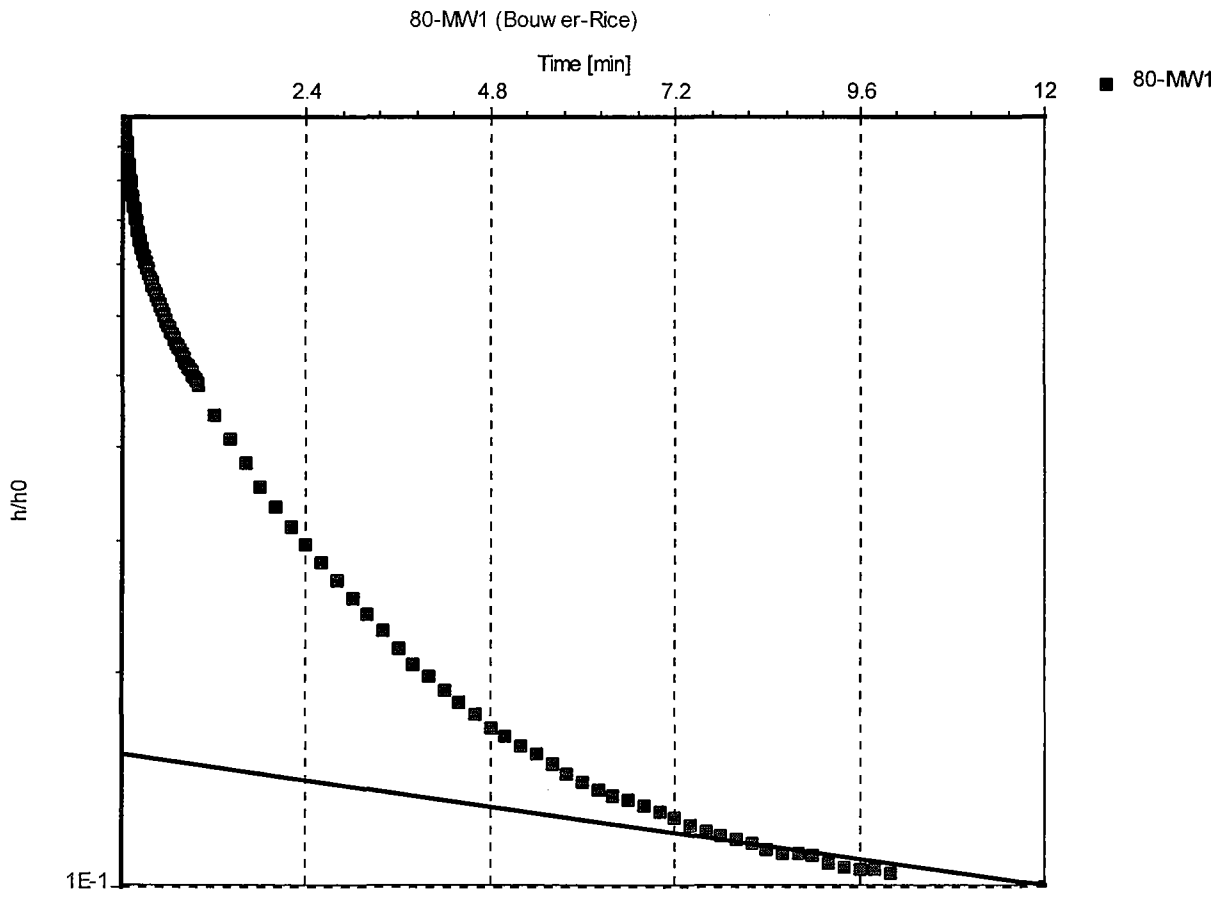
Appendix H

Slug Test Analyses and Raw Data

Waterloo Hydrogeologic, Inc.
180 Columbia St. Unit 1104
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Pumping Test Analysis Report

Project: DO 19
No: 4936-119
Client: Fort Monmouth



Test name: **80-MW1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.00E+0 [ft/d]

Test parameters:

Test well:	80-MW1	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	10 [ft]		
Casing radius:	0.666 [ft]		
r(eff):	0.600 [ft]		

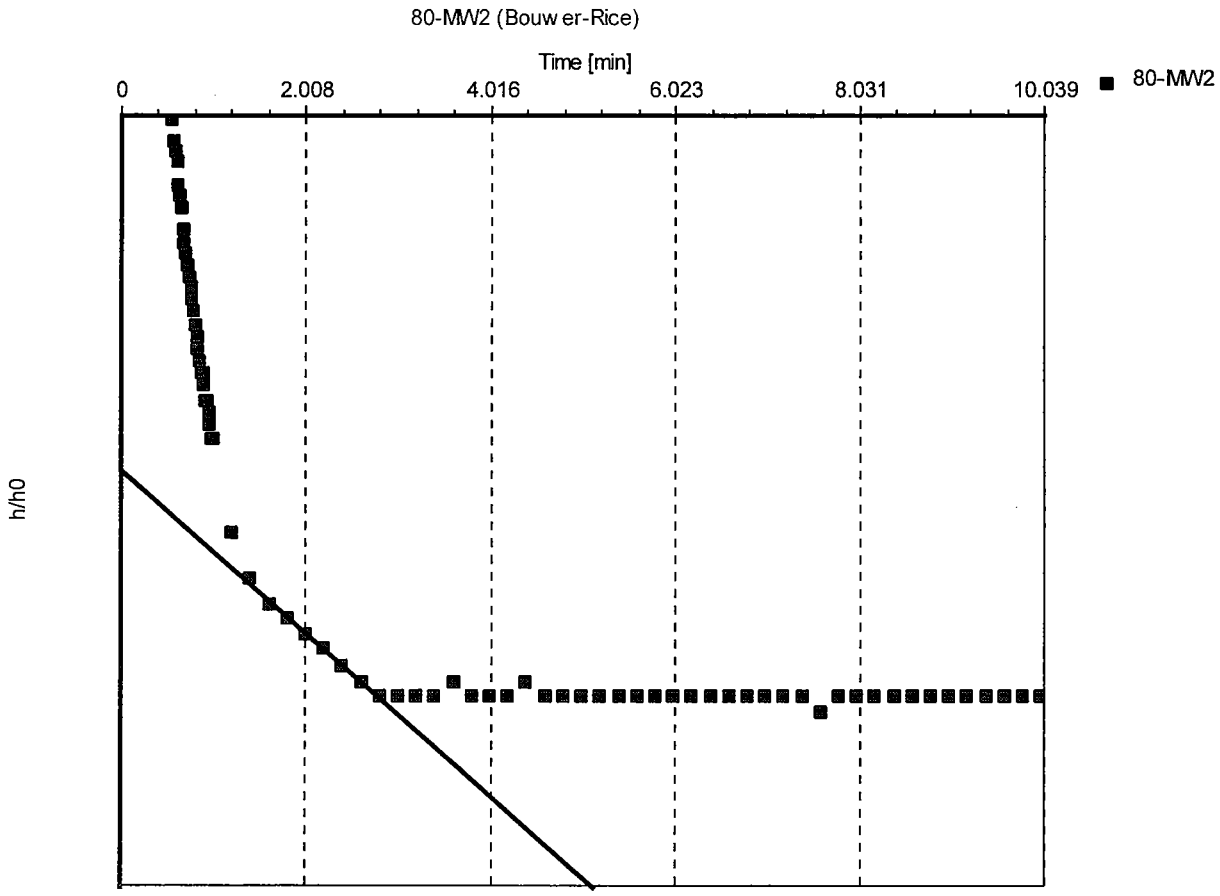
Comments:

Evaluated by: TJK/PS
Date: 8/15/01

Waterloo Hydrogeologic, Inc.
180 Columbia St. Unit 1104
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Pumping Test Analysis Report

Project:	DO 19
No:	4936-119
Client:	Fort Monmouth



Test name: **80-MW2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 4.85E+0 [ft/d]

Test parameters:

Test well:	80-MW2	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	10 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

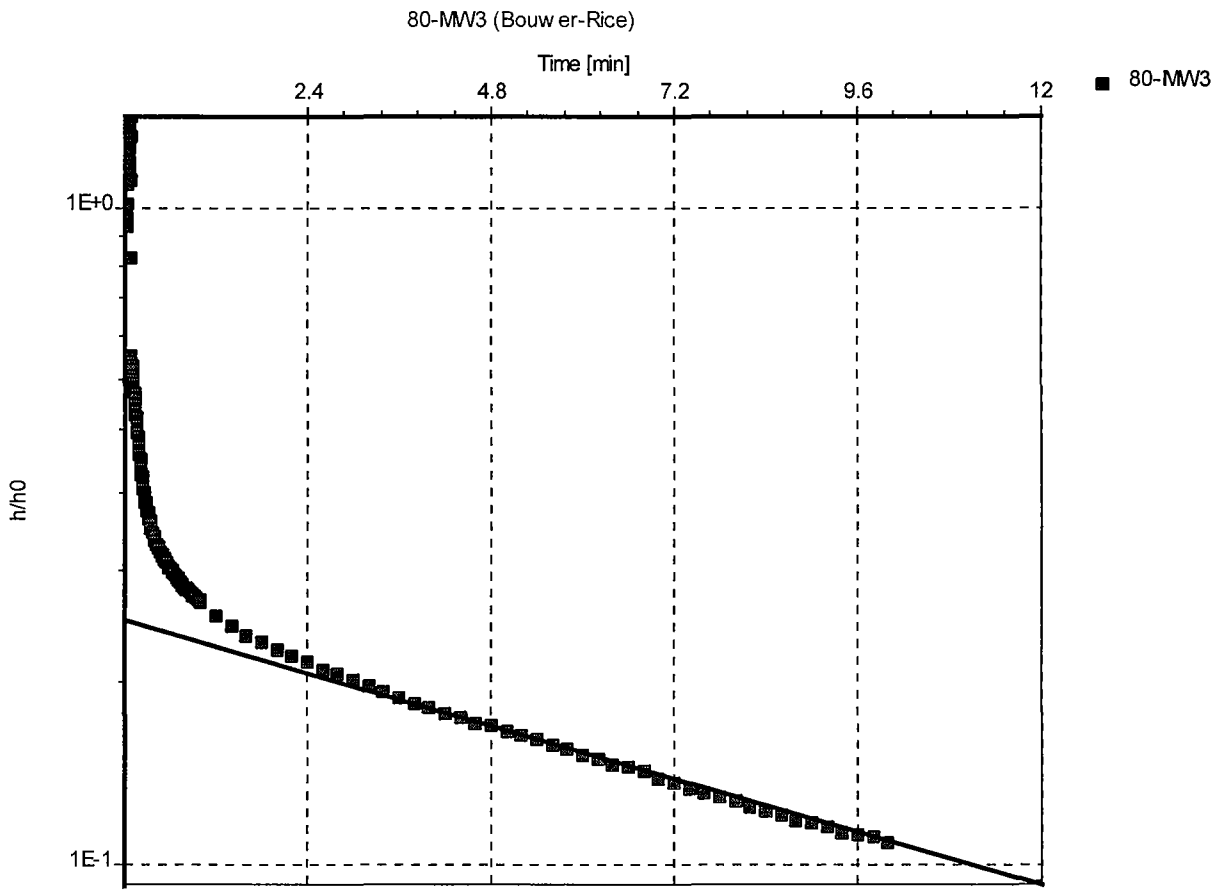
Comments:

Evaluated by: TJK/PS
Date: 8/15/01

Waterloo Hydrogeologic, Inc.
180 Columbia St. Unit 1104
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Pumping Test Analysis Report

Project: DO 19
No: 4936-119
Client: Fort Monmouth



Test name: **80-MW3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 6.30E+0 [ft/d]

Test parameters:

Test well:	80-MW3	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	10 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

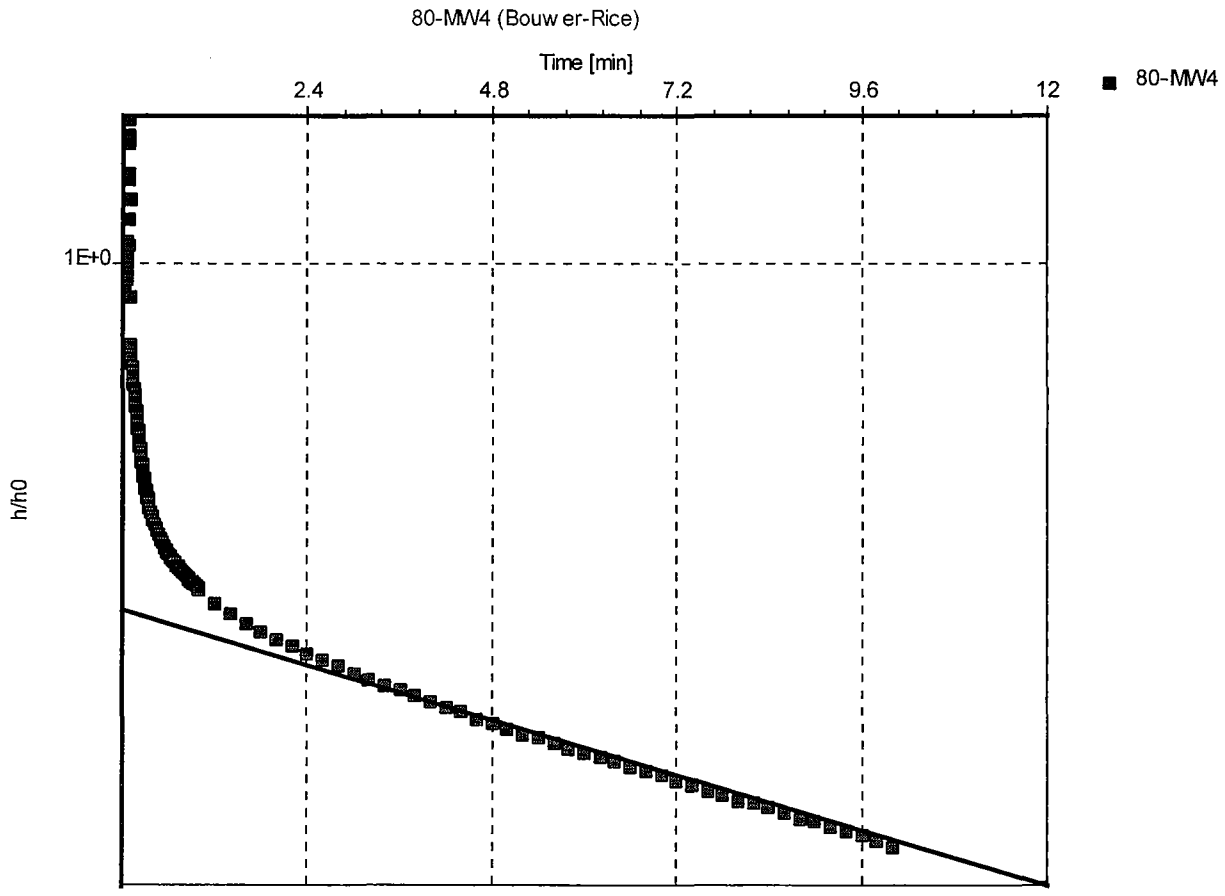
Comments:

Evaluated by: TJK/PS
Date: 8/15/01

Waterloo Hydrogeologic, Inc.
180 Columbia St. Unit 1104
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Pumping Test Analysis Report

Project: DO 19
No: 4936-119
Client: Fort Monmouth



Test name: **80-MW4**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 6.41E+0 [ft/d]

Test parameters:

Test well:	80-MW4	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	10 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

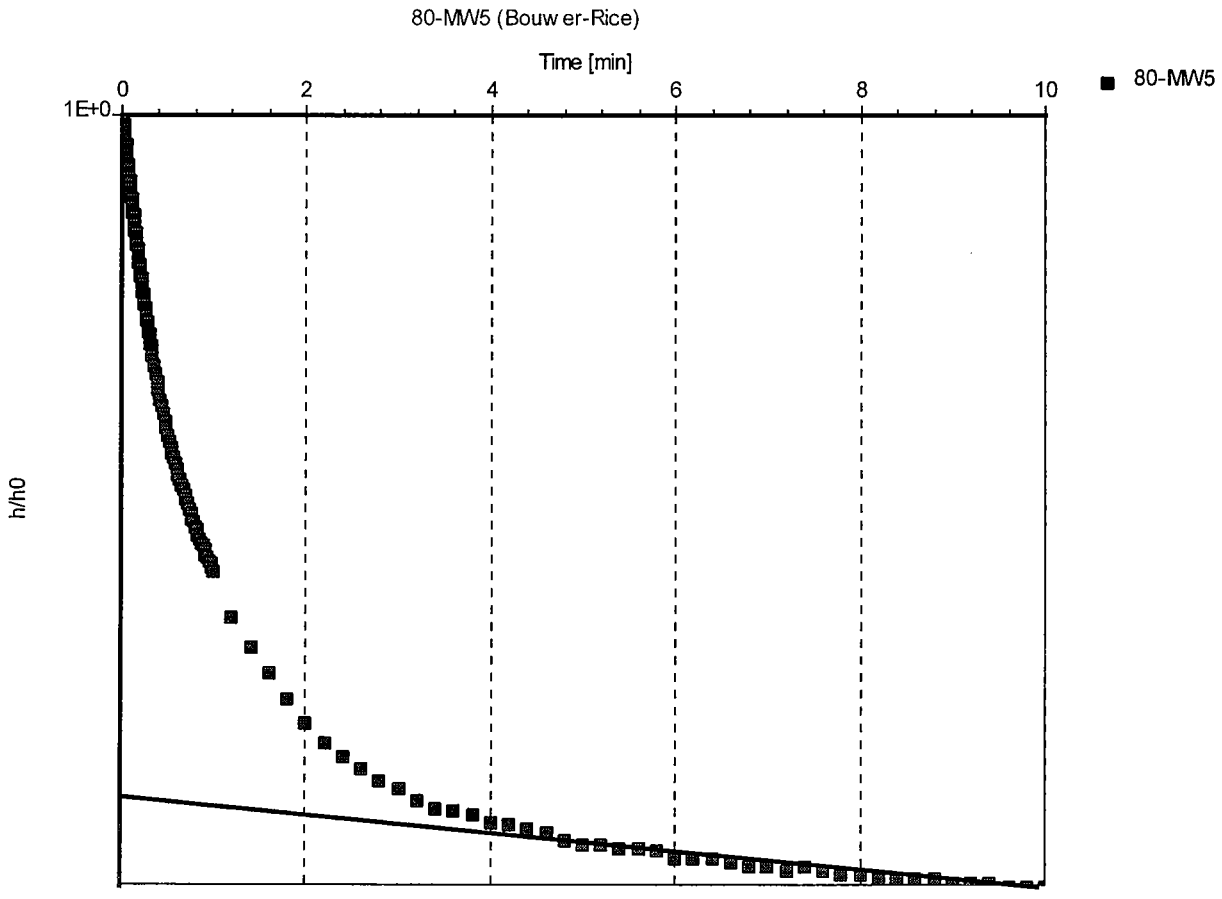
Comments:

Evaluated by: TJK/PS
Date: 8/15/01

Waterloo Hydrogeologic, Inc.
180 Columbia St. Unit 1104
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Pumping Test Analysis Report

Project:	DO 19
No:	4936-119
Client:	Fort Monmouth



Test name: **80-MW5**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.08E+0 [ft/d]

Test parameters:

Test well:	80-MW5	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	10 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

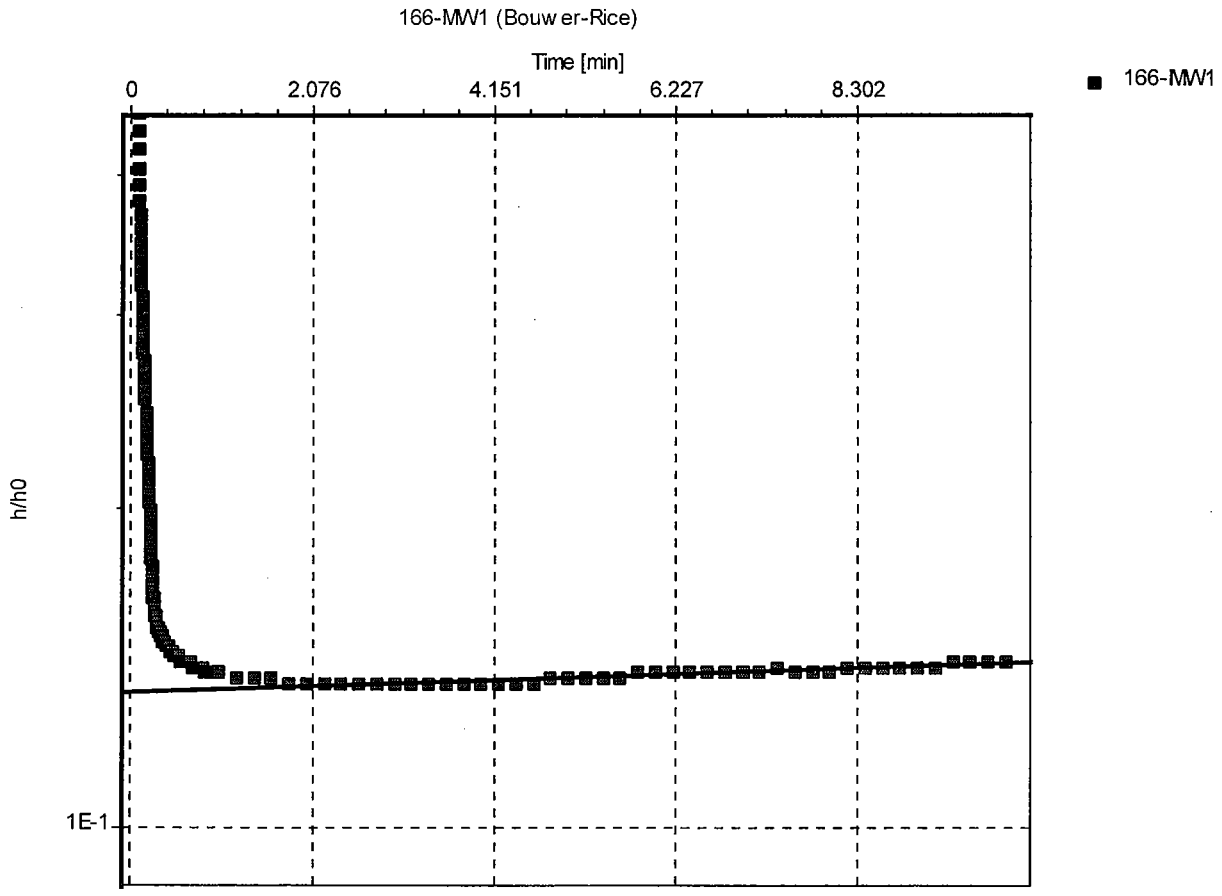
Comments:

Evaluated by: TJK/PS
Date: 8/15/01

Waterloo Hydrogeologic, Inc.
180 Columbia St. Unit 1104
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Pumping Test Analysis Report

Project: DO 19
No: 4936-119
Client: Fort Monmouth



Test name: **166-MW1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 3.48E-1 [ft/d]

Test parameters:

Test well:	166-MW1	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	9.5 [ft]		
Casing radius:	0.666 [ft]		
r(eff):	0.600 [ft]		

Comments: Not enough water in well to perform slug test. When slug test was performed, noticed mud within the well which would suggest sediment inside the well. Data for this well will be discarded from any calculations and averages.

Evaluated by: TJK/PS
Date: 8/15/01

SE1000C
Environmental Logger
08/16 14:21

Unit# 00001 Test 15

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	4.120
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/15 16:40:39

Elapsed Time	INPUT 1
0.0000	5.117
0.0033	5.098
0.0066	5.086
0.0100	5.064
0.0133	5.051
0.0166	5.013
0.0200	5.035
0.0233	4.963
0.0266	4.934
0.0300	4.915
0.0333	4.887
0.0366	4.874
0.0400	4.868
0.0433	4.830
0.0466	4.814
0.0500	4.792
0.0533	4.773
0.0566	4.757
0.0600	4.738
0.0633	4.723
0.0666	4.707
0.0700	4.688
0.0733	4.672
0.0766	4.653
0.0800	4.637

0.0833	4.622
0.0866	4.609
0.0900	4.593
0.0933	4.577
0.0966	4.565
0.1000	4.549
0.1033	4.536
0.1066	4.524
0.1100	4.508
0.1133	4.495
0.1166	4.483
0.1200	4.470
0.1233	4.457
0.1266	4.445
0.1300	4.432
0.1333	4.419
0.1366	4.410
0.1400	4.397
0.1433	4.388
0.1466	4.375
0.1500	4.366
0.1533	4.353
0.1566	4.344
0.1600	4.334
0.1633	4.325
0.1666	4.315
0.1700	4.306
0.1733	4.296
0.1766	4.284
0.1800	4.277
0.1833	4.268
0.1866	4.258
0.1900	4.249
0.1933	4.243
0.1966	4.233
0.2000	4.227
0.2033	4.217
0.2066	4.211
0.2100	4.205
0.2133	4.195
0.2166	4.189
0.2200	4.183
0.2233	4.176
0.2266	4.167
0.2300	4.161
0.2333	4.154
0.2366	4.148
0.2400	4.142

0.2433	4.135
0.2466	4.129
0.2500	4.126
0.2533	4.120
0.2566	4.113
0.2600	4.107
0.2633	4.101
0.2666	4.097
0.2700	4.091
0.2733	4.085
0.2766	4.078
0.2800	4.075
0.2833	4.069
0.2866	4.063
0.2900	4.060
0.2933	4.053
0.2966	4.050
0.3000	4.044
0.3033	4.041
0.3066	4.034
0.3100	4.031
0.3133	4.025
0.3166	4.022
0.3200	4.018
0.3233	4.012
0.3266	4.009
0.3300	4.003
0.3333	4.000
0.3500	3.977
0.3666	3.955
0.3833	3.933
0.4000	3.914
0.4166	3.895
0.4333	3.876
0.4500	3.857
0.4666	3.842
0.4833	3.823
0.5000	3.807
0.5166	3.791
0.5333	3.775
0.5500	3.760
0.5666	3.744
0.5833	3.731
0.6000	3.715
0.6166	3.703
0.6333	3.687
0.6500	3.674
0.6666	3.659

0.6833	3.646
0.7000	3.633
0.7166	3.621
0.7333	3.608
0.7500	3.599
0.7666	3.586
0.7833	3.573
0.8000	3.564
0.8166	3.551
0.8333	3.542
0.8500	3.532
0.8666	3.523
0.8833	3.513
0.9000	3.504
0.9166	3.494
0.9333	3.485
0.9500	3.475
0.9666	3.466
0.9833	3.460
1.0000	3.450
1.2000	3.340
1.4000	3.254
1.6000	3.172
1.8000	3.100
2.0000	3.043
2.2000	2.992
2.4000	2.945
2.6000	2.901
2.8000	2.860
3.0000	2.822
3.2000	2.787
3.4000	2.756
3.6000	2.724
3.8000	2.696
4.0000	2.673
4.2000	2.651
4.4000	2.632
4.6000	2.613
4.8000	2.594
5.0000	2.582
5.2000	2.569
5.4000	2.557
5.6000	2.544
5.8000	2.531
6.0000	2.522
6.2000	2.512
6.4000	2.506
6.6000	2.500

6.8000	2.493
7.0000	2.487
7.2000	2.481
7.4000	2.471
7.6000	2.465
7.8000	2.462
8.0000	2.456
8.2000	2.452
8.4000	2.446
8.6000	2.443
8.8000	2.443
9.0000	2.440
9.2000	2.433
9.4000	2.430
9.6000	2.427
9.8000	2.427
10.0000	2.424
12.0000	2.411

SE1000C
Environmental Logger
08/16 14:18

Unit# 00001 Test 16

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	3.350
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/15 16:58:23

Elapsed Time	INPUT 1
0.0000	3.470
0.0033	3.545
0.0066	3.561
0.0100	3.526
0.0133	3.479
0.0166	3.438
0.0200	3.413
0.0233	3.428
0.0266	3.814
0.0300	4.455
0.0333	4.761
0.0366	4.660
0.0400	4.486
0.0433	3.902
0.0466	2.904
0.0500	2.759
0.0533	2.718
0.0566	2.683
0.0600	2.658
0.0633	2.620
0.0666	2.589
0.0700	2.563
0.0733	2.535
0.0766	2.507
0.0800	2.478

0.0833	2.453
0.0866	2.428
0.0900	2.402
0.0933	2.380
0.0966	2.358
0.1000	2.336
0.1033	2.314
0.1066	2.295
0.1100	2.276
0.1133	2.257
0.1166	2.238
0.1200	2.219
0.1233	2.203
0.1266	2.184
0.1300	2.169
0.1333	2.153
0.1366	2.140
0.1400	2.124
0.1433	2.112
0.1466	2.093
0.1500	2.080
0.1533	2.068
0.1566	2.055
0.1600	2.042
0.1633	2.030
0.1666	2.017
0.1700	2.008
0.1733	1.998
0.1766	1.986
0.1800	1.976
0.1833	1.967
0.1866	1.957
0.1900	1.948
0.1933	1.938
0.1966	1.929
0.2000	1.919
0.2033	1.913
0.2066	1.903
0.2100	1.897
0.2133	1.891
0.2166	1.885
0.2200	1.878
0.2233	1.872
0.2266	1.866
0.2300	1.859
0.2333	1.853
0.2366	1.850
0.2400	1.843

0.2433	1.837
0.2466	1.831
0.2500	1.828
0.2533	1.821
0.2566	1.818
0.2600	1.815
0.2633	1.809
0.2666	1.806
0.2700	1.799
0.2733	1.796
0.2766	1.793
0.2800	1.790
0.2833	1.787
0.2866	1.783
0.2900	1.777
0.2933	1.774
0.2966	1.774
0.3000	1.768
0.3033	1.765
0.3066	1.761
0.3100	1.758
0.3133	1.758
0.3166	1.755
0.3200	1.752
0.3233	1.749
0.3266	1.746
0.3300	1.742
0.3333	1.739
0.3500	1.727
0.3666	1.714
0.3833	1.705
0.4000	1.695
0.4166	1.686
0.4333	1.679
0.4500	1.670
0.4666	1.667
0.4833	1.660
0.5000	1.654
0.5166	1.648
0.5333	1.641
0.5500	1.638
0.5666	1.632
0.5833	1.629
0.6000	1.626
0.6166	1.619
0.6333	1.616
0.6500	1.613
0.6666	1.607

0.6833	1.603
0.7000	1.600
0.7166	1.597
0.7333	1.594
0.7500	1.591
0.7666	1.588
0.7833	1.585
0.8000	1.581
0.8166	1.578
0.8333	1.575
0.8500	1.572
0.8666	1.569
0.8833	1.569
0.9000	1.566
0.9166	1.562
0.9333	1.562
0.9500	1.559
0.9666	1.556
0.9833	1.553
1.0000	1.553
1.2000	1.531
1.4000	1.521
1.6000	1.515
1.8000	1.512
2.0000	1.509
2.2000	1.506
2.4000	1.502
2.6000	1.499
2.8000	1.496
3.0000	1.496
3.2000	1.496
3.4000	1.496
3.6000	1.499
3.8000	1.496
4.0000	1.496
4.2000	1.496
4.4000	1.499
4.6000	1.496
4.8000	1.496
5.0000	1.496
5.2000	1.496
5.4000	1.496
5.6000	1.496
5.8000	1.496
6.0000	1.496
6.2000	1.496
6.4000	1.496
6.6000	1.496

6.8000	1.496
7.0000	1.496
7.2000	1.496
7.4000	1.496
7.6000	1.493
7.8000	1.496
8.0000	1.496
8.2000	1.496
8.4000	1.496
8.6000	1.496
8.8000	1.496
9.0000	1.496
9.2000	1.496
9.4000	1.496
9.6000	1.496
9.8000	1.496
10.0000	1.496

SE1000C
Environmental Logger
08/16 14:28

Unit# 00001 Test 12

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	2.850
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/15 15:08:25

Elapsed Time	INPUT 1
0.0000	7.355
0.0033	7.327
0.0066	7.305
0.0100	7.279
0.0133	7.251
0.0166	7.222
0.0200	7.194
0.0233	7.178
0.0266	7.169
0.0300	7.159
0.0333	7.399
0.0366	7.652
0.0400	7.772
0.0433	7.791
0.0466	7.772
0.0500	7.734
0.0533	7.775
0.0566	7.917
0.0600	8.122
0.0633	8.482
0.0666	8.596
0.0700	8.280
0.0733	7.699
0.0766	6.844
0.0800	6.045

0.0833	6.038
0.0866	6.004
0.0900	5.982
0.0933	5.978
0.0966	5.950
0.1000	5.915
0.1033	5.893
0.1066	5.871
0.1100	5.849
0.1133	5.833
0.1166	5.817
0.1200	5.805
0.1233	5.786
0.1266	5.770
0.1300	5.751
0.1333	5.735
0.1366	5.716
0.1400	5.701
0.1433	5.685
0.1466	5.669
0.1500	5.653
0.1533	5.637
0.1566	5.625
0.1600	5.609
0.1633	5.593
0.1666	5.581
0.1700	5.565
0.1733	5.549
0.1766	5.536
0.1800	5.524
0.1833	5.511
0.1866	5.499
0.1900	5.483
0.1933	5.473
0.1966	5.461
0.2000	5.448
0.2033	5.435
0.2066	5.426
0.2100	5.416
0.2133	5.407
0.2166	5.394
0.2200	5.385
0.2233	5.375
0.2266	5.366
0.2300	5.356
0.2333	5.350
0.2366	5.341
0.2400	5.334

0.2433	5.325
0.2466	5.319
0.2500	5.309
0.2533	5.303
0.2566	5.296
0.2600	5.290
0.2633	5.284
0.2666	5.278
0.2700	5.271
0.2733	5.268
0.2766	5.262
0.2800	5.255
0.2833	5.249
0.2866	5.246
0.2900	5.240
0.2933	5.236
0.2966	5.230
0.3000	5.227
0.3033	5.221
0.3066	5.218
0.3100	5.214
0.3133	5.208
0.3166	5.205
0.3200	5.202
0.3233	5.199
0.3266	5.192
0.3300	5.189
0.3333	5.186
0.3500	5.167
0.3666	5.151
0.3833	5.135
0.4000	5.123
0.4166	5.110
0.4333	5.101
0.4500	5.091
0.4666	5.082
0.4833	5.072
0.5000	5.063
0.5166	5.057
0.5333	5.050
0.5500	5.044
0.5666	5.034
0.5833	5.028
0.6000	5.025
0.6166	5.019
0.6333	5.012
0.6500	5.006
0.6666	5.000

0.6833	4.997
0.7000	4.993
0.7166	4.987
0.7333	4.981
0.7500	4.978
0.7666	4.974
0.7833	4.968
0.8000	4.965
0.8166	4.962
0.8333	4.959
0.8500	4.955
0.8666	4.952
0.8833	4.946
0.9000	4.943
0.9166	4.940
0.9333	4.937
0.9500	4.933
0.9666	4.930
0.9833	4.927
1.0000	4.924
1.2000	4.886
1.4000	4.861
1.6000	4.835
1.8000	4.817
2.0000	4.798
2.2000	4.782
2.4000	4.769
2.6000	4.753
2.8000	4.741
3.0000	4.728
3.2000	4.716
3.4000	4.703
3.6000	4.690
3.8000	4.681
4.0000	4.671
4.2000	4.662
4.4000	4.652
4.6000	4.643
4.8000	4.637
5.0000	4.627
5.2000	4.618
5.4000	4.611
5.6000	4.602
5.8000	4.596
6.0000	4.586
6.2000	4.577
6.4000	4.570
6.6000	4.564

6.8000	4.558
7.0000	4.548
7.2000	4.539
7.4000	4.532
7.6000	4.526
7.8000	4.520
8.0000	4.513
8.2000	4.507
8.4000	4.501
8.6000	4.494
8.8000	4.488
9.0000	4.485
9.2000	4.479
9.4000	4.472
9.6000	4.469
9.8000	4.466
10.0000	4.460
12.0000	4.409

SE1000C
Environmental Logger
08/16 14:23

Unit# 00001 Test 14

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	3.240
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/15 16:17:11

Elapsed Time	INPUT 1
0.0000	7.189
0.0033	7.164
0.0066	7.129
0.0100	7.104
0.0133	7.076
0.0166	7.044
0.0200	7.025
0.0233	7.205
0.0266	7.344
0.0300	7.338
0.0333	7.322
0.0366	7.290
0.0400	7.256
0.0433	7.186
0.0466	7.126
0.0500	7.092
0.0533	7.085
0.0566	7.234
0.0600	7.344
0.0633	7.341
0.0666	7.322
0.0700	7.518
0.0733	7.852
0.0766	8.178
0.0800	8.430

0.0833	8.474
0.0866	8.269
0.0900	7.890
0.0933	7.676
0.0966	6.972
0.1000	6.700
0.1033	6.694
0.1066	6.649
0.1100	6.649
0.1133	6.627
0.1166	6.605
0.1200	6.586
0.1233	6.571
0.1266	6.558
0.1300	6.542
0.1333	6.530
0.1366	6.514
0.1400	6.501
0.1433	6.485
0.1466	6.473
0.1500	6.460
0.1533	6.447
0.1566	6.435
0.1600	6.422
0.1633	6.410
0.1666	6.400
0.1700	6.387
0.1733	6.375
0.1766	6.365
0.1800	6.356
0.1833	6.343
0.1866	6.334
0.1900	6.324
0.1933	6.312
0.1966	6.302
0.2000	6.293
0.2033	6.283
0.2066	6.274
0.2100	6.264
0.2133	6.255
0.2166	6.248
0.2200	6.239
0.2233	6.230
0.2266	6.220
0.2300	6.214
0.2333	6.204
0.2366	6.198
0.2400	6.192

0.2433	6.182
0.2466	6.176
0.2500	6.170
0.2533	6.163
0.2566	6.154
0.2600	6.147
0.2633	6.141
0.2666	6.135
0.2700	6.129
0.2733	6.125
0.2766	6.119
0.2800	6.113
0.2833	6.106
0.2866	6.103
0.2900	6.097
0.2933	6.094
0.2966	6.087
0.3000	6.084
0.3033	6.081
0.3066	6.075
0.3100	6.072
0.3133	6.069
0.3166	6.062
0.3200	6.059
0.3233	6.056
0.3266	6.053
0.3300	6.050
0.3333	6.046
0.3500	6.027
0.3666	6.012
0.3833	5.999
0.4000	5.986
0.4166	5.974
0.4333	5.964
0.4500	5.955
0.4666	5.945
0.4833	5.936
0.5000	5.930
0.5166	5.923
0.5333	5.914
0.5500	5.907
0.5666	5.901
0.5833	5.895
0.6000	5.892
0.6166	5.885
0.6333	5.879
0.6500	5.876
0.6666	5.870

0.6833	5.866
0.7000	5.860
0.7166	5.857
0.7333	5.854
0.7500	5.848
0.7666	5.844
0.7833	5.841
0.8000	5.838
0.8166	5.835
0.8333	5.832
0.8500	5.825
0.8666	5.822
0.8833	5.819
0.9000	5.816
0.9166	5.813
0.9333	5.810
0.9500	5.806
0.9666	5.806
0.9833	5.803
1.0000	5.800
1.2000	5.765
1.4000	5.743
1.6000	5.721
1.8000	5.702
2.0000	5.686
2.2000	5.674
2.4000	5.658
2.6000	5.645
2.8000	5.633
3.0000	5.620
3.2000	5.608
3.4000	5.598
3.6000	5.589
3.8000	5.579
4.0000	5.570
4.2000	5.560
4.4000	5.551
4.6000	5.541
4.8000	5.532
5.0000	5.525
5.2000	5.516
5.4000	5.510
5.6000	5.503
5.8000	5.494
6.0000	5.488
6.2000	5.481
6.4000	5.475
6.6000	5.469

6.8000	5.462
7.0000	5.456
7.2000	5.450
7.4000	5.443
7.6000	5.437
7.8000	5.431
8.0000	5.424
8.2000	5.421
8.4000	5.415
8.6000	5.409
8.8000	5.402
9.0000	5.399
9.2000	5.393
9.4000	5.387
9.6000	5.383
9.8000	5.377
10.0000	5.371
12.0000	5.330

SE1000C
Environmental Logger
08/16 14:26

Unit# 00001 Test 13

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	3.740
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/15 15:41:59

Elapsed Time	INPUT 1
0.0000	6.174
0.0033	6.174
0.0066	6.155
0.0100	6.149
0.0133	6.126
0.0166	6.108
0.0200	6.098
0.0233	6.076
0.0266	6.057
0.0300	6.038
0.0333	6.022
0.0366	6.010
0.0400	5.994
0.0433	5.981
0.0466	5.969
0.0500	5.956
0.0533	5.943
0.0566	5.928
0.0600	5.915
0.0633	5.902
0.0666	5.890
0.0700	5.877
0.0733	5.864
0.0766	5.852
0.0800	5.839

0.0833	5.827
0.0866	5.814
0.0900	5.801
0.0933	5.792
0.0966	5.779
0.1000	5.767
0.1033	5.754
0.1066	5.744
0.1100	5.735
0.1133	5.722
0.1166	5.713
0.1200	5.700
0.1233	5.691
0.1266	5.681
0.1300	5.672
0.1333	5.659
0.1366	5.650
0.1400	5.637
0.1433	5.628
0.1466	5.618
0.1500	5.609
0.1533	5.599
0.1566	5.590
0.1600	5.580
0.1633	5.571
0.1666	5.561
0.1700	5.552
0.1733	5.542
0.1766	5.533
0.1800	5.527
0.1833	5.517
0.1866	5.508
0.1900	5.498
0.1933	5.492
0.1966	5.482
0.2000	5.473
0.2033	5.467
0.2066	5.457
0.2100	5.451
0.2133	5.441
0.2166	5.435
0.2200	5.426
0.2233	5.419
0.2266	5.410
0.2300	5.403
0.2333	5.397
0.2366	5.391
0.2400	5.381

0.2433	5.375
0.2466	5.369
0.2500	5.359
0.2533	5.353
0.2566	5.347
0.2600	5.340
0.2633	5.334
0.2666	5.328
0.2700	5.321
0.2733	5.315
0.2766	5.309
0.2800	5.302
0.2833	5.296
0.2866	5.290
0.2900	5.283
0.2933	5.277
0.2966	5.271
0.3000	5.265
0.3033	5.261
0.3066	5.255
0.3100	5.249
0.3133	5.242
0.3166	5.236
0.3200	5.233
0.3233	5.227
0.3266	5.220
0.3300	5.217
0.3333	5.211
0.3500	5.182
0.3666	5.157
0.3833	5.135
0.4000	5.113
0.4166	5.091
0.4333	5.072
0.4500	5.053
0.4666	5.034
0.4833	5.018
0.5000	5.002
0.5166	4.987
0.5333	4.974
0.5500	4.958
0.5666	4.949
0.5833	4.936
0.6000	4.924
0.6166	4.911
0.6333	4.901
0.6500	4.889
0.6666	4.879

0.6833	4.870
0.7000	4.860
0.7166	4.851
0.7333	4.841
0.7500	4.832
0.7666	4.822
0.7833	4.816
0.8000	4.807
0.8166	4.800
0.8333	4.791
0.8500	4.785
0.8666	4.778
0.8833	4.772
0.9000	4.766
0.9166	4.756
0.9333	4.750
0.9500	4.744
0.9666	4.740
0.9833	4.734
1.0000	4.728
1.2000	4.655
1.4000	4.611
1.6000	4.576
1.8000	4.545
2.0000	4.516
2.2000	4.494
2.4000	4.478
2.6000	4.466
2.8000	4.453
3.0000	4.447
3.2000	4.434
3.4000	4.428
3.6000	4.425
3.8000	4.422
4.0000	4.415
4.2000	4.412
4.4000	4.409
4.6000	4.406
4.8000	4.399
5.0000	4.396
5.2000	4.396
5.4000	4.393
5.6000	4.393
5.8000	4.390
6.0000	4.384
6.2000	4.384
6.4000	4.384
6.6000	4.380

6.8000	3.400
7.0000	3.400
7.2000	3.400
7.4000	3.403
7.6000	3.400
7.8000	3.400
8.0000	3.400
8.2000	3.403
8.4000	3.403
8.6000	3.403
8.8000	3.403
9.0000	3.403
9.2000	3.403
9.4000	3.406
9.6000	3.406
9.8000	3.406
10.0000	3.406

Appendix I

Sensitive Receptor Survey

EDR Offsite Receptor Report

Fort Monmouth - Main Post
DPW Building 173
Fort Monmouth, NJ 07703

Inquiry Number: 0695816.1r

October 24, 2001

Environmental Data Resources, Inc.

***The* Source For Environmental Risk Management Data**

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-BEK

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	2
Census Map	3
Census Findings	4
Receptor Map	5
Map Findings	6
Records Searched/Data Currency Tracking Addendum	10

Thank you for your business
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer and Other Information

This Report contains information obtained from a variety of public and other sources and Environmental Data Resources, Inc. (EDR) makes no representation or warranty regarding the accuracy, reliability, quality, suitability, or completeness of said information or the information contained in this report. The customer shall assume full responsibility for the use of this report.
NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, EXPRESSED OR IMPLIED, SHALL APPLY AND EDR SPECIFICALLY DISCLAIMS THE MAKING OF SUCH WARRANTIES. IN NO EVENT SHALL EDR BE LIABLE TO ANYONE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES. COPYRIGHT (C) 1998 BY ENVIRONMENTAL DATA RESOURCES, INC. ALL RIGHTS RESERVED.

Unless otherwise indicated, all trademarks used herein are the property of Environmental Data Resources, Inc. or its affiliates.

EXECUTIVE SUMMARY

A search of available records was conducted by Environmental Data Resources, Inc. (EDR). The EDR Offsite Receptor Report provides information which may be used to comply with the Clean Air Act Risk Management Program 112-R. *"The rule requires that you estimate in the RMP residential populations within the circle defined by the endpoint for your worst-case and alternative release scenarios (i.e., the center of the circle is the point of release and the radius is the distance to the endpoint). In addition, you must report in the RMP whether certain types of public receptors and environmental receptors are within the circles."*

The address of the subject property, for which the search was intended, is:

FORT MONMOUTH - MAIN POST
DPW BUILDING 173
FORT MONMOUTH, NJ 07703

Distance Searched: 2.000 miles from subject property

RECEPTOR SUMMARY
An X indicates the presence of the receptor within the search radius.

Residential Population
Estimated population within search radius: 27117 persons.

Other Public Receptors

Type	Within Search Radius	Sites Total
Day Care Centers:	X	2
Medical Centers:		
Nursing Homes:		
Schools:	X	16
Hospitals:		
Arena:		
Prison:		

Environmental Receptors

Type	Within Search Radius	Sites Total
Federal Land:	X	1

CENSUS MAP - 0695816.1r



★ Target Property
Roads
Waterways
Census Tracts

TARGET PROPERTY:	Fort Monmouth - Main Post	CUSTOMER:	Versar, Inc.
ADDRESS:	DPW Building 173	CONTACT:	Audrey Romano
CITY/STATE/ZIP:	Fort Monmouth NJ 07703	INQUIRY #:	0695816.1r
LAT/LONG:	40.3124 / 74.0431	DATE:	October 24, 2001 7:10 pm

CENSUS FINDINGS

Map ID	Tract Number	Total Population	Population in Radius	Total Area(sq.mi.)	Area in Radius(sq.mi.)
T1	8042.00	5713	3491.5	3.36	2.05
T2	8043.00	3096	2815.8	2.22	2.02
T3	8045.00	5299	1117.7	2.87	0.60
T4	8053.00	5289	3808.2	3.09	2.23
T5	8052.00	857	857.0	0.75	0.75
T6	8055.00	3510	282.0	0.72	0.06
T7	8044.00	1098	1098.0	0.10	0.10
T8	8049.00	638	638.0	0.35	0.35
T9	8050.01	4589	3870.4	1.00	0.84
T10	8050.02	3708	3708.0	1.22	1.22
T11	8057.00	2651	275.6	0.42	0.04
T12	8047.97	1713	1249.6	0.41	0.30
T13	8062.00	7690	3096.4	2.91	1.17
T14	8051.00	3152	808.3	2.95	0.76

RECEPTOR MAP - 0695816.1r



0 1/2 1 2 Miles

★ Target Property

Roads

Waterways

Environmental or Public Receptor

Federal Lands Linear Features

Federal Lands Area

TARGET PROPERTY:	Fort Monmouth - Main Post	CUSTOMER:	Versar, Inc.
ADDRESS:	DPW Building 173	CONTACT:	Audrey Romano
CITY/STATE/ZIP:	Fort Monmouth NJ 07703	INQUIRY #:	0695816.1r
LAT/LONG:	40.3124 / 74.0431	DATE:	October 24, 2001 7:11 pm

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
NA North 0-1/8 mi 0 NA	Name: ID: State FIPS: Feature:	Fort Monmouth Military Reservation 29120 34 Army DOD	US0029120 FED_LAND
1 SW 1/2-1 mi 2889 Higher	Name: ID: Site Type: Latitude: Longitude:	Steelman School 882575 school 40.30700 -74.05000	GNS0930612 GNIS_SCH
A2 SE 1/2-1 mi 3199 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	WOLF HILL E.S. 341212004074 55 WOLFHILL AVE OCEANPORT, NJ 07757 53021 732-542-0683 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 04	341212004074 CCD
A3 ESE 1/2-1 mi 3570 Higher	Name: ID: Site Type: Latitude: Longitude:	Oceanport School 882531 school 40.30700 -74.03000	GNS0927961 GNIS_SCH
4 SSW 1/2-1 mi 4873 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	MEADOWBROOK E.S. 340441003772 65 WYCKOFF ROAD EATONTOWN, NJ 07724 52913 732-935-3337 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 06	340441003772 CCD
5 East 1-2 mi 5564 Higher	Name: ID: Site Type:	Lil' Squan University 585451108 Daycare ctr	DAY1045371 DAYCARE

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
6 SE 1-2 mi 7721 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	SHORE REGIONAL H.S. 341494004100 132 STATE ROUTE 36 WEST LONG BRANCH, NJ 07764 53038 732-222-9300 Urban Fringe of Large City Regular Elementary and Secondary Schools High MONMOUTH 09 12	341494004100 CCD
7 NW 1-2 mi 7863 Higher	Name: ID: Site Type: Latitude: Longitude:	Shrewsbury School 882572 school 40.32800 -74.06000	GNS0930190 GNIS_SCH
8 SW 1-2 mi 7939 Higher	Name: ID: Site Type: Latitude: Longitude:	Vetter School 882586 school 40.29700 -74.06000	GNS0931468 GNIS_SCH
9 NW 1-2 mi 8305 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	SHREWSBURY E.S. 341497004102 20 OBRE PLACE SHREWSBURY, NJ 07702 53039 732-747-0882 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 08	341497004102 CCD
B10 SW 1-2 mi 8935 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	MARGARET L. VETTER E.S. 340441003768 3 GRANT AVENUE EATONTOWN, NJ 07724 52911 732-935-3330 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 06	340441003768 CCD

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
B11 SW 1-2 mi 8947 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	MEMORIAL E.S. 340441003770 7 GRANT AVENUE EATONTOWN, NJ 07724 52912 732-935-3321 Urban Fringe of Large City Regular Elementary and Secondary Schools Middle MONMOUTH 07 08	340441003770 CCD
C12 North 1-2 mi 8964 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	MARKHAM PLACE E.S. 340879003898 99 MARKHAM PL LITTLE SILVER, NJ 07739 52955 732-741-7112 Urban Fringe of Large City Regular Elementary and Secondary Schools Middle MONMOUTH 05 08	340879003898 CCD
C13 North 1-2 mi 9284 Higher	Name: ID: Site Type: Latitude: Longitude:	Little Silver School 882493 school 40.33800 -74.04000	GNS0926346 GNIS_SCH
14 NNE 1-2 mi 9362 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	POINT ROAD E.S. 340879003900 357 LITTLE SILVER POINT RD LITTLE SILVER, NJ 07739 52956 732-741-4022 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 04	340879003900 CCD
15 ESE 1-2 mi 9934 Higher	Name: ID: Site Type:	The Gingerbread House 585451085 Daycare ctr	DAY1045378 DAYCARE

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
16 ENE 1-2 mi 10233 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	MAPLE PLACE E.S. 341212004072 2 MAPLE PL OCEANPORT, NJ 07757 53020 732-229-0267 Urban Fringe of Large City Regular Elementary and Secondary Schools Middle MONMOUTH 05 08	341212004072 CCD
17 SE 1-2 mi 10270 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	FRANK ANTONIDES E.S. 341749004148 135 LOCUST AVENUE WEST LONG BRANCH, NJ 07764 53055 732-222-5080 Urban Fringe of Large City Regular Elementary and Secondary Schools Middle MONMOUTH 04 08	341749004148 CCD
18 SE 1-2 mi 10333 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade: Highest Grade:	WEST LONG BRANCH PRIMARY 341749006107 20 PARKER ROAD WEST LONG BRANCH, NJ 07764 53056 732-222-6500 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 03	341749006107 CCD

RECORDS SEARCHED/DATA CURRENCY TRACKING

CENSUS
Source: U.S. Census Bureau
Telephone: 301-457-4100
1990 U.S. Census data was used to estimate residential population following these EPA guidelines:
"Census data are presented by Census tract. If your circle covers only a portion of the tract, you should develop an estimate for that portion...Determine the population density per square mile (total population of the Census tract divided by the number of square miles in the tract) and apply that density figure to the number of square miles within your circle."

FED_LAND: Federal Lands
Source: USGS
Telephone: 703-648-5094
Federal lands data. Includes data from several Federal land manangement agencies, including Fish and Wildlife Service, Bureau of Land Management, National Park Service, and Forest Service. Includes National Parks, Forests, Monuments; Wildlife Sanctuaries, Preserves, Refuges; Federal Wilderness Areas.
Date of government version: 09/09/97.

HCFA: Provider of Services Listing
Source: The Health Care Financing Administration
Telephone: 410/786-3000
A listing of hospitals with Medicare provider number, produced by The Health Care Financing Administration (HCFA), a federal agency within the U.S. Department of Health and Human Services.
HCFA runs the Medicare and Medicaid programs.
Date of government version: 06/01/98.

CCD: Common Core of Data
Source: National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
The Common Core of Data (CCD) is the National Center for Education Statistics' primary database on elementary and secondary public education in the United States. CCD is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Date of government version: 1995-96.

GNIS: Geographic Names Information System
Source: USGS
Telephone: 703-648-5094
The Geographic Names Information System (GNIS), developed by the USGS in cooperation with the U.S. Board on Geographic Names (BGN), contains information about almost 2 million physical and cultural geographic features in the United States. The GNIS is our Nation's official repository of domestic geographic names information.
Date of government version: 03/01/98.

PRV_SCH: Private Schools
EDR indicates the location of buildings and facilities - private schools - where individuals who are public receptors are likely to be located.

DAYCARE: Daycare Centers
EDR indicates the location of buildings and facilities - daycare centers - where individuals who are public receptors are likely to be located.

MEDCEN: Medical Centers
EDR indicates the location of buildings and facilities - medical centers - where individuals who are public receptors are likely to be located.

NURSING: Nursing Homes
EDR indicates the location of buildings and facilities - nursing homes - where individuals who are public receptors are likely to be located.

ARENA: Arenas
EDR indicates the location of buildings and facilities - arenas - where individuals who are public receptors are likely to be located.

PRISON: Prisons
EDR indicates the location of buildings and facilities - prisons - where individuals who are public receptors are likely to be located.

BOP: Bureau of Prisons Facilities
Source: Federal Bureau of Prisons
List of facilities operated by the Federal Bureau of Prisons.
Date of government version: 07/01/98.

Appendix J

Well Survey and Well Search Summary

Hitlist as of 08-27-2001

2900961 Redacted - Privacy Act Redacted - Privacy Act AMEI 50 4 D ... ... 38 25 10-27-1953 401920 740106 ... ... WR1

2901016 Redacted - Privacy Act Redacted - Privacy Act GREH 150 15 D ... ... 38 25 12-24-1953 401839 740240 ... ... WR1

2901400 Redacted - Privacy Act Redacted - Privacy Act TICE 54 8 D ... ... 25 25 04-19-1955 401920 740040 ... ... WR1

2902505 Redacted - Privacy Act Redacted - Privacy Act TICE 100 10 D ... ... 46 25 10-10-1957 401906 740226 ... ... WR1

2902774 Redacted - Privacy Act Redacted - Privacy Act TICE 124 50 D ... ... 46 25 09-22-1958 401933 740226 ... ... WR1

2903015 Redacted - Privacy Act Redacted - Privacy Act TICE 60 50 G ... ... 38 25 08-20-1959 401906 740119 ... ... WR1

2903369 Redacted - Privacy Act Redacted - Privacy Act OSBH 100 6 D ... ... 11 25 08-08-1960 401933 740213 ... ... WR1

2904271 Redacted - Privacy Act Redacted - Privacy Act TICE 60 10 D ... ... 38 25 02-13-1964 401933 740213 ... ... WR1

2904513 RUMSON COUNTRY CLUB 2914446 LAUM 350 600 D ... ... 42 25 10-16-1964 401906 740133 ... ... 00001916.P75 00001918.P75 WR1

2904519 Redacted - Privacy Act Redacted - Privacy Act AMEI 60 5 D ... ... 38 25 10-15-1964 401933 740053 ... ... WR1

2904782 Redacted - Privacy Act Redacted - Privacy Act PETE 50 12 D ... ... 38 25 08-05-1965 401839 740240 ... ... WR1

2904815 PETE & EMIL BLDRS 2914456 PETE 50 7 D 25-26-27 72R 38 25 09-10-1965 401906 740053 ... ... WR1

2904817 Redacted - Privacy Act Redacted - Privacy Act PETE 50 7 D 28-29-30 ... 38 25 09-10-1965 401853 740040 ... ... Redacted - Privacy Act Redacted - Privacy Act WR1

2904855 PETE 50 7 D ... ... 38 25 10-15-1965 401853 740040 ... ... WR1

2905009 Redacted - Privacy Act Redacted - Privacy Act TICE 70 15 D ... ... 53 25 03-21-1966 401853 740119 ... ... WR1

2905084 Redacted - Privacy Act Redacted - Privacy Act TRAD 50 10 D ... ... 38 25 05-31-1966 401933 740133 ... ... WR1

2905673 P.V.C. CONTAINER CRP 2913692 TICE 100 35 D ... ... 46 25 01-22-1969 401839 740226 ... ... WR1

2906131 Redacted - Privacy Act Redacted - Privacy Act PETE 70 10 D ... ... 38 25 12-18-1970 401906 740040 ... ... WR1

2906460 Redacted - Privacy Act Redacted - Privacy Act KAYE 50 10 D ... ... 38 25 04-25-1972 401906 740106 ... ... WR1

2906499 KLEINER BROS. CONST. 2914452 KAYE 50 10 D ... ... 11 25 05-22-1972 401920 740106 ... ... WR1

2906510 Redacted - Privacy Act Redacted - Privacy Act KAYE 50 10 D ... ... 38 25 06-07-1972 401839 740200 ... ... WR1

2906958 Redacted - Privacy Act Redacted - Privacy Act BAIN 85 10 D ... ... 38 25 04-18-1973 401933 740106 ... ... WR1

2907172 Redacted - Privacy Act Redacted - Privacy Act BAIN 85 10 D ... ... 38 25 09-05-1973 401933 740106 ... ... WR1

2907264 Redacted - Privacy Act Redacted - Privacy Act BAIN 50 10 D ... ... 38 25 10-18-1973 401933 740106 ... ... WR1

2908438 Redacted - Privacy Act Redacted - Privacy Act BAIN 60 10 D ... ... 38 25 08-03-1976 401853 740200 ... ... WR1

2908810 Redacted - Privacy Act Redacted - Privacy Act AMER 50 5 D ... ... 38 25 05-12-1977 401839 740146 ... ... WR1

2910282 Redacted - Privacy Act Redacted - Privacy Act PICK 80 12 D 150 11 38 25 09-11-1979 401920 740053 ... ... WR1

2911063 FORT MONMOUTH/US ARM 2913666 HAND 25 0 M ... ... 11 25 03-31-1981 401906 740213 ... ... WR1

Hitlist as of 08-27-2001

```
2911064 FORT MONMOUTH/US ARM 2913666 HAND 25 0 M ... ... 11 25 03-31-1981 401906 740213 ... ..
. ... ... ... ... ... ... ... ... ... ... WR1
2911065 FORT MONMOUTH/US ARM 2913666 HAND 25 0 M ... ... 11 25 03-31-1981 401906 740213 ... ..
. ... ... ... ... ... ... ... ... ... ... WR1
2911066 FORT MONMOUTH/US ARM 2913666 HAND 25 0 M ... ... 11 25 03-31-1981 401906 740213 ... ..
. ... ... ... ... ... ... ... ... ... ... WR1
2911067 FORT MONMOUTH/US ARM 2913666 HAND 25 0 M ... ... 11 25 03-31-1981 401906 740213 ... ..
. ... ... ... ... ... ... ... ... ... ... WR1
2911068 FORT MONMOUTH/US ARM 2913666 HAND 25 0 M ... ... 11 25 03-31-1981 401906 740213 ... ..
. ... ... ... ... ... ... ... ... ... ... WR1
2911772 Redacted - Privacy Act Redacted - Privacy Act ENGI 100 10 H 74 21 38 25 12-22-1981 401906 740240 ... ... .
.. ... ... ... ... ... ... ... ... ... ... WR1
2911855 Redacted - Privacy Act Redacted - Privacy Act PICK 175 12 1 26-1A 70 38 25 02-17-1982 401920 740053 ... ... ...
... ... ... ... ... ... ... ... ... ... WR1
2912553 SHELL OIL COMPANY 2914447 HAND 25 0 M 25 110 38 25 01-21-1983 401846 740152 ... ... ..
. ... ... ... ... ... ... ... ... ... WR1
2912554 SHELL OIL COMPANY 2914447 HAND 25 0 M 25 110 38 25 01-21-1983 401846 740152 ... ... ..
. ... ... ... ... ... ... ... ... ... WR1
2912555 SHELL OIL COMPANY 2914447 HAND 25 0 M 25 110 38 25 01-21-1983 401846 740152 ... ... ..
. ... ... ... ... ... ... ... ... ... WR1
2912598 Redacted - Privacy Act Redacted - Privacy Act AQUA 80 12 R 20 2 38 25 02-01-1983 401832 740126 ... N ... ... ..
. ... ... ... ... ... ... ... ... WR1
2912785 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912786 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912787 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912788 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912789 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912790 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912792 NJDEP 2913635 HAND 10 0 M 142A 30 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912793 NJDEP 2913635 HAND 10 10 M 44-5 54 23 25 06-02-1983 401939 740219 ... N ... ... ... ..
. ... ... ... ... ... ... WR1
2912794 NJDEP 2913635 HAND 10 0 M 44-5 54 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912795 NJDEP 2913635 HAND 10 0 M 44-5 54 23 25 06-02-1983 401939 740219 ... N ... ... ... ...
... ... ... ... ... ... WR1
2912796 NJDEP 2913635 HAND 10 0 M 42 54 23 25 06-02-1983 401939 740219 ... N ... ... ... ... .
.. ... ... ... ... ... WR1
2912797 NJDEP 2913635 HAND 10 0 M 42 54 23 25 06-02-1983 401939 740219 ... N ... ... ... ... .
.. ... ... ... ... ... WR1
2912798 NJDEP 2913635 HAND 10 0 M 42 54 23 25 06-02-1983 401939 740219 ... N ... ... ... ... .
.. ... ... ... ... ... WR1
2913696 BROADWELL REALTY SER 2913635 NEPL 10 0 M ... ... 16 25 08-05-1984 401939 740219 ... N
... ... ... ... ... ... ... ... ... ... WR1
2913697 BROADWELL REALTY SER 2913635 NEPL 10 0 M ... ... 16 25 08-05-1984 401939 740219 ... N
... ... ... ... ... ... ... ... ... ... WR1
2913698 BROADWELL REALTY SER 2913635 NEPL 25 0 M ... ... 16 25 08-05-1984 401939 740219 ... N
... ... ... ... ... ... ... ... ... ... WR1
2913825 N.J. TRANSIT CORP 2914474 GEOR 35 0 M ... ... 23 25 06-20-1985 401819 740152 ... ... .
.. ... ... ... ... ... ... ... ... ... WR1
```

Hitlist as of 08-27-2001

2913978 NEW JERSEY TRANSIT 2914461 GEOR 35 0 M 25 25 06-20-1985 401920 740040 07-22-19
85 ... ... WR1
2914157 Redacted - Privacy Act & Redacted - Privacy Act AJWD 60 8 D 20 1 38 25 09-15-1984 401846 740139 ... N ...
... ... WR1
2914244 Redacted - Privacy Act Redacted - Privacy Act PETE 120 10 D 1&2 106 38 25 10-05-1984 401819 740219 ... N ...
... ... WR1
2914980 Redacted - Privacy Act Redacted - Privacy Act AJWD 200 8 R 1 53 09 25 05-05-1985 401912 740246 10-23-1985 N ...
... ... WR1
2915005 Redacted - Privacy Act Redacted - Privacy Act TIGE 80 10 D 18 1 38 25 07-18-1985 401846 740059 07-25-1985 N ..
. ... WR1
2915421 Redacted - Privacy Act Redacted - Privacy Act ENGI 100 10 D 14 18 38 25 09-20-1985 401859 740046 10-08-1986 N
... ... WR1
2916628 GLOBE PETROLEUM INC. 2913634 ONTE 12 0 M 1423 30 23 25 06-11-1986 401939 740232 06-30-
1986 N WR1
2916629 GLOBE PETROLEUM INC. 2913634 ONTE 12 0 M 1423 30 23 25 06-11-1986 401939 740232 06-30-
1986 N WR1
2916630 GLOBE PETROLEUM INC. 2913634 ONTE 12 0 M 1423 30 23 25 06-11-1986 401939 740232 06-30-
1986 N WR1
2919474 Redacted - Privacy Act Redacted - Privacy Act PICK 200 15 D 8 108 38 25 10-26-1987 401920 740133 05-31-1988 .
.. .. WR1
2919537 Redacted - Privacy Act Redacted - Privacy Act PICK 60 15 D 6 66 38 25 11-09-1987 401920 740053 03-07-1988 ...
... ... WR1
2919952 Redacted - Privacy Act Redacted - Privacy Act PICK 80 15 D 7 2.01 38 25 02-16-1988 401920 740040 08-18-198
8 ... ... WR1
2920242 JERSEY CENTRAL POWER 2914482 ENGI 80 150 R 6.01(6A) 309 25 25 04-12-1988 401839 740106
02-09-1989 ... ... WR1
2920243 JERSEY CENTRAL POWER 2914482 ENGI 15 0 Z 6.02(6B) 309 25 25 04-12-1988 401839 740106 0
2-09-1989 ... ... WR1
2920244 JERSEY CENTRAL POWER 2914482 ENGI 15 0 Z 6.02(6B) 309 25 25 04-12-1988 401839 740106 0
2-09-1989 ... ... WR1
2920245 JERSEY CENTRAL POWER 2914482 ENGI 60 15 Z 6.01(6A) 309 25 25 04-12-1988 401839 740106
02-09-1989 ... ... WR1
2920246 JERSEY CENTRAL POWER 2914482 ENGI 15 0 Z 6.01(6A) 309 25 25 04-12-1988 401839 740106 0
2-09-1989 ... ... WR1
2920248 JERSEY CENTRAL POWER 2914482 ENGI 15 0 Z 6.01(6A) 309 25 25 04-12-1988 401839 740106 0
2-09-1989 ... ... WR1
2921780 Redacted - Privacy Act Redacted - Privacy Act ENDR 190 20 G 1 & 2 98 38 25 11-10-1988 401853 740133 01-20-1989
... ... WR1
2922063 Redacted - Privacy Act Redacted - Privacy Act COLN 100 15 R 17 8 38 25 02-10-1989 401920 740053 03-08-1989 ... ...
... ... WR1
2922181 Redacted - Privacy Act Redacted - Privacy Act PICK 150 15 G 2 84 23 25 02-09-1989 401933 740133 04-10-198
9 ... ... 15 ALWIN TERRACE 03-27-1989 192 2! Redacted - Privacy Act 1040 ... ... WR1
2922236 Redacted - Privacy Act Redacted - Privacy Act PICK 60 15 D 4 67 38 25 02-28-1989 401920 740053 11-22-19
89 ... ... SHREWSBURY AVENUE 09-06-1989 191 15 Redacted - Privacy Act J1040 ... ... WR1
2922526 Redacted - Privacy Act Redacted - Privacy Act PICK 190 15 G 10 83 23 25 04-07-1989 401933 740133 07-26-19
89 ... ... 30 ALWIN TERRACE 06-02-1989 173 20 Redacted - Privacy Act J1040 ... ... WR1
2922549 BRIDGEWATER TOWNHOUS 2914473 TIGE 180 25 G 3/1 99/100 38 25 04-12-1989 401839 740133 0
6-08-1989 ... ... 57 BRIDGEWATER DRIVE 05-30-1989 180 25 Redacted - Privacy Act 1393 ... ... WR
1
2923608 Redacted - Privacy Act Redacted - Privacy Act RAYS 200 12 D 8 66 45 25 10-18-1989 401933 740226 03-12-1
993 ... ... 1 92 SUNNYBANK DRIVE 11-29-1989 197 12 Redacted - Privacy Act M0699 ... ... WR1
2923677 US ARMY 2913665 MYBL 30 0 M TAXEXEMP TAX 38 25 11-03-1989 401906 740226 03-12-1990 ...
... 1 SALTZMAN AVENUE 11-02-1989 15 0 Redacted - Privacy Act J1472 ... ... WR1
2923678 US ARMY 2913665 MYBL 30 0 M TAXEXEMP TAX 38 25 11-03-1989 401906 740226 03-12-1990 ...
... 2 SALTZMAN AVENUE 11-02-1989 17 0 Redacted - Privacy Act J1472 ... ... WR1

Hitlist as of 08-27-2001

2923679 US ARMY 2913665 MYBL 30 0 M TAXEXEMP TAX 38 25 11-03-1989 401906 740226 03-12-1990 ... ... 3 SALTZMAN AVENUE 11-02-1989 15 0 Redacted - Privacy Act J1472 ... ... WR1

2923680 US ARMY 2913665 MYBL 30 0 M TAXEXEMP TAX 38 25 11-03-1989 401906 740226 03-12-1990 ... ... 4 SALTZMAN AVENUE 11-02-1989 20 0 Redacted - Privacy Act J1472 ... ... WR1

2924557 Redacted - Privacy Act Redacted - Privacy Act TIGE 60 15 D 6-7 67 38 25 04-10-1990 401920 740053 05-11-1990 ... ... SHREWSBURY AVENUE 04-18-1990 80 10 Redacted - Privacy Act M0987 ... ... WR1

2924639 US ARMY 2913665 MYBL 30 0 M NA NA 38 25 04-27-1990 401906 740226 07-12-1990 ... ... 176 RIVERSIDE DRIVE 05-01-1990 15 0 Redacted - Privacy Act J1472 ... ... WR1

2924640 US ARMY 2913665 MYBL 30 0 M NA NA 38 25 04-27-1990 401906 740226 07-12-1990 ... ... 176 RIVERSIDE DRIVE 05-01-1990 14 0 Redacted - Privacy Act J1472 ... ... WR1

2924953 SHELL OIL CORP. 2914447 KAVL 10 0 M 25 110 38 25 06-27-1990 401853 740200 09-24-1990 ... ... GT01 P.O. BOX 1703 07-12-1990 12 0 Redacted - Privacy Act M1328 ... ... WR1

2924954 SHELL OIL CORP. 2914447 KAVL 10 0 M 25 110 38 25 06-27-1990 401853 740200 09-24-1990 ... ... GT02 P.O. BOX 1703 07-12-1990 12 0 Redacted - Privacy Act M1328 ... ... WR1

2924955 SHELL OIL CORP. 2914447 KAVL 10 0 M 25 110 38 25 06-27-1990 401853 740200 09-24-1990 ... ... GT03 P.O. BOX 1703 07-12-1990 12 0 Redacted - Privacy Act M1328 ... ... WR1

2924956 SHELL OIL CORP. 2914447 KAVL 10 0 M 25 110 38 25 06-27-1990 401853 740200 09-24-1990 ... ... GT04 P.O. BOX 1703 07-12-1990 11 0 Redacted - Privacy Act M1328 ... ... WR1

2925357 Redacted - Privacy Act Redacted - Privacy Act Redacted - Privacy A 20 0 M 9-18B 88 38 25 10-12-1990 401839 740213 10-19-1990 ... ... 1 HIGH TEC 10-15-1990 19 0 Redacted - Privacy Act M1088 ... ... WR1

2925453 CONCURRENT COMPUTER 2914454 EMPI 15 0 M 4 127 38 25 11-07-1990 401906 740119 12-17-1990 ... S MW-1 2 CRESCENT PLACE 11-14-1990 12 0 Redacted - Privacy Act J1276 ... ... WR1

2925454 CONCURRENT COMPUTER 2914454 EMPI 15 0 M 4 127 38 25 11-07-1990 401906 740119 12-17-1990 ... S MW-2 2 CRESCENT PLACE 11-14-1990 12 0 Redacted - Privacy Act J1276 ... ... WR1

2925455 CONCURRENT COMPUTER 2914454 EMPI 15 0 M 4 127 38 25 11-07-1990 401906 740119 12-17-1990 ... S MW-3 2 CRESCENT PLACE 11-13-1990 12 0 Redacted - Privacy Act J1276 ... ... WR1

2925456 CONCURRENT COMPUTER 2914454 EMPI 15 0 M 4 127 38 25 11-07-1990 401906 740119 12-17-1990 ... S MW-4 2 CRESCENT PLACE 11-15-1990 12 0 Redacted - Privacy Act J1276 ... ... WR1

2925457 CONCURRENT COMPUTER 2914454 EMPI 15 0 M 4 127 38 25 11-07-1990 401906 740119 12-17-1990 ... S MW-5 2 CRESCENT PLACE 11-13-1990 15 0 Redacted - Privacy Act J1276 ... ... WR1

2925506 Redacted - Privacy Act Redacted - Privacy Act KAYE 70 10 1 19 2 38 25 11-20-1990 401906 740040 11-27-1990 ... ... BRANCHPORT AVENUE 11-27-1990 100 10 ... ... WR1

2926778 U S ARMY 2914414 TABA 40 0 M N/A N/A 38 25 08-29-1991 401946 740200 10-29-1991 N ... ... EVANS AREA 09-03-1991 31 0 Redacted - Privacy Act J1530 ... ... WR1

2926925 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 1 BLDG 167 ... 13 0 Redacted - Privacy Act M1066 ... ... WR1

2926926 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 2 BLDG 167 10-01-1991 13 0 Redacted - Privacy Act M1066 ... ... WR1

2926927 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 3 BLDG 167 10-01-1991 13 0 Redacted - Privacy Act M1066 ... ... WR1

2926928 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 4 BLDG 167 ... 12 0 Redacted - Privacy Act M1066 ... ... WR1

2926929 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 3 BLDG 167 10-03-1991 12 0 Redacted - Privacy Act M1066 ... ... WR1

2926930 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 1 BLDG 167 10-02-1991 12 0 Redacted - Privacy Act M1066 ... ... WR1

2926931 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-24-1991 401906 740200 10-29-1991 N ... 2 BLDG 167 10-02-1991 11 0 Redacted - Privacy Act M1066 ... ... WR1

2926938 U.S. ARMY FORT MONMO 2914441 TABA 20 0 M N/A N/A 38 25 09-25-1991 401920 740200 10-29-1991 N ... 1 BLDG 167 10-08-1991 12 0 Redacted - Privacy Act J1530 ... ... WR1

2926939 U.S. ARMY FORT MONMO 2914441 TABA 20 0 M N/A N/A 38 25 09-25-1991 401920 740200 10-29-1991 N ... 1 BLDG 167 10-04-1991 14 0 Redacted - Privacy Act M1066 ... ... WR1

2926940 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-25-1991 401906 740200 10-29-1991 N ... 1 BLDG 167 10-07-1991 13 0 Redacted - Privacy Act M1066 ... ... WR1

2926941 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-25-1991 401906 740200 10-29-1991 N ... 2 BLDG 167 10-07-1991 14 0 Redacted - Privacy Act M1066 ... ... WR1

Hitlist as of 08-27-2001

2926942 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 09-25-1991 401906 740200 10-29-1991 N ... 3 BLDG 167 10-04-1991 15 0 Redacted - Privacy Act M1066 ... ... WR1

2928031 U S ARMY 2914444 TABA 20 25 E N/A N/A 38 25 05-14-1992 401906 740200 06-25-1992 ... . R-1 EVANS AREA BLDG 05-20-1992 20 0 Redacted - Privacy Act M1289 ... ... WR1

2928907 U.S. ARMY FORT MONMO 2914444 TABA 20 0 M N/A N/A 38 25 10-13-1992 401906 740200 11-05-1992 ... ... BLDG 167 10-14-1992 15 0 Redacted - Privacy Act J1530 ... ... WR1

2928992 U.S. ARMY 2914441 GARS 20 0 M 1 3 38 25 10-27-1992 401920 740200 11-06-1992 ... ... 513 MOTOR POOL 10-30-1992 15 0 Redacted - Privacy Act J1098 ... ... WR1

2928993 U.S. ARMY 2914441 GARS 20 0 M 1 3 38 25 10-27-1992 401920 740200 11-06-1992 ... ... 513 MOTOR POOL 10-30-1992 15 0 Redacted - Privacy Act J1098 ... ... WR1

2928994 U.S. ARMY 2914441 GARS 20 0 M 1 3 38 25 10-27-1992 401920 740200 11-06-1992 ... ... 513 MOTOR POOL 10-30-1992 15 0 Redacted - Privacy Act J1098 ... ... WR1

2928995 U.S. ARMY 2914441 GARS 20 0 M 1 3 38 25 10-27-1992 401920 740200 11-06-1992 ... ... 513 MOTOR POOL 11-03-1992 15 0 Redacted - Privacy Act J1098 ... ... WR1

2929739 US ARMY - FT. MONMOU 2914442 DRCT 20 0 M N/A N/A 38 25 06-03-1993 401920 740146 01-10-1994 ... ... 1 BLDG 108 06-13-1993 13 0 Redacted - Privacy Act M1051 ... ... WR1

2929740 US ARMY - FT. MONMOU 2914442 DRCT 20 0 M N/A N/A 38 25 06-03-1993 401920 740146 01-10-1994 ... ... 2 BLDG 108 06-14-1993 13 0 Redacted - Privacy Act M1051 ... ... WR1

2929741 US ARMY - FT. MONMOU 2914442 DRCT 20 0 M N/A N/A 38 25 06-03-1993 401920 740146 01-10-1994 ... ... 3 BLDG 108 06-13-1993 13 0 Redacted - Privacy Act M1051 ... ... WR1

2930322 Redacted - Privacy Act 2914464 GILE 100 20 1 28 2 38 25 10-12-1993 401906 740040 12-07-1993 ... ... 3 MAPLE PLACE 11-18-1993 197 20 Redacted - Privacy Act M1121 ... ... WR1

2930957 U S ARMY FORT MONMOU 2914444 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740200 07-27-1994 ... ... 07-06-1994 15 0 Redacted - Privacy Act J1421 ... ... WR1

2930961 U S ARMY FORT MONMOU 2913667 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401853 740240 07-27-1994 ... ... MW-1 ... 07-15-1994 13 0 Redacted - Privacy Act J1421 ... ... WR1

2930962 U S ARMY FORT MONMOU 2914444 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740200 07-27-1994 ... ... MW-1 ... 07-08-1994 15 0 Redacted - Privacy Act J1421 ... ... WR1

2930963 U S ARMY FORT MONMOU 2914444 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740200 07-27-1994 ... ... 07-07-1994 15 0 Redacted - Privacy Act J1421 ... ... WR1

2930964 U S ARMY FORT MONMOU 2914444 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740200 07-27-1994 ... ... MW-1 ... 07-06-1994 15 0 Redacted - Privacy Act J1421 ... ... WR1

2930973 U S ARMY FORT MONMOU 2913664 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740240 07-27-1994 ... ... MW-7 ... 07-12-1994 13 0 Redacted - Privacy Act J1421 ... ... WR1

2930974 U S ARMY FORT MONMOU 2913664 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740240 07-27-1994 ... ... MW-8 ... 07-12-1994 13 0 Redacted - Privacy Act J1421 ... ... WR1

2930975 U S ARMY FORT MONMOU 2913661 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401920 740240 07-29-1994 ... ... MW-3 ... 07-11-1994 13 0 Redacted - Privacy Act J1421 ... ... WR1

2930976 U S ARMY FORT MONMOU 2913661 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401920 740240 07-29-1994 ... ... MW-66 ... 07-14-1994 13 0 Redacted - Privacy Act J1421 ... ... WR1

2930980 U S ARMY FORT MONMOU 2913664 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401906 740240 07-27-1994 ... ... MW-1 ... 07-13-1994 13 0 Redacted - Privacy Act J1421 ... ... WR1

2931158 SHELL OIL COMPANY 2914447 KAVL 25 0 M 25 110 38 25 05-04-1994 401853 740200 06-29-1994 ... ... GT102 1 MAIN STREET 06-01-1994 12 0 Redacted - Privacy Act M1328 ... ... WR1

2931159 SHELL OIL COMPANY 2914447 KAVL 25 0 M 25 110 38 25 05-04-1994 401853 740200 06-29-1994 ... ... GT101 1 MAIN STREET 06-01-1994 12 0 Redacted - Privacy Act M1328 ... ... WR1

2931440 Redacted - Privacy Act 2914428 FUNK 200 20 G 5 35 38 25 06-09-1994 401933 740106 08-10-1994 ... ... 548 SEAVANCA DRIVE 06-30-1994 195 20 Redacted - Privacy Act J1450 ... ... WR1

2931552 Redacted - Privacy Act 2914449 PARE 30 10 G 5 139 38 25 06-30-1994 401853 740133 08-29-1994 ... ... 34 WELFHILL AVENUE 07-13-1994 35 8 Redacted - Privacy Act J1540 ... ... WR1

2931772 US ARMY FORT MONMOUT 2913664 TYRE 15 0 M ... ... 38 25 08-03-1994 401906 740240 10-13-1994 ... ... MW1 SELFM-PW-EV 09-14-1994 12.5 ... Redacted - Privacy Act J1421 ... ... WR1

2931773 US ARMY FORT MONMOUT 2913664 TYRE 15 0 M ... ... 38 25 08-03-1994 401906 740240 10-13-1994 ... ... MW1 SELFM-PW-EV 09-14-1994 10 ... Redacted - Privacy Act J1421 ... ... WR1

2931774 US ARMY FORT MONMOUT 2913664 TYRE 15 0 M ... ... 38 25 08-03-1994 401906 740240 10-13-1994 ... ... MW1 SELFM-PW-EV 09-15-1994 13 ... Redacted - Privacy Act J1421 ... ... WR1

Hitlist as of 08-27-2001

2931775 US ARMY FORT MONMOUT 2913664 TYRE 15 0 M ... ... 38 25 08-03-1994 401906 740240 10-13-1994 ... ... MW1 SELFM-PW-EV 09-22-1994 12 ... Redacted - Privacy Act J1421 ... ... WR1

2932576 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW16 BLDF 167 01-04-1995 15 0 Redacted - Privacy Act 1624 ... ... WR1

2932577 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW17 BLDF 167 01-11-1995 15 0 Redacted - Privacy Act J1624 ... ... WR1

2932578 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW18 BLDF 167 01-11-1995 15 0 Redacted - Privacy Act J1624 ... ... WR1

2932579 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW19 BLDF 167 01-04-1995 15 0 Redacted - Privacy Act J1624 ... ... WR1

2932580 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW20 BLDF 167 01-04-1995 15 0 Redacted - Privacy Act J1455 ... ... WR1

2932581 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW21 BLDF 167 01-04-1995 16 0 Redacted - Privacy Act J1624 ... ... WR1

2932582 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... MW22 BLDF 167 12-15-1994 15 0 Redacted - Privacy Act J1455 ... ... WR1

2932583 U. S. ARMY (DIRECTOR 2913668 ANDE 25 0 M 1,1,8.01 3,53,54 11 25 11-29-1994 401853 740226 04-20-1995 ... ... B5 BLDF 167 01-11-1995 15 0 Redacted - Privacy Act J1455 ... ... WR1

2933754 US ARMY - FORT MONMO 2914444 PARE 20 0 M N/A N/A 38 25 07-19-1995 401906 740200 10-02-1995 ... ... 1122 BLDG 1122 09-12-1995 15 0 Redacted - Privacy Act J1540 ... ... WR1

2933755 US ARMY - FORT MONMO 2914444 PARE 20 0 M N/A N/A 38 25 07-19-1995 401906 740200 11-08-1995 ... ... 1122MW1 FT. MONMOUTH 09-12-1995 18 0 Redacted - Privacy Act J1540 ... ... WR1

2933989 US ARMY - FT. MONMOU 2913661 PARE 20 0 M ... ... 38 25 08-18-1995 401920 740240 09-18-1995 ... ... MW296-4 BLDG. 167 DEH ENV. 09-12-1995 10 (Redacted - Privacy Act 1540 ... ... WR1

2934702 US ARMY FORT MONMOUT 2914442 TRAC 40 0 B 55 240 11 25 12-15-1995 401920 740146 01-17-1996 ... ... BLDG 286 ROOM 012 AMSEL 12-18-1995 ... 0 Redacted - Privacy Act J1556 ... ... WR1

2934857 US ARMY FORT MONMOUT 2914442 KIRK 50 0 B 55 240 11 25 02-08-1996 401920 740146 03-11-1996 ... ... BLDG 286, RM 012, AMSEL, 03-01-1996 ... 0 Redacted - Privacy Act J1556 ... ... WR1

2935504 HOFFMAN JR., JAMES & 2914464 PICK 70 15 D 11.01 66 38 25 06-05-1996 401906 740040 07-15-1996 ... ... 532 SHREWSBURY AVE. 06-24-1996 70 12 Redacted - Privacy Act 3762 ... ... WR1

2935731 OAKHURST SERVICE CEN 2914484 LUTZ 25 0 M N/A N/A 37 25 07-17-1996 401826 740119 08-15-1996 ... ... MW#5 ROOSEVELT AVE. 08-08-1996 20 (Redacted - Privacy Act J1598 ... ... WR1

2935732 OAKHURST SERVICE CEN 2914484 LUTZ 25 0 M N/A N/A 37 25 07-17-1996 401826 740119 08-15-1996 ... ... MW#6 ROOSEVELT AVE. 08-08-1996 20 0 Redacted - Privacy Act J1598 ... ... WR1

2935833 I Redacted - Privacy Act Redacted - Privacy Act MRSI 15 0 M 5 13 38 25 08-02-1996 401920 740106 08-28-1996 ... ... W-1 42 HIAWATHA AVE. 08-26-1996 13 0 Redacted - Privacy Act J1297 ... ... WR1

2936864 Redacted - Privacy Ac Redacted - Privacy Act GILE 175 10 D 20 76 38 25 04-23-1997 401920 740119 08-28-1997 ... ... 431 DRIVEWAY 08-20-1997 165 20 Redacted - Privacy Act M1121 ... ... WR1

2936995 AMERCOM ENG CORP 2914484 LIPP 40 0 B N/A N/A 25 25 05-27-1997 401826 740119 09-10-1997 ... ... B1-B7 RT 36 07-18-1997 40 0 Redacted - Privacy Act M1292 ... ... WR1

2937878 WATERS EDGE TOWN HOM 2914447 MCCR 120 35 G 2.03 113 38 25 11-14-1997 401853 740200 04-16-1998 ... ... 4 OCEANPORT AVE. 02-03-1998 280 25 Redacted - Privacy Act J1602 ... ... WR1

2938172 Redacted - Privacy Act Redacted - Privacy Act PARE 30 0 M 41 139 38 25 02-11-1998 401826 740226 ... ... 1281 EATONTOWN BLVD. WR1

2938340 WEP INC. 2914453 PURE 100 20 G 8.01 61 38 25 03-18-1998 401920 740053 04-28-1998 ... ... SHAPEN WAY 04-19-1998 198 20 Redacted - Privacy Act 1384 ... ... WR1

2938652 Redacted - Privacy Act Redacted - Privacy Act PICK 60 15 G 16 93 38 25 05-14-1998 401920 740119 ... ... 6 BUNGALOW PLACE WR1

2938811 Redacted - Privacy Ac Redacted - Privacy Act PICK 60 15 G 1101 88 38 25 06-15-1998 401906 740106 ... ... 62 ASBURY AVE WR1

2939550 US ARMY - FT. MONMOU 2913695 STOT 300 0 H N/A N/A 11 25 10-21-1998 401826 740226 ... ... SELSM-EH-MC BLDG. 2700 ... ... WR1

29.14.4 52

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply
WELL RECORD

Permit No. 29-961
Application No. _____
County _____
29.14.452

Redacted - Privacy Act

1. OWNER _____ ADDRESS Port Au Peck
Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION S. Bank Shrewsbury Ave. N of Cayuga Ave
3. DATE COMPLETED 11/53 DRILLER C. Ray Travis
4. DIAMETER: Top 5 Inches Bottom 4 Inches TOTAL DEPTH 61 Feet
5. CASING: Type Welded 10' - 10" Surface Cemented Diameter _____ Inches Length _____ Feet
6. SCREEN: Type _____ Size of Opening .025" Diameter 2½ Inches Length 3 Feet
Range in Depth { Top 57 Feet Bottom 61 Feet Geologic Formation Black Sand
Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY No Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Oct Yield 2 Gallons per minute
Static water level before pumping 3 Feet below surface
Pumping level 54 feet below surface after _____ hours pumping
Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped BAILER How measured _____
Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
Type Red Jacket Submersible Capacity 2 Gallons per minute
How Driven _____ Horse Power ½ R.P.M. 3500
Depth of pump in well _____ Feet Depth of Foot piece in well 56½ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____
10. USED FOR Domestic AMOUNT { Average 200 ? Gallons Daily Maximum _____ Gallons Daily
11. QUALITY OF WATER 350 ppm Salt Sample: Yes _____ No. _____
Taste good Odor _____ Color _____ Temperature _____ °F
12. LOG 20-30 Coarse Brown Sand (Give details on back of sheet or on separate sheet) Are samples available? No
30-57 Green clay, sand
13. SOURCE OF DATA 57-62 Black sand.
14. DATA OBTAINED BY Travis DATE 3/30/54

(Note: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.691

Form 87-5M

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply

Permit No. 29-1016
Application No. _____
County _____

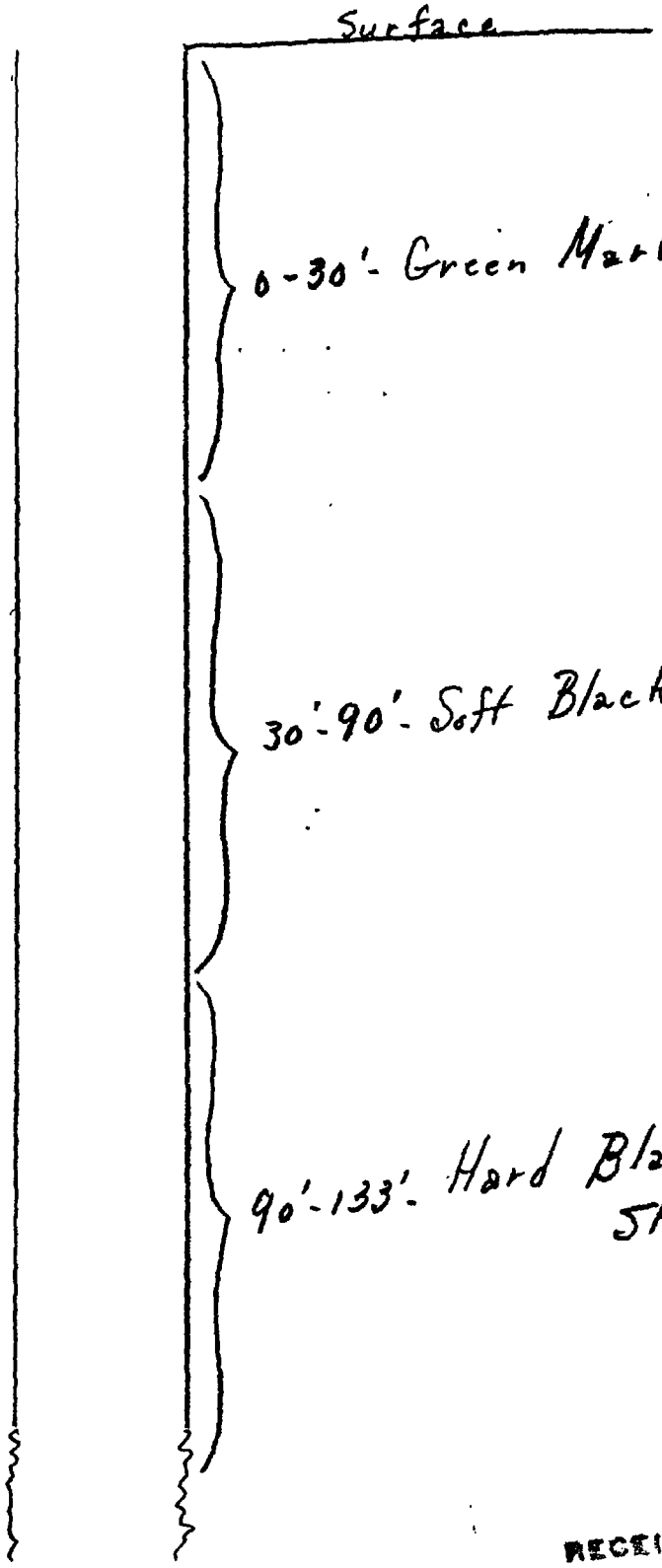
WELL RECORD

29.13.691
29-1016

1. OWNER Redacted - Privacy Act _____ ADDRESS 124 Leonard Ave., Oceanport, N. J.
   Owner's Well No. _____ SURFACE ELEVATION 2 Feet (Above mean sea level)
2. LOCATION Oceanport, N. J.
3. DATE COMPLETED Dec. 31, 1953 DRILLER Greenhalgh & Kaye
4. DIAMETER: Top _____ Inches Bottom _____ Inches TOTAL DEPTH 133 Feet
5. CASING: Type Black Steel Diameter 4 Inches Length _____ Feet
6. SCREEN: Type None Size of Opening _____ Diameter _____ Inches Length _____ Feet
   Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation _____
   Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Dec. 31, 1954 Yield 12 Gallons per minute
   Static water level before pumping 2 Feet below surface
   Pumping level 63 feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped Cylinder How measured 50 Gal. Drum
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Capacity _____ Gallons per minute
   How Driven _____ Horse Power _____ R.P.M. _____
   Depth of pump in well _____ Feet Depth of Foot piece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____
10. USED FOR Domestic AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily
11. QUALITY OF WATER Good Sample: Yes _____ No. _____
    Taste Good Odor None Color Clear Temperature _____ °F
12. LOG _____ Are samples available? _____
    (Give details on back of sheet or on separate sheet)
13. SOURCE OF DATA Drillers
14. DATA OBTAINED BY A. McCurdy & E. Daniels DATE Feb. 5, 1954

(Note: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.691
29.1016



RECEIVED
FEB 8 1954

29.14.4 61

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply
WELL RECORD

Permit No. 29-1400
Application No. _____
County _____
29.14.A61
29-1400

Redacted - Privacy Act

1. OWNER _____ ADDRESS 29 Monmouth Place LONG BRANCH
Owner's Well No. 4 SURFACE ELEVATION Bet. 20 & 30 Feet (Above mean sea level)

2. LOCATION CITY OF LONG BRANCH NEW JERSEY

3. DATE COMPLETED 4/23/55 DRILLER A. P. Tice & Son

4. DIAMETER: Top 4 Inches Bottom 4 Inches TOTAL DEPTH 52 Feet

5. CASING: Type 4" Blk steel Diameter 4 Inches Length 48 Feet

6. SCREEN: Type J. SRB Size of Opening 18,000 Diameter 3 Inches Length 4' 11" Feet
Range in Depth { Top 47 1" Feet Bottom 4 11" Feet Geologic Formation Vincetown
Tail piece. Diameter none Inches Length _____ Feet

7. WELL FLOWS NATURALLY no Gallons per Minute at 30 Feet above surface
Water rises to _____ Feet above surface

8. RECORD OF TEST: Date 4/23/55 Yield 30 Gallons per minute
Static water level before pumping 28' 4" from top of ground Feet below surface
Pumping level 23' 6" feet below surface after 4 hours pumping
Drawdown 12 Feet Specific Capacity 30 Gals. per min. per ft. of drawdown
How Pumped Gasoline Sucker Pump How measured 5 Gal. Bucket
Observed effect on nearby wells none

9. PERMANENT PUMPING EQUIPMENT:
Type Meyers Capacity 8 Gallons per minute
How Driven Electric Horse Power 1/2 R.P.M. 1700
Depth of pump in well 30 Feet Depth of Foot piece in well 30 Feet
Depth of Air Line in well none Feet Type of Meter on Pump none

10. USED FOR Domestic AMOUNT { Average 500 Gallons Daily Maximum 300 Gallons Daily

11. QUALITY OF WATER good Sample: Yes _____ No. ✓
Taste none Odor none Color clear Temperature 54 °F

12. LOG _____ Are samples available? ✓
(Give details on back of sheet or on separate sheet)

13. SOURCE OF DATA depth, material, and how long it took to drill

14. DATA OBTAINED BY A.P.Tice & Son DATE 4/23/55

(Note: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.6 65

FORM 87.

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-2505
Application No. _____
County _____
29.13.665

WELL RECORD

Atsbury Motor Court

Redacted - Privacy Act Redacted - Privacy Act

1. OWNER _____ ADDRES _____
Owner's Well No. TWO SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Hi-way #33 New Shrewsbury township.

3. DATE COMPLETED October 18/57 DRILLER William R Tice Sr

4. DIAMETER: top 4 Inches Botton 4 Inches TOTAL DEPTH 100 Feet

5. CASING: Type steel Diameter 4 Inches Length 94 Feet

6. SCREEN: Type Johnson Size of Opening .040 Diameter 3 3/4 Inches Length 6 Feet

Range { Top _____ Feet Bottom _____ Feet Geologic Formation _____

Tail piece. Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY No Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date Oct 18 Yield 30 Gallons per minute

Static water level before pumping 14 Feet below surface

Pumping level 28 feet below surface after 4 hours pumping

Drawdown 14 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped Shallow Well pump How measured 10 gal container

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type Jet Mfrs. Name Myers

Capacity 10 G.P.M. How Driven Electric H.P. 1/2 R.P.M. 3450

Depth of Pump in well _____ Feet _____ Depth of Footpiece in well 30 Feet

Depth of Air Line in well _____ Feet _____ Depth of Meter on Pump _____

10. USED FOR Motal AMOUNT Average _____ Gallons Daily

Maximum _____ Gallons Daily

11. QUALITY OF WATER Good Sample: Yes ____ No ____

Taste Good Odor None Color clear Temp. 54 °F

12. LOG _____ Are samples available _____

(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA _____

14. DATA OBTAINED BY William R Tice Sr. Date October 1957

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.13.638

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-2774
Application No. _____
County _____

29.13.638
29-2774

WELL RECORD

Redacted - Privacy Act

1. OWNER _____ ADDRESS Little Silver - NJ
Owner's Well No. one SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Hamilton Road - New Shrewsbury twp.
3. DATE COMPLETED October 1958 DRILLER William R Tice Sr
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 104 Feet
5. CASING: Type Bethelem Steel Diameter 4 Inches Length 94 Feet
6. SCREEN: Type Johnson Size of Opening .035 Diameter 3 3/4 Inches Length 10 Feet
Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation _____
Tail piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY No Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Oct. 9th Yield 180 Gallons per minute
Static water level before pumping 10 Feet below surface
Pumping level 64 feet below surface after 4 hours pumping
Drawdown 54 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Air How measured 50 gal container
Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT: — To be installed later.
Type Submersible Mfrs. Name Myers
Capacity 50 G.P.M. How Driven Electric H.P. 3 R.P.M. 3450
Depth of Pump in well 84 Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR Motel AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily
11. QUALITY OF WATER PH-8 - Iron 20 PPM Sample: Yes _____ No. _____
Taste Irony Odor None Color clear Temp. 54 °F
12. LOG This water must be conditioned. Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA _____
14. DATA OBTAINED BY Wm. R Tice Sr. Date Oct 1958

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

27-14-407 L

FORM 87-10M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-30[illegible]
Application No. _____
County _____

WELL RECORD

29.14.454
29.3015

Redacted - Privacy Act

1. OWNER ___ ADDRESS Goose neck Point Road - Port Au
Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Goose neck Point Road - Port-Au-Peck, Nfld

3. DATE COMPLETED Sept 24 1959 DRILLER William P Tizo Sr.

4. DIAMETER: top 6 inches Botton 4 inches TOTAL DEPTH 261 Feet

5. CASING: Type Bethlehem Steel Diameter 6 to 4 inches Length 251 Feet

6. SCREEN: Type Johnson SRB Size of Opening .018 Diameter 3 3/4 inches Length 10 Feet
Range { Top _____ Feet / Bottom _____ Feet
Geologic Formation fine white sand with peat

Tail piece. Diameter _____ inches Length _____ Feet

7. WELL FLOWS NATURALLY No Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface

8. RECORD OF TEST: Date Sept 22-23 Yield 60 Gallons per minute
Static water level before pumping 7 Feet below surface
Pumping level 95 feet below surface after 4 hours pumping
Drawdown 88 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Air How measured 10 gal container
Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:
Type Submersible Mfrs. Name Myers
Capacity 50 G.P.M. How Driven Electric H.P. 3 R.P.M. _____
Depth of Pump in well 155 Feet _____ Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet _____ Depth of Meter on Pump _____

10. USED FOR Lawn sprinkling and swimming pool AMOUNT Average _____ Gallons Daily
Maximum _____ Gallons Daily

11. QUALITY OF WATER PH 7.5 Iron 2 ppm Sample: Yes ___ No. ___
Taste Good Odor None Color clear Temp. 54

12. LOG _____ Are samples available _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA _____

14. DATA OBTAINED BY William P Tizo Sr. Date Sept 1959

(Use reverse side of this sheet for additional information such as log of materials penetrated, record of special casing arrangements etc.)

WELREC 107 1954

29.13.639

FORM 87-10M

29.13.639

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-3369
Application No. _____
County Mon.

WELL RECORD

Grant Ave.

1. OWNER Redacted - Privacy Act ADDRESS RFD. RT-1 Eatontown NJ.
   Owner's Well No. 1 SURFACE ELEVATION 60 Feet (Above mean sea level)
2. LOCATION Grant Ave Eatontown.
3. DATE COMPLETED Dec 1960 DRILLER H Lindsey Osborn.
4. DIAMETER: top 4 Inches Botton 4 Inches TOTAL DEPTH 210 Feet
5. CASING: Type BlK steel Diameter 4 Inches Length 182 Feet
6. SCREEN: Type _____ Size of Opening _____ Diameter _____ Inches Length _____ Feet
   Range { Top NO Feet Bottom 5 Feet Screen. Geologic Formation _____
   Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Dec 1960 Yield 8 Gallons per minute
   Static water level before pumping 22 Feet below surface
   Pumping level 32 feet below surface after 3 hours pumping
   Drawdown 10 Feet Specific Capacity 1/4 Gals. per min. per ft. of drawdown
   How Pumped Elec pump. How measured 5 Gal pail
   Observed effect on nearby wells None.
9. PERMANENT PUMPING EQUIPMENT:
   Type DW Jet Mfrs. Name Myers.
   Capacity 8 G.P.M. How Driven _____ H.P. 1/2 R.P.M. _____
   Depth of Pump in well _____ Feet _____ Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet _____ Depth of Meter on Pump _____
10. USED FOR House AMOUNT Average 100 Gallons Daily
    Maximum _____ Gallons Daily
11. QUALITY OF WATER Not Taken. Sample: Yes ____ No. No
    Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG _____ Are samples available _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Driller
14. DATA OBTAINED BY H Lindsey Osborn. Date Dec 1960

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.13.639
29.2369

0 - 5'6" Brn. sand.
5'6" - 18' Brn sandy clay sandstone
18' - Ground water
18' - 64 Blk clay-silt
64 - 90 fine grey sand, silt, mica
90 - 180 clay, small layers green marl
Some glaucanite
180 - 208 Blk clay turning grey
208 - 210 Course grey sand, fossil

Pumped, open hole.
30' hole below casing

RECEIVED
FEB - 2 1961
DEPT. OF CONSERVATION &
ECONOMIC DEVELOPMENT
GEOLOGIC & TOP. SURVEY

29.13.639
29-4271

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-4271
Application No. _____
County _____

WELL RECORD

29.13.639
29.4271

Frank M. Palaia (Builder)

1. OWNER [Redacted - Privacy Act] ADDRESS 39 Mohican Ave., Port-Au-Peck, N.J.
   Owner's Well No. one SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION 39 Mohican Avenue, Port - Au - Peck, N.J.
3. DATE COMPLETED Feb. 25, 1964 DRILLER William R. Tice Sr.
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 102 Feet
5. CASING: Type std. weight steel Diameter 4 Inches Length 69'4" Feet
6. SCREEN: Type none Size of Opening ___ Diameter _____ Inches Length _____ Feet
   Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____
   Tail piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY no Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Feb. 24 Yield _____ Gallons per minute
   Static water level before pumping seven Feet below surface
   Pumping level 12 feet below surface after four hours pumping
   Drawdown five Feet Specific Capacity while pumping twelve G.P.M. Gals. per min. per ft. of drawdown
   How Pumped I/2 horse power jet pump How measured five gal container.
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type jet Mfrs. Name MYERS
   Capacity 12 G.P.M. How Driven electric H.P. I/2 R.P.M. 3450
   Depth of Pump in well _____ Feet Depth of Footpiece in well 30 Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches
10. USED FOR one family home. AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER PH 7.5 Iron I p.p.m. Hardness 5 g.p.g. Sample: Yes ___ No. ___
    Taste good Odor none Color clear Temp. _____ °F
12. LOG _____ Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA _____
14. DATA OBTAINED BY William R. Tice Sr. Date February 1964

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14446

WELL LOG 29.4513

Coordinates: 29.14.9.4.6
Permit No.: 29-4513
Owner: Rumson Country Club
Well Location:
Driller:
How Drilled:
(cable tool, rotary, etc.)
Logged by:
Date Logged:

Depth (Feet)	Description	Correlation
112 Mt. L.	Greenish grey moderately glauconitic fairly clean fine sand with scattered pea gravel.	
114	Same, slightly coarser, less glauconite.	
132	Same.	
157-158 Wenonah	Grey to light olive grey very lightly glauconitic, moderately lignitic micaceous fine sand.	
222-223 Ket	Light grey to finely micaceous moderately lignitic fine to very fine sand.	
227-228	Light brownish grey fairly clean fine sand, with scattered ironstone and siderite nodules/chips.	
232-233	Light grey to grey laminated silty clay and fine to very fine sand lenses.	
267-278	Light grey clean, slightly micaceous fine to med. sand.	
283-293	Grey to dark grey slightly micaceous, lignitic, fine to med. sand.	
302-313	Grey fairly clean, locally lignitic and micaceous fine to med. sand.	
322-323	Dark grey finely micaceous silt to fine sand.	
232-233	Grey fairly clean moderately lignitic and micaceous fine to med. sand.	

29-4513

29.14.446
29.4513

~~29.14.4513~~
29.A513

C.W. LAUMAN & CO. INC.
Water supply contractors
GUARANTEED WATER WELLS · PUMPING EQUIPMENT · WATER TREATMENT
BETHPAGE, LONG ISLAND, N.Y. 11714
WELLS 1-2305

100 Lauman Lane
Bethpage, New York
January 12, 1965

212-H: 5-7600

Dr. Kemble Widmer, State Geologist
State Office Building
John Fitch Way
Trenton, New Jersey

520 Rumson Rd. Rotary Hydrolic-drilled

Re: Rumson Country Club

Dear Kem:

I am enclosing a log of a 16 inch reverse rotary test hole drilled at the above job. High static water level gave us considerable trouble on this job and we had to build up our sump pit and drilling platform 4'6" above grade.

During the drilling operations we experienced considerable caving from about 110 to 165 feet. It would seem to indicate an artesian head in the Mt. Laurel-Wenonah formation. We found it necessary to case this off with 16 inch OD casing. We continued the hole down to 333 feet with no further trouble.

However, on attempting to construct an underreamed 24 inch hole, as shown on the enclosed print, we had a considerable amount of caving below the casing in what we would normally consider a non-water bearing stratum. We were lucky that our tools did not get stuck.

We are now in the process of casing the entire depth of the well and will gravel pack between the 16 inch casing and the 6 inch well screen set between 268 and 333 feet.

If you or any of your men are in the vicinity of this job, we have core samples at the site that may be examined and would appreciate your opinion as to the correlation of the various formations.

Kindest personal regards.

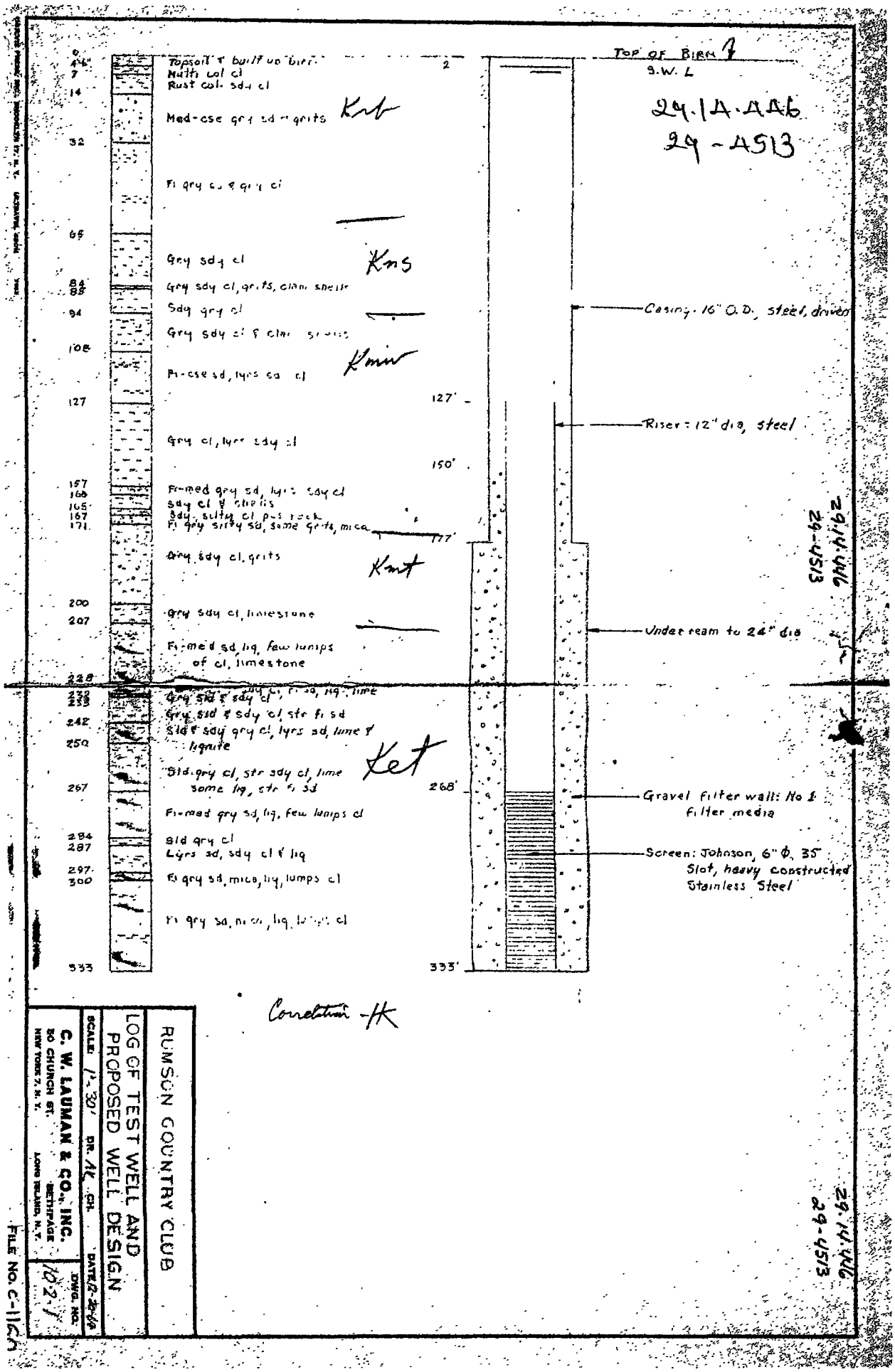
Sincerely yours,

C. W. LAUMAN & CO., INC.

Joe

J. T. Kearns

JTK/bmc



WELREC 107 1918

29-14-429 ☐

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-4519
Application No. _____
County _____
29.1A.429
29-4519

WELL RECORD

Redacted - Privacy Act

1. OWNER _____ ADDRESS 277 Morgrove Pl, Elberon
Owner's Well No. _____ SURFACE ELEVATION 10 Feet (Above mean sea level)
2. LOCATION Center point Asbury Ave - 200' W. 7 Bs Rd continuation
3. DATE COMPLETED _____ DRILLER _____
4. DIAMETER: top 4 Inches Bottom _____ Inches TOTAL DEPTH _____ Feet
5. CASING: Type GI ST Diameter 4 Inches Length _____ Feet
6. SCREEN: Type Good PLASTIC Size of Opening .016 Diameter 4 Inches Length 4 Feet
Range in Depth { Top _____ Feet / Bottom 65 Feet } Geologic Formation _____
Tail piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute
Static water level before pumping _____ Feet below surface
Pumping level _____ feet below surface after _____ hours pumping
Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped _____ How measured _____
Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
Type SW Jet Mfrs. Name Red Jacket
Capacity _____ G.P.M. 25 How Driven _____ H.P. 1/2 R.P.M. _____
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. _____ AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER Good Sample: Yes _____ No. _____
Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA G. R. Travis
14. DATA OBTAINED BY _____ Date _____

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29-13-691

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-4782
Application No. _____
County _____

WELL RECORD

29-13-691
29-4782

1. OWNER Mr. Harold Binelford ADDRESS Asbury Ave. Asbury Park, N.J.
F.&S. Builders Co. Block #72 Lots # 41, 42, 43
Owner's Well No. one SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION 6' from building

3. DATE COMPLETED July 19, 1965 DRILLER Henry A. Peters (license # 156)

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 50 Feet

5. CASING: Type Black steel type Diameter 4 Inches Length 45'-8" Feet

6. SCREEN: Type none Size of Opening ___ Diameter _____ Inches Length _____ Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation Hornerstown Marl

Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date August 5, 1965 Yield 8-10 Gallons per minute

Static water level before pumping 7 Feet below surface

Pumping level 35 feet below surface after 2 hours pumping

Drawdown 28 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped Gasa Pump How measured _____

Observed effect on nearby wells none

9. PERMANENT PUMPING EQUIPMENT:

Type Jet Mfrs. Name Myers

Capacity 8-10 G.P.M. How Driven Electric H.P. 50at R.P.M. 3500

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches

10. USED FOR Domestic AMOUNT { Average 300 Gallons Daily / Maximum 500 Gallons Daily

11. QUALITY OF WATER Good Sample: Yes ___ No. X

Taste Good Odor none Color clear Temp. 54 °F

12. LOG Other Side Are samples available? no
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA Bailer

14. DATA OBTAINED BY Driller Date July 19, 1965

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.B.691
29-4782

Log

0'-2'-fill dirt,broken sand
2'-3'- Humus,black dirt
3'- 7'- multi-color cla y
7'-18'- green clay sand
18'-28'- hard green sand clay and rocks
28'-44'- soft green pepper clay ,some shell
44'-45'-green pepper clay and pyrite rocks
45'-49'- pepper blael sand clay
49'-50'-stop here

WELREC 107 0843

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

WELL RECORD

Permit No. 29-4815
Application No. _____
County _____

29.14.456
29.4815

1. OWNER Pete & Emil Bldrs. (Emil Trak) ADDRESS Box 41 Asbury Ave.(Block 72r-Lots-25,26,2
Owner's Well No. One SURFACE ELEVATION Oceanport, New Jersey Feet
(Above mean sea level)

2. LOCATION 20 foot from building straight

3. DATE COMPLETED September 17,1965 DRILLER Henry A. Peters (License # 156)

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 50 Feet

5. CASING: Type Black Steel Type Diameter 4 Inches Length 44'-2" Feet

6. SCREEN: Type none Size of Opening ___ Diameter _____ Inches Length _____ Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation Hornerstown Marl

Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface

8. RECORD OF TEST: Date September 17,1965 Yield 10-12 Gallons per minute
Static water level before pumping 6 to 7 Feet below surface
Pumping level 30 feet below surface after 2 hours pumping
Drawdown 24 to23 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Gas pump How measured _____
Observed effect on nearby wells none

9. PERMANENT PUMPING EQUIPMENT:
Type Jet Mfrs. Name Myers
Capacity 10 to 12 G.P.M. How Driven Electric H.P. 1/2 R.P.M. 3500
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches

10. USED FOR Domestic AMOUNT { Average 300 Gallons Daily / Maximum 500 Gallons Daily

11. QUALITY OF WATER Good Sample: Yes ___ No. no
Taste Good Odor none Color Clear Temp. 54 °F

12. LOG Other Side Are samples available? no
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA Bailer

14. DATA OBTAINED BY Driller Date September 17,1965

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14.456
29.4815

Log

0'-2'- brown clay sands
2'-6'- Dark Brown Sandy Clay
6'-18'- light brown clay sand
18'-28'- dark green sandy clay
28'-44'- green pepper clay
44'-48'- same,also with some black pepper sand
48'-50'-clean gravel coarse;stopped here

29-14-407 (2)

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

WELL RECORD

Permit No. 29-4817
Application No. _____
County _____
29.14.467
29.4817

1. OWNER Redacted - Privacy Act ADDRESS Asbury Ave, Oceanport, N.J.
~~Lots 28-29-30 Block#72R~~
Owner's Well No. One (1) SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION 12 foot from building

3. DATE COMPLETED September 1, 1964 DRILLER Henry A. Peters (license # 156)

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 51 Feet

5. CASING: Type Black Steel Type Diameter 4 Inches Length 43'9" Feet

6. SCREEN: Type None Size of Opening ___ Diameter _____ Inches Length _____ Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation Vincetown

Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date September 1, 1964 Yield 12-15 Gallons per minute

Static water level before pumping ~~8~~ 8 Feet below surface

Pumping level 20 feet below surface after 2 hours pumping

Drawdown 12 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped Dart How measured _____

Observed effect on nearby wells None

9. PERMANENT PUMPING EQUIPMENT:

Type Jet Mfrs. Name Myers

Capacity 12-15 G.P.M. How Driven Electric H.P. 1/2 R.P.M. 3500

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches

10. USED FOR Domestic AMOUNT { Average 300 Gallons Daily / Maximum 500 Gallons Daily }

11. QUALITY OF WATER Good Sample: Yes ___ No. x

Taste Good Odor None Color Clear Temp. 54 °F

12. LOG ~~Other Side~~ Are samples available? no
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA Bailer

14. DATA OBTAINED BY Driller Date February 5, 1971

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.1A.467
29.A817

0?'- brown-green clay sands
?-30'- muddy dark green clay sands
30-46'- pepper clay gravels,shell pepper sands,shell rocks ;stopped here

29-14-467 LT

FORM 87

29.14.467

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-4855
Application No. _____
County _____

WELL RECORD

29-4855

Redacted - Privacy Act

1. OWNER _____ ADDRESS Lots #38,39,40, Asbury Ave. Asbury Park, N.J.

Owner's Well No. One (1) SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION 5 foot from building

3. DATE COMPLETED November 3,1965 DRILLER Henry A. Peters (License # 156)

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 50 Feet

5. CASING: Type Black Steel Type Diameter 4 Inches Length 44'-8" Feet

6. SCREEN: Type None Size of Opening ___ Diameter _____ Inches Length _____ Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation Vincetown

Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date November 3,1965 Yield 12 Gallons per minute

Static water level before pumping 9 Feet below surface

Pumping level 24 feet below surface after 1 hours pumping

Drawdown 15 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped Gas pumped How measured _____

Observed effect on nearby wells None

9. PERMANENT PUMPING EQUIPMENT:

Type Piston Mfrs. Name Myers

Capacity 12 G.P.M. How Driven Electric H.P. 1/3 R.P.M. 3500

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches

10. USED FOR Domestic AMOUNT { Average 300 Gallons Daily / Maximum 500 Gallons Daily }

11. QUALITY OF WATER Good Sample: Yes ___ No. x

Taste Good ~~Other Side~~ Odor None Color Clear Temp. 54 °F

12. LOG _____ Are samples available? _____

(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA Bailer

14. DATA OBTAINED BY Driller Date November 3,1965

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14.467
29.4855

Log

0'-3'- fill a nd top soil
3'-28'- multi-color clay and light to dark green sands
28'-47'- Green pepper clay
47'- Black pepper clay lumdus,black and white rocks
Shell and black pepper sand
47'-50'- drill susp, pepper sand and gravel pack;Stopped here

29-1H-457

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5009
Application No. _____
County _____

WELL RECORD

29.1A.457
29.5009

Mr.Fred Davies (Builder)

1. OWNER Redacted - Privacy Act (owner) ADDRESS Palmer Ave., West Long Branch.
   Owner's Well No. one SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Palmer Ave., West Long Branch,N.J.
3. DATE COMPLETED March 22,1966 DRILLER William R.Tice Sr.
4. DIAMETER: top 4 inches Bottom 4 inches TOTAL DEPTH 68 Feet
5. CASING: Type std. weight steel. Diameter 4 inches Length 64 Feet
6. SCREEN: Type JOHNSON Red Brass. Size of Opening _____ Diameter .018" inches Length four Feet
   Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____
   Tail piece: Diameter _____ inches Length _____ Feet
7. WELL FLOWS NATURALLY no. Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date March 22,1966 Yield 75 Gallons per minute
   Static water level before pumping I4' 6" Feet below surface
   Pumping level 40 feet below surface after two hours pumping @75g.p
   Drawdown 25' 6" Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped Air Compressor. How measured IO gal. container.
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type submersible. Mfrs. Name MYERS
   Capacity I5 G.P.M. How Driven electric. H.P. I/2 R.P.M. 3450
   Depth of Pump in well 40 Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR one family home. AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
    PH 5.5
11. QUALITY OF WATER Iron none Sample: Yes _____ No. _____
    Hardness I G.P.G.
    Taste good. Odor none. Color clear. Temp. 54 °F
12. LOG _____ Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA _____
14. DATA OBTAINED BY William R.Tice Sr. Date March I966

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29-14-419 ☐

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5084
Application No. _____
County _____

29.1A.419
29.5084

WELL RECORD

Redacted - Privacy Act

1. OWNER _____ ADDRESS 121 Hornerich Pt Oceanport
Owner's Well No. 11 SURFACE ELEVATION 5 Feet (Above mean sea level)

2. LOCATION Rear house + 20ft in line Pump

3. DATE COMPLETED June 1966 DRILLER _____

4. DIAMETER: top _____ Inches Bottom _____ Inches TOTAL DEPTH _____ Feet

5. CASING: Type 4" galv st Diameter _____ Inches Length _____ Feet

6. SCREEN: Type Cook Size of Opening .016 Diameter 3 Inches Length 3 Feet

Range in Depth { Top _____ Feet / Bottom 15 Feet } Geologic Formation Red Bank

Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute

Static water level before pumping 5 Feet below surface

Pumping level _____ feet below surface after _____ hours pumping

Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped _____ How measured _____

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type Sw Jet Mfrs. Name Georgia Pacific

Capacity 5-10 G.P.M. How Driven _____ H.P. 3/4 R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR dom AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER good Sample: Yes _____ No. _____

Taste _____ Odor _____ Color _____ Temp. _____ °F

12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA AR Trans

14. DATA OBTAINED BY _____ Date Dec 66

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29-13-692

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5673
Application No. _____
County _____
29.13.692
29.5673

WELL SEALED 8/15/89

WELL RECORD

1. OWNER P.V.C. Container Corp. ADDRESS 556 Industrial Way West, Eatontown, N.J.
Owner's Well No. one. SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION 556 Industrial Way West, Eatontown, N.J.

3. DATE COMPLETED Feb. 15, 1969 DRILLER William R. Tice, Sr.

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 115 Feet

5. CASING: Type std. weight steel. Diameter 4 Inches Length 105 Feet
Edw. E. Johnson

6. SCREEN: Type stainless. Size of Opening .020" Diameter 3 3/4 Inches Length 10 Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation shell & fossil

Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY no Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date Feb. 15 & 16 1969 Yield 50 Gallons per minute

Static water level before pumping 7' 6" Feet below surface

Pumping level 42 feet below surface after six hours pumping

Drawdown 34' 6" Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped Air compressor. How measured 50 gallon container.

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type submersible Mfrs. Name Reda Pump Co.

Capacity 50 G.P.M. How Driven Electric H.P. two R.P.M. 3450

Depth of Pum. in well 84 Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR cooling compressors. AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER PH 7.5 Iron 7.5 p.p.m. Hardness 10 g.p.g. Sample: Yes _____ No. _____

Taste _____ Odor none Color clear Temp. 50 °F

12. LOG see back of sheet. Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA _____

14. DATA OBTAINED BY William R. Tice, Sr. Date Feb., 1969

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.13.692
29-5673

WELL # I ,on the north side of the building is the producer well.

WELL # 2 ,on the south side of the building is the difuser well.

Both wells are the same in every respect,such as materials - depth - capacity - etc.

WELL # 2,the difuser well was tested to determine the the value of the well and we find that it will take twenty seven gallons per minute while holding ten pounds pressure at the head of the well.

RECEIVED
DEC 12 11 29 AM '44
GEOLOGY AND TOPOGRAPHY

29-13-692
29-5673

Gentlemen:
Please Note,

Re: these two wells to be drilled for P.V.C. Container Corp., one well to obtain water from to be used to cool compressors and the other well to dispose the water. These two wells will be approx one hundred - thirty feet apart. The estimated depth of one hundred feet was given for bidding reasons. I believe we will have to go deeper to obtain the 35 gpm.

Respectfully Yours
William R. Rice, Sr

P.S. Please send a pad of application permits.

29-14-464 [D]

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

WELL RECORD

Permit No. 29-6131
Application No. _____
County _____
29.14.A64
29-6131

Redacted - Privacy Act

1. OWNER _____ ADDRESS Myrtle & Avon Avenues, Oceanport, N.J.
Owner's Well No. One (1) SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION 5 feet from building
3. DATE COMPLETED January 5, 1971 DRILLER Peters Well Drilling Co. Inc. (License #156)
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 66 Feet
5. CASING: Type Black Steel Type Diameter 4 Inches Length 63 Feet
6. SCREEN: Type None Size of Opening ___ Diameter _____ Inches Length _____ Feet
Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation Hornerstown Marl
Tail piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date January 5, 1971 Yield 25 _____ Gallons per minute
Static water level before pumping 6 Feet below surface
Pumping level 30 feet below surface after 1 hours pumping
Drawdown 24 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Gas Pump How measured _____
Observed effect on nearby wells None
9. PERMANENT PUMPING EQUIPMENT:
Type Jet Mfrs. Name Uniflow
Capacity 25 G.P.M. How Driven Electric H.P. 1/3 R.P.M. 3500
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches
10. USED FOR Domestic AMOUNT { Average 300 Gallons Daily / Maximum 500 Gallons Daily
11. QUALITY OF WATER Good Sample: Yes ___ No. X
Taste _____ Odor None Color Clear Temp. 54 °F
12. LOG Ido Are samples available? no
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA iler
14. DATA OBTAINED BY Driller Date January 25, 1971

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14.464
29.6131

Log

0'-6'- clay and mud
6'-26'- brown and green clay sand,muddy
26'-38'- dark green to grey clay sand,takes water
38'-61'- some pepper and some shell,dark green to grey in chms color,soupy
61'-66'- bright green clay,pepper;Stopped here

29-14-455 A7

FORM 82

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-6960
Application No. _____
County _____

29.14.455

WELL RECORD

29.6A60

Redacted - Privacy Act

1. OWNER _____ ADDRESS 45 Morris Place, Oceanport, N.J.
Owner's Well No. _____ SURFACE ELEVATION 50 Feet (Above mean sea level)

2. LOCATION 45 Morris Place, Oceanport, N.J.

3. DATE COMPLETED May 5, 1972 DRILLER Kaye Well Drilling, Inc.

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 56 Feet

5. CASING: Type Black Steel Diameter 4 Inches Length 40 Feet

6. SCREEN: Type None Size of Opening ___ Diameter _____ Inches Length _____ Feet
Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____
Tail piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface

8. RECORD OF TEST: Date May 5, 1972 Yield 10 Gallons per minute
Static water level before pumping 7 Feet below surface
Pumping level 15 feet below surface after _____ hours pumping
Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Cylinder How measured 50 Gal. Drum
Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:
Type _____ Mfrs. Name _____
Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches

10. USED FOR Domestic AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER Hard Sample: Yes ___ No. ___
Taste Good Odor None Color Clear Temp. _____ °F

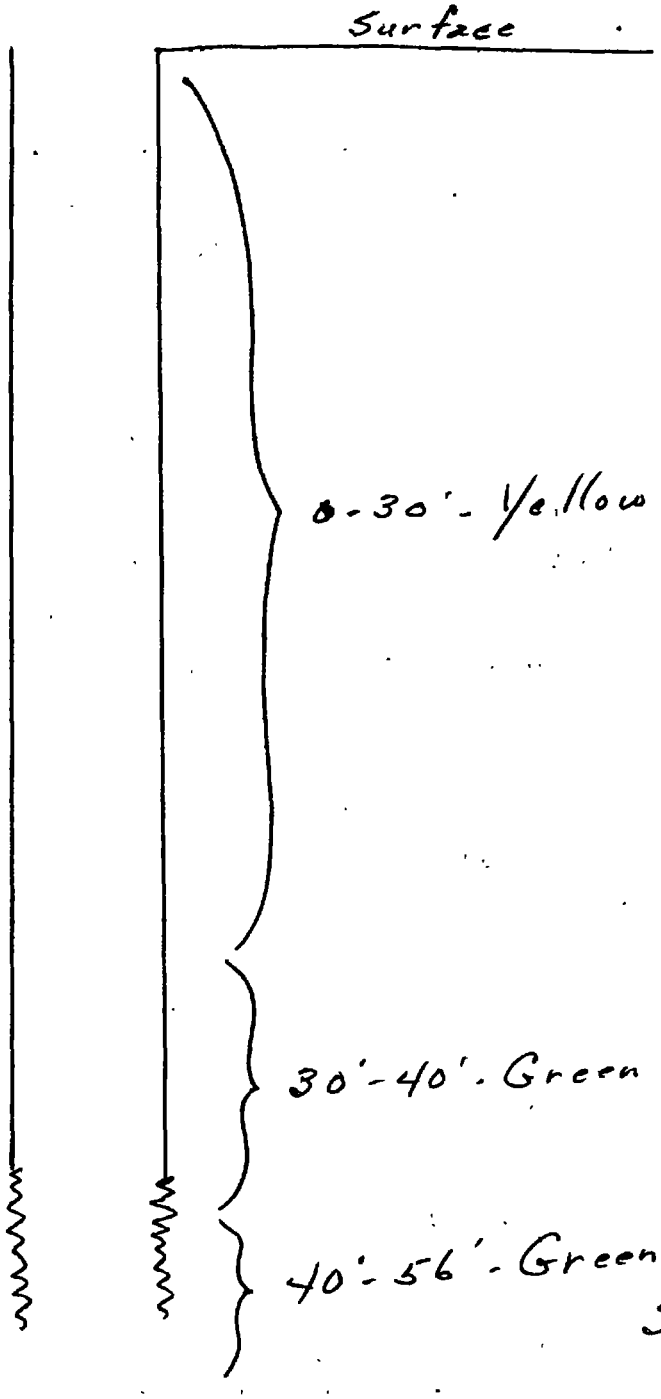
12. LOG Iron ½ of 1 PPM, PH 6, Hardness 9 Grains Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA Drillers

14. DATA OBTAINED BY Kaye Well Drilling, Inc. Date May 8, 1972

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14.455
29.6460



RECEIVED
MAY 19 3 35 PM '71
TOPOGRAPHY
AND
GEOLOGY

FORM 87

29-14-452

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
29.14.452

Permit No. 29-6499
Application No. _____
County _____

WELL RECORD

29-6499

1. OWNER Kleiner Bros. Const. Co., Inc ADDRESS 42 R. Monmouth Rd. Eatontown, N.J
Owner's Well No. _____ SURFACE ELEVATION 48 Feet (Above mean sea level)
2. LOCATION Allenhurst & Myrtle Ave., Oceanport, N.J.
3. DATE COMPLETED May 22, 1972 DRILLER Kaye Well Drilling, Inc.
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 50 Feet
5. CASING: Type Black Steel Diameter 4 Inches Length 40 Feet
6. SCREEN: Type None Size of Opening _____ Diameter _____ Inches Length _____ Feet
Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation Tht
Tail piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date May 22, 1972 Yield 10 Gallons per minute
Static water level before pumping 5 Feet below surface
Pumping level 20 feet below surface after _____ hours pumping
Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Cylinder How measured 50 Gal. Drum
Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
Type _____ Mfrs. Name _____
Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR Domestic AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily
11. QUALITY OF WATER Fair Sample: Yes _____ No. _____
Taste Fair Odor None Color Clear Temp. _____ °F
12. LOG Iron 2 PPM, PH 7, Hardness 12 Grains Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Drillers
14. DATA OBTAINED BY Kaye Well Drilling, Inc. Date June 5, 1972

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.1A.492

29.6499

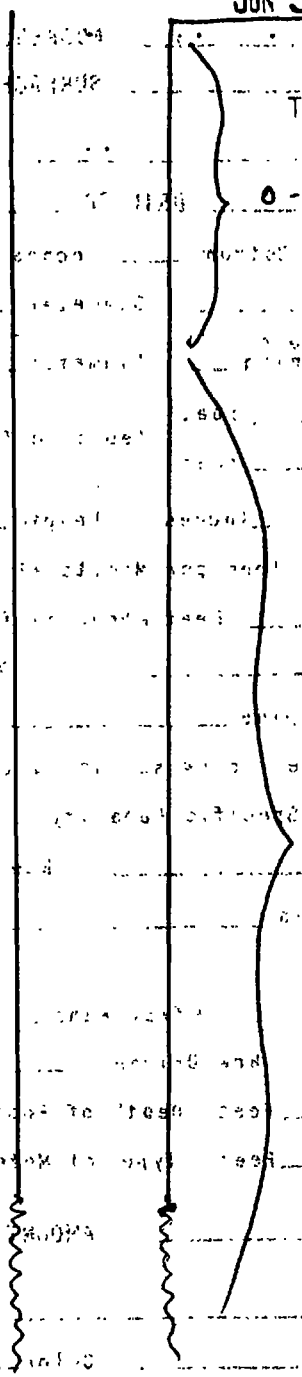
RECEIVED

JUN Surface WH '72

GEOLOGY AND TOPOGRAPHY

0 - 10' - Yellow

10 - 50' - Green



FORM 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-6570
Application No. _____
County _____

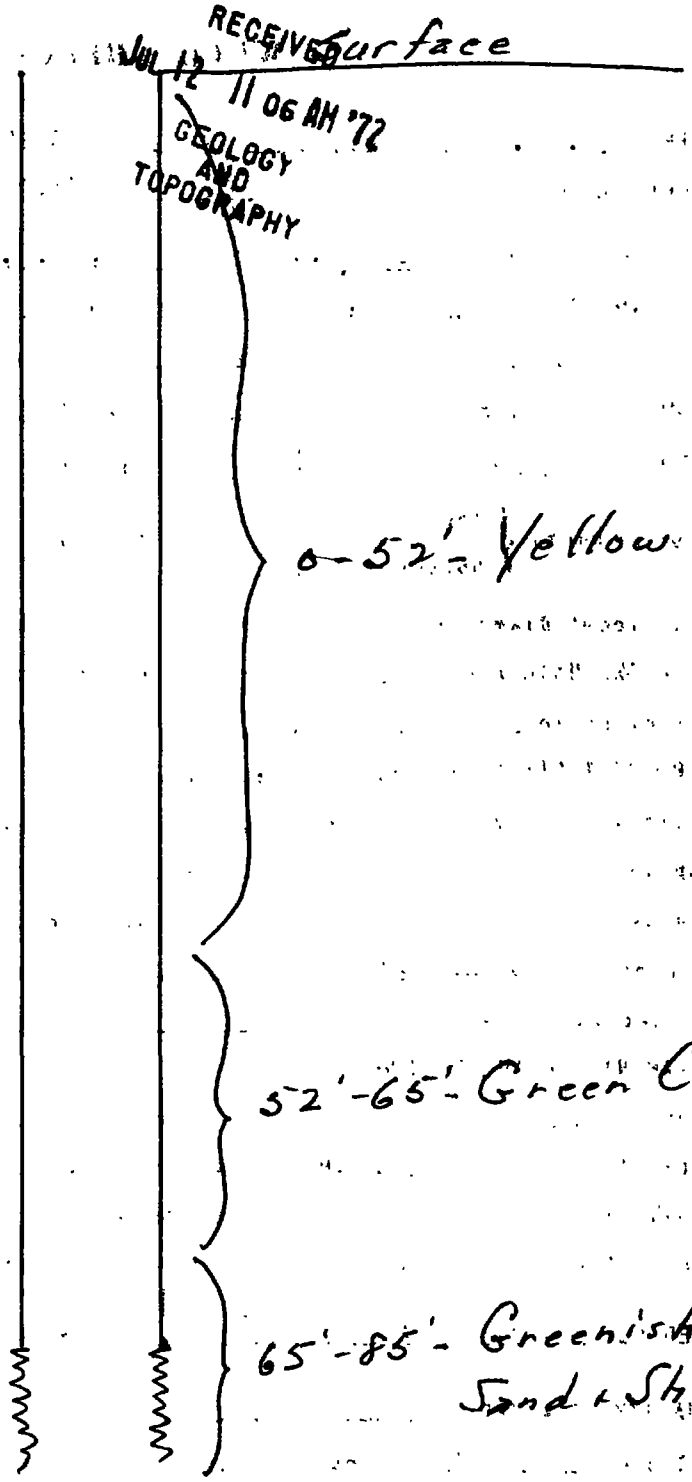
WELL RECORD

29.14.471
29-6510

1. OWNER Redacted - Privacy Act ADDRESS Wolf Hall Rd., Oceanport, N.J.
Owner's Well No. _____ SURFACE ELEVATION 56 Feet (Above mean sea level)
2. LOCATION Wolf Hill Rd., Oceanport, N.J.
3. DATE COMPLETED June 14, 1972 DRILLER Kaye Well Drilling, Inc.
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 85 Feet
5. CASING: Type Black Steel Diameter 4 Inches Length 63 Feet
6. SCREEN: Type None Size of Opening ___ Diameter _____ Inches Length _____ Feet
Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____
Tail piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date June 14, 1972 Yield 10 Gallons per minute
Static water level before pumping 25 Feet below surface
Pumping level 42 feet below surface after _____ hours pumping
Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Cylinder How measured 50 Gal. Drum
Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
Type _____ Mfrs. Name _____
Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size ___ Inches
10. USED FOR Domestic AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER Fair Sample: Yes ___ No. ___
Taste Fair Odor None Color Clear Temp. _____ °F
12. LOG Iron 2 PPM, PH 7, Hardness 6 Grains Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Drillers
14. DATA OBTAINED BY Kaye Well Drilling, Inc. Date July 10, 1972

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.1A.471
29-6510



29-14-428

Form 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-6958
Application No. _____
County _____

29.14.A28

WELL RECORD

29-6958

Redacted - Privacy Act

1. OWNER _____ ADDRESS 24 Ithaca Ave
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Ocean Port
3. DATE COMPLETED APRIL, 1974 DRILLER LOUIS BAINBRIDGE
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 155 Feet
5. CASING: Type STEEL Diameter 4 Inches Length 76 Feet
6. SCREEN: Type NONE Size of Opening — Diameter — Inches Length — Feet
   Range in Depth { Top — Feet / Bottom — Feet } Geologic Formation SAND & CLAY & SHELLS
   Tail piece: Diameter — Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date APR, Yield 5 Gallons per minute
   Static water level before pumping 5 Feet below surface
   Pumping level 75 feet below surface after 4 hours pumping
   Drawdown 70 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped AIR LIFT How measured WEIR
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR DOMESTIC AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER _____ Sample: Yes _____ No. _____
    Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG ✓ Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA LOUIS M. BAINBRIDGE & SON
14. DATA OBTAINED BY Louis Bainbridge Date 1/9/74

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.LA.428
29.6958

0 - 2	FILL
2 - 15	GREEN CLAY
15 - 30	BLACK SAND
30 - 50	BLACK SAND & CLAY
50 - 65	GREEN CLAY
65 - 130	BLACK CLAY
130 - 137	GREEN CLAY & SHELLS
137 - 145	GREEN CLAY
145 - 155	GREEN CLAY & SHELLS

29-14-428

FORM 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-7172
Application No. _____
County _____

29.14.428

WELL RECORD

29.7172

1. OWNER Redacted - Privacy Act ADDRESS 30 ITHACA AVE.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION OCEAN PORT

3. DATE COMPLETED SEPT DRILLER LOUIS BAINBRIDGE

4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 50 Feet

5. CASING: Type STEEL Diameter 4 Inches Length 45 Feet

6. SCREEN: Type STAINLESS Size of Opening 10 Diameter 4TS Inches Length 5 Feet

Range in Depth { Top 45 Feet / Bottom 50 Feet } Geologic Formation SAND

Tail piece: Diameter plug Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date SEPT Yield 10 Gallons per minute

Static water level before pumping 5 Feet below surface

Pumping level 30 feet below surface after 4 hours pumping

Drawdown 25 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped AIR LIFT How measured WEIR

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type _____ Mfrs. Name _____

Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR DOMESTIC AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER _____ Sample: Yes _____ No. _____

Taste _____ Odor _____ Color _____ Temp. _____ °F

12. LOG ✓ Are samples available? _____

(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA LOUIS M. BAINBRIDGE & SON

14. DATA OBTAINED BY Louis Bainbridge Date 1/9/74

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14.A28
29.7172

0 - 2	FILL
2 - 10	BLACK CLAY + SHELLS
10 - 20	GREEN SAND + CLAY
20 - 30	YELLOW SAND + GRAVEL
30 - 32	GREEN CLAY
32 - 43	GREEN "
43 - 50	BLACK SAND

29-14-428

Form 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-7264
Application No. _____
County _____

29.1A.A28

WELL RECORD

29.M26A

1. OWNER Redacted - Privacy Act ADDRESS ALLENHURST AVE
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION OCEAN PORT
3. DATE COMPLETED JAN 9, 1974 DRILLER LOUIS BAINBRIDGE
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 54 Feet
5. CASING: Type STEEL Diameter 4 Inches Length 49 Feet
6. SCREEN: Type STAINLESS Size of Opening .10 Diameter 4TS Inches Length 5 Feet
   Range in Depth { Top 49 Feet / Bottom 54 Feet } Geologic Formation SAND
   Tail piece: Diameter plug Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date JAN Yield 20 Gallons per minute
   Static water level before pumping 21 Feet below surface
   Pumping level 40 feet below surface after 4 hours pumping
   Drawdown 38 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped AIR LIFT How measured WEIR
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR DOMESTIC AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER _____ Sample: Yes _____ No. _____
    Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG ON BACK Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA LOUIS M. BAINBRIDGE & SON
14. DATA OBTAINED BY Louis Wilbur Bainbridge Date 1/9/74

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.14.A28
29.N264

0 - 2 FILL

2 - 10 YELLOW BLACK SAND

10 - 45 GRAY SAND & CLAY

45 - 55 GREEN BLACK SAND.

FORM 87

29-14-447

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-8438
Application No. _____
County _____

29.1A.AAH

WELL RECORD

Redacted - Privacy Act 29.8438

1. OWNER _____ ADDRESS 65 Monmouth Blvd Oceanport
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Boro of Oceanport
3. DATE COMPLETED 9/14/76 DRILLER Louis Bainbridge
4. DIAMETER: top 4 inches Bottom 4 Inches TOTAL DEPTH 58 Feet
5. CASING: Type Steel Diameter 4" Inches Length 50 Feet
6. SCREEN: Type Stainless Size of Opening 10 Diameter 4TS Inches Length 8 Feet
   Range in Depth { Top 50 Feet / Bottom 58 Feet } Geologic Formation Sand
   Tail piece: Diameter plug Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 9/14/76 Yield 40 Gallons per minute
   Static water level before pumping 13 Feet below surface
   Pumping level 35 feet below surface after 4 hours pumping
   Drawdown 22 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped air lift How measured Wier
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR domestic AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER _____ Sample: Yes _____ No. _____
    Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG on back Are samples available? _____
    (Give details on back of sheet or on separate sheet furnish copy) If electric log was made, please
13. SOURCE OF DATA Louis M. Bainbridge + Son
14. DATA OBTAINED BY Louis M. Bainbridge Date _____

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

29.1A.4AM
29-8438

0 – 43 – BLACK CLAY

43 – 58 – BLACK SAND

29-14-472

Form B7

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-8810
Application No. _____
County _____

29.14.472

WELL RECORD

29-8810

Redacted - Privacy Act

Redacted - Privacy Act

1. OWNER _____ ADDRESS ~~Ithica Ave., Oceanport~~

Owner's Well No. _____ SURFACE ELEVATION 9 Feet (Above mean sea level)

2. LOCATION Ithica Ave, Oceanport

3. DATE COMPLETED 7/18/77 DRILLER American Drilling Company

4. DIAMETER: top 7 7/8 inches Bottom 7 7/8 inches TOTAL DEPTH 60 Feet

5. CASING: Type PVC Diameter 4 inches Length 60 Feet

6. SCREEN: Type Johnson Size of Opening 4 Diameter 4 inches Length 4 Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation _____

Tail pieces Diameter _____ inches Length _____ Feet

7. WELL FLOWS NATURALLY 10 Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute

Static water level before pumping _____ Feet below surface

Pumping level _____ feet below surface after _____ hours pumping

Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped _____ How measured _____

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type submersable Mfrs. Name Myers

Capacity _____ G.P.M. How Driven _____ H.P. 1/2 R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ inches

10. USED FOR domestic AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily

11. QUALITY OF WATER excellent Sample: Yes _____ No. _____

Taste good Odor _____ Color clear Temp. _____ °F

12. LOG _____ Are samples available? _____

(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)

13. SOURCE OF DATA Dave Travis

14. DATA OBTAINED BY _____ Date _____

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated. Analysis of the water, chlorine, record of special casing requirements, etc.)

FORM 87

29.14.4.5.3 C

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Permit No. 29-10282

Application No. _____

County MONMOUTH

29.14.453
29.10282

WELL RECORD

Redacted - Privacy Act

Redacted - Privacy Act

1. OWNER _____ ADDRESS _____

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION SAGAMORE AVE, OCEANPORT, N.J.

3. DATE COMPLETED 10-11-79 DRILLER NORMAN PRIMOST

4. DIAMETER: top 8" Inches Bottom _____ Inches TOTAL DEPTH 186 Feet

5. CASING: Type PVC Sched 40 Diameter 4 Inches Length 171 Feet

6. SCREEN: Type PVC Sched 40 Size of Opening .020 Diameter 4 Inches Length 10 Feet

Range in Depth { Top 162 Feet / Bottom 186 Feet } Geologic Formation MT LAUREL - WENONAH (GRAVEL PACKED WELL)

Tail piece: Diameter 4 Inches Length 5 Feet

7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date 10-11-79 Yield 20 Gallons per minute (CAN PUMPED 4/85GPM)

Static water level before pumping 8 Feet below surface

Pumping Level 18 GPM / 90 feet below surface after 2 hours pumping

Drawdown 82 Feet Specific Capacity 0.21 Gals. per min. per ft. of drawdown

How Pumped TEST SUBMERSIBLE How measured MEASURED CONTAINER

Observed effect on nearby wells NONE

9. PERMANENT PUMPING EQUIPMENT:

Type SUBMERSIBLE Mfrs. Name Gould

Capacity 17 G.P.M. How Driven ELEC H.P. 3/4 R.P.M. 3450

Depth of Pump in well 157 Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR DOMESTIC AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER VERY GOOD Sample: Yes X No. _____

Taste NONE Odor NONE Color CLEAR Temp. _____ °F

12. LOG PH 7.35 Fe th 0.3 PPM Are Hardness 122 PPM (Give details on back of sheet or on separate sheet. If electric log was made, give or furnish copy)

13. SOURCE OF DATA DRILLER

14. DATA OBTAINED BY David A Primost Date 11-19-79

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

WELREC 107 1942

Form DWR-138
11/80

FOR OBSERVATION PURPOSES ONLY

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29-11063 thru

PERMIT NO. 29-11068

APPLICATION NO. _____

29.13.666

WELL RECORD

COUNTY Monmouth

1. OWNER US Army ADDRESS Fort Monmouth, NJ
   Owner's Well No. 1-6 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Fort Monmouth
3. DATE COMPLETED 2/26/81 DRILLER Handex Corp
4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 20 Feet
5. CASING: Type — Diameter — Inches Length — Feet
6. SCREEN: Type PVC Size of Opening .020 Diameter 3" Inches Length 20 Feet
   Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation Kcb, Tht
   Tail Piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY NO Gallons per minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date NONE Yield _____ Gallons per minute
   Static water level before pumping _____ Feet below surface
   Pumping level _____ feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How pumped _____ How measured _____
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type None Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR 6 Monitor Wells (gasoline) AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER — No product Sample: Yes ____ No ____
    Taste _____ Odor _____ Color _____ Temp. _____ °F.
12. LOG SEE ATTACHED Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA FIELD
14. DATA OBTAINED BY DRILLER Date 2/26/81

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29·13·666

29-11063

29·13·666

PROJECT Fort Monmouth
WELL NO. 1

HANDEX CORPORATION
BORING LOG

DATE START: 2/26/81
DATE FINISH: 2/26/81
STATIC WATER LEVEL 5 ft.

LOCATION Service Station on Fort Monmouth
DRILLING METHOD HSA SAMPLING METHOD Cuttings
CASING: Type _____ Diameter _____ in. Length _____ ft.
SCREEN: Type PVC Diameter 3 in. Length 20 ft.
GRAVEL PACK yes ✓ no _____ Gravel Size Grit Total Depth 20 ft.
SANITARY SEAL yes _____ no _____ Type _____

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0 - 4.0 Dark Gray C/M Sand some clay
		4.0 - 6.0 Green C/M Sand
		6.0 - 9.0 Light Brown M/F Sand trace silt
10		9.0 - 16.0 Dark Green M/F Sand Trace - Silt
		16.0 - 20.0 Light Brown M/F Sand
20		
30		
40		

↑ 20 ft. 3" SCREEN ↓

29·13·666
29-11064
29.13.666

PROJECT Fort Monmouth
WELL NO. 2

HANDEX CORPORATION
BORING LOG

DATE START: 2-26-81
DATE FINISH: 2-26-81
STATIC WATER LEVEL _____ ft.

LOCATION Fort Monmouth N.J.
DRILLING METHOD Hollow Stem SAMPLING METHOD _____
CASING: Type PVC Diameter 3 in. Length 5 ft.
SCREEN: Type PVC Diameter 3 in. Length 20 ft.
GRAVEL PACK yes ✓ no ____ Gravel Size ____ Total Depth 25 ft.
SANITARY SEAL yes ____ no ✓ Type ____

DEPTH BELOW SUR FACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0-1.0' BLACK TOP
		1.0'-3.0' DARK BROWN SAND TR GRAVEL
		3.0'-4.0 YELLOW SAND WITH S/M GRAVEL
5		4.0'-6.0' BROWN SAND TR SILT
		6.0 10.0' DARK BROWN SILTY SAND TR GRAVEL
10		10.0'-15' DARK BROWN SILT SAND
15		15'-25' BLUE SILTY CLAY
20		

TOP
SOLID
CAPPED
SCREEN
@ 23'

29·13·666
29-11065
29·13·666

PROJECT Fort Monmouth
WELL NO. 3

HANDEX CORPORATION
BORING LOG

DATE START:
DATE FINISH:
STATIC WATER LEVEL ft.

LOCATION Fort Monmouth
DRILLING METHOD Hollow Stem SAMPLING METHOD
CASING: Type PVC Diameter 3 in. Length 5 ft.
SCREEN: Type PVC Diameter 3 in. Length 20 ft.
GRAVEL PACK yes ✓ no Gravel Size Total Depth 25 ft.
SANITARY SEAL yes no ✓ Type

DEPTH BELOW SUR FACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS	
		0.0'–1.5' BLACK TOP	Top Soil
		1.5'–4' DARK BROWN SAND WITH TR GRAVEL	
5		4'–10' DARK BROWN SILTY SAND WATER AT 8 FT.	Casing
10		10'–15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY	Screen
15		15'–20' DARK BROWN TR GRAY CLAY	
20		20'–25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.	

29·13·666
29-11066
29.13.666

PROJECT FORT MONMOUTH
WELL NO. 4

HANDEX CORPORATION
BORING LOG

DATE START: 2-27-81
DATE FINISH: 2-27-81
STATIC WATER LEVEL _____ ft.

LOCATION FORT MONMOUTH
DRILLING METHOD Hollow STEM SAMPLING METHOD _____
CASING: Type PVC Diameter 3 in. Length 0 ft.
SCREEN: Type PVC Diameter 3 in. Length 20 ft.
GRAVEL PACK yes ✓ no ____ Gravel Size _____ Total Depth 20 ft.
SANITARY SEAL yes ~~no~~ no ✓ Type _____

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0'-1.0' BLACK TOP
		1.0'-5' BROWN/LIGHT SAND & GRAVEL
5		5'-10' DARK BROWN SILTY SAND TR GRAVEL.
10		10FT-15' WATER AT 8 FT DARK BROWN SAND S/M GRAVEL GAS ODOR AT 10 FT.
15		15'-20' DARK BROWN M/C SAND TR SILT
20		

TOP
SCREEN
BOT

WELREC 107 0742

29·13·666
29-11067
29·13·666

PROJECT Fort Monmouth
WELL NO. 5

HANDEX CORPORATION
BORING LOG

DATE START: 2-27-81
DATE FINISH: 2-27-81
STATIC WATER LEVEL _____ ft.

LOCATION Fort Monmouth N.J.
DRILLING METHOD Hollow Stem SAMPLING METHOD _____
CASING: Type _____ Diameter _____ in. Length _____ ft.
SCREEN: Type PVC Diameter 3 in. Length 20 ft.
GRAVEL PACK yes ✓ no _____ Gravel Size _____ Total Depth 20 ft.
SANITARY SEAL yes _____ no ✓ Type _____

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0' - 1.0' BLACK TOP
		1.0' - 1.5' 8"-0 STONE
		1.5' - 6' SAND (Yellow) and S/H GRAVEL
5		6'-10' DARK BROWN Sand TR SILT TR GRAVEL
10		10'-15' DARK BROWN SILTY SAND TR CLAY
		WATER
15		15'-20' DARK BROWN SILTY Sand TR GRAVEL TR GRAY SILTY CLAY
20		

TOP
3" SCREEN
CAP

WELREC 107 0743

29.13.666
29-11068

29.13.666

PROJECT FORT MONMOUTH
WELL NO. 6

HANDEX CORPORATION
BORING LOG

DATE START: 2-27-81
DATE FINISH: 2-27-81

LOCATION FORT MONMOUTH
DRILLING METHOD Hollow STEM SAMPLING METHOD
CASING: Type Diameter in. Length ft.
SCREEN: Type PVC Diameter 3 in. Length 20 ft.
GRAVEL PACK yes ✓ no Gravel Size Total Depth 20 ft.
SANITARY SEAL yes no ✓ Type

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS	WELL DESIGN
		0.0'-1.0' BLACK TOP	TOP
		1.0'-4.0' DARK BROWN S/M SAND TR M/C GRAVEL	All Screen →
5		4'-7' GAS ODOR VERY STRONG DARK BROWN SAND TR SILT	
		7'-10' DARK BROWN SILTY SAND WATER AT 8FT TR GRAVEL	
10		10'-20' DARK BROWN SILT SAND S/M GRAVEL TR/ GRAY CLAY	
15			
20			CAP

WELREC 107 0744

29·13·664

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-11772

APPLICATION NO. _____

29·13·664

COUNTY _____

WELL RECORD

29·11772

Redacted - Privacy Act

1. OWNER _____ ADDRESS 49 Gooseneck Pt.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Ocean Port, Monmouth, Lot-74 Block-21

3. DATE COMPLETED 1-14-82 DRILLER Engineering Drilling

4. DIAMETER: Top 4 inches Bottom 3"x5" inches TOTAL DEPTH 265' Feet

5. CASING: Type PVC Diameter 4 Inches Length 255' Feet

6. SCREEN: Type PVC Size of Opening 20 Diameter 3x5 Inches Length [redacted]10 Feet

Range in Depth { Top 255' Feet / Bottom 265 Feet } Geologic Formation _____

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date 1-14-82 Yield 50 Gallons per minute

Static water level before pumping 8'6" Feet below surface

Pumping level 50 feet below surface after 4 hours pumping

Drawdown 9' Feet Specific Capacity 60 Gals. per min. per ft. of drawdown

How pumped Air How measured Elec.

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type _____ Mfrs. Name _____

Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR Heat Pump AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER Good Sample: Yes ____ No ____

Taste — Odor — Color — Temp. _____ °F.

12. LOG Yes Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA Cuttings

14. DATA OBTAINED BY [signature] Date 4-17-82

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.14.4.5.3

Form DWR-138
11/80

PICKWICK WELL DRILLING
P. O. BOX 6
FARMINGDALE, N.J. 07727
201-938-5300 201-240-3707

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29·14·A53

WELL RECORD

PERMIT NO. 29-11855

APPLICATION NO. _____

COUNTY Monmouth

1. OWNER [redacted] - Privacy Act _____ ADDRESS 500 Branchport Ave. Oceanport
   Owner's Well No. _____ SURFACE ELEVATION 10 Feet (Above mean sea level)
2. LOCATION same as above
3. DATE COMPLETED 3-2-82 DRILLER Norman Primost
4. DIAMETER: Top 8½ inches Bottom _____ inches TOTAL DEPTH 191 Feet
5. CASING: Type PVC Sched. 40 Diameter 4 Inches Length 166 Feet
6. SCREEN: Type PVC 40 Size of Opening _____ Diameter 4 Inches Length 20 Feet
   Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation Kmw gravel packed well
   Tail Piece: Diameter 4 Inches Length 5 Feet
7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 3-2-82 Yield 60 (air pumped w/85CFM) Gallons per minute
   Static water level before pumping 12 Feet below surface
   Pumping level _____ feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity 0.5 Approx Gals. per min. per ft. of drawdown
   How pumped temp. sub. How measured container
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT: BY OTHERS
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR DOMESTIC(replacement) AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER Very Good Sample: Yes ____ No ____
    Taste none Odor none Color clean Temp. _____ °F.
12. LOG _____ Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA Driller
14. DATA OBTAINED BY [signature] Date 4/8/82

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.14.453
29.11855

Log

0-5	clayey reddish-brown & grey sand.
5-15	clayey grey sand & gray sand.
15-30	gray silt, cemented.
30-45	same w/silty fine black sand & shells
45-75	gray silty clay w/some bl. sand & a few shells. with some grey clay.
75-85	gray silty clay w/more bl. sand & some grey clay.
85-105	silty fine & med bl. sand w/some gray clay trace of grey clay. - some shells.
105-150	gray silty & sandy clay, some shells & some black sand.
150-155	same w/some hard shells
155-185	Black & white med. sand w/shells - clean.
185-191	same - w/clay & some hard.

APR 19 1982

PROJECT Shell

WELL NO. 1

DATE DRILLED 1-19-83

STATIC WATER LEVEL 2'6"

HANDEX Corp.
703 Ginesi Drive
Morganville, New Jersey 07751
(201) 536-8500

PERMIT NO. 29-12353

APPLICATION NO. 29.1A.A47

COUNTY Monmouth

USE monitor 29.14.A47
29.12553

LOCATION 1 Main Street, Oceanport, New Jersey

OWNER Shell Oil Company ADDRESS West Orange, New Jersey

DRILLING METHOD air rotary SAMPLING METHOD cuttings

DIAMETER: Top _____ Bottom _____ Inches TOTAL DEPTH 10' Feet

CASING: Type PVC Diameter 4 Inches Length 2' Feet

SCREEN: Type PVC Size of Opening 0.020 Diameter 4 Inches Length 8' Feet

GRAVEL PACK Yes X No _____ GRAVEL SIZE #1

SANITARY SEAL Yes X No _____ TYPE bentonite GEOLOGIC FRM Fill

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0'-0'6" Asphalt and crushed stone
		0'6"-2' Tan medium to fine SAND, some-fine gravel, trace+ silt
		2'-3'6" Tan medium to fine SAND, little+ silt, slight fuel odor at 3'6"
5'		3'6"-10' FILL--Black cinders, wood, glass, etc.
		Well Screen
10'		
15'		

29.14.447

Form DWR-020
10/84

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES – BUREAU OF WATER ALLOCATION
CN-029, TRENTON, NEW JERSEY 08625
(609) 984-6831

pde

WELL ABANDONMENT REPORT

29.14.447

TYPE OF WELL ABANDONED:
- ☐ Irrigation
- ☐ Domestic
- ☐ Industrial
- ☐ Public
- ☒ Monitoring
- ☐ Observation

WELL PERMIT NO. 29-12553

Shell Oil Company
Name of Owner

Handex Corporation
Driller

1 Main Street
Address

1
Well No. (if available)

Oceanport, NJ
Township, County

lot 25, block 110
Lot & Block No.

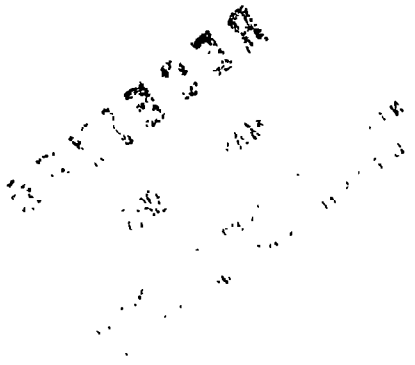
REASON FOR ABANDONMENT: well was removed when contractor removed the waste oil tank. It was within the area of the excavation.

DESCRIBE METHOD USED AND DRAW A DIAGRAM OF THE WELL

_____ Bags of Cement
_____ lbs. of Bentonite
_____ lbs. of Sand

Diameter of Casing 4"

Casing Length 2'



Screen Length 8'

Total Depth 10'

I hereby certify that I have abandoned and sealed the well in accordance with N.J.S.A. 4A-4.1, "Standard Specifications for Sealing Abandoned Wells."

May 24, 1985 19
Date

Signature of Driller

1125
License No.

PROJECT Shell

WELL NO. 2

DATE DRILLED 1-19-83

STATIC WATER LEVEL 2'

HANDEX Corp.
703 Ginesi Drive
Morganville, New Jersey 07751
(201) 536-8500

PERMIT NO. 29-12554

APPLICATION NO. 29.14447

COUNTY Monmouth 29.12554

USE monitor

LOCATION 1 Main Street, Oceanport, New Jersey

OWNER Shell Oil Company ADDRESS West Orange, New Jersey

DRILLING METHOD air rotary SAMPLING METHOD cuttings

DIAMETER: Top _____ Bottom _____ Inches TOTAL DEPTH 9' Feet

CASING: Type PVC Diameter 4 Inches Length 1' Feet

SCREEN: Type PVC Size of Opening 0.020 Diameter 4 Inches Length 8' Feet

GRAVEL PACK Yes X No _____ GRAVEL SIZE #1

SANITARY SEAL Yes X No _____ TYPE bentonite GEOLOGIC FRM Fill

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0'-1' Grass--soil
		1'-3' Brown medium to fine SAND, trace silt
5'		3'-9' FILL--Black cinders, bottles, brick, etc.
		NOTE: Hole making 10 g.p.m.
10'		
15'		

Well Screen

WELREC 107 1923

29.14.447

Form DWR-020
10/84

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES – BUREAU OF WATER ALLOCATION
CN-029, TRENTON, NEW JERSEY 08625
(609) 984-6831

WELL ABANDONMENT REPORT

29-14-447

TYPE OF WELL ABANDONED:
- ☐ Irrigation
- ☐ Domestic
- ☐ Industrial
- ☐ Public
- ☒ Monitoring
- ☐ Observation

WELL PERMIT NO. 29-12554

Shell Oil Company Name of Owner	Handex Corporation Driller
1 Main Street Address	2 Well No. (if available)
Oceanport, New Jersey Township, County	lot 25, block 110 Lot & Block No.

REASON FOR ABANDONMENT: Case closed on our files and the NJDEP files.

DESCRIBE METHOD USED AND DRAW A DIAGRAM OF THE WELL

1½ Bags of Cement
2½ lbs. of Bentonite
— lbs. of Sand

Diameter of Casing 4"

Displacement grouted wells with neat cement from bottom up.

Casing Length 1'

Screen Length 8'

Total Depth 9'

I hereby certify that I have abandoned and sealed the well in accordance with N.J.S.A. 4A-4.1, "Standard Specifications for Sealing Abandoned Wells."

May 24, 1985 19
Date

Signature of Driller

1125
License No.

WELREC 107 1924

PROJECT Shell

WELL NO. 3

DATE DRILLED 1-19-83

STATIC WATER LEVEL 2'

HANDEX Corp.
703 Ginesi Drive
Morganville, New Jersey 07751
(201) 536-8500

PERMIT NO. 29-12556

APPLICATION NO. 29.14AA7

COUNTY Monmouth 29.12555

USE monitor

LOCATION 1 Main Street, Oceanport, New Jersey

OWNER Shell Oil Company ADDRESS West Orange, New Jersey

DRILLING METHOD air rotary SAMPLING METHOD cuttings

DIAMETER: Top _____ Bottom _____ Inches TOTAL DEPTH 9' Feet

CASING: Type PVC Diameter 4 Inches Length 1' Feet

SCREEN: Type PVC Size of Opening 0.020 Diameter 4 Inches Length 8' Feet

GRAVEL PACK Yes X No _____ GRAVEL SIZE #1

SANITARY SEAL Yes X No _____ TYPE bentonite GEOLOGIC FRM Fill

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0'-1' Grass--soil
		1'-3' Brown medium to fine SAND, trace silt
5'		3'-9' FILL--Black cinders, bottles, bricks, etc.
		NOTE: Hole making 10 g.p.m.
10'		
15'		

Well Screen

WELREC 107 1925

29.14.447

Form DWR-020
10/84

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES – BUREAU OF WATER ALLOCATION
CN-029, TRENTON, NEW JERSEY 08625
(609) 984-6831

WELL ABANDONMENT REPORT

29.14.447

TYPE OF WELL ABANDONED:
- ☐ Irrigation
- ☐ Domestic
- ☐ Industrial
- ☐ Public
- ☒ Monitoring
- ☐ Observation

WELL PERMIT NO. 29-12555

Shell Oil Company Name of Owner	Handex Corporation Driller
1 Main Street Address	3 Well No. (if available)
Oceanport, New Jersey Township, County	lot 25, block 110 Lot & Block No.

REASON FOR ABANDONMENT: Case closed on our files and the NJDEP files.

DESCRIBE METHOD USED AND DRAW A DIAGRAM OF THE WELL

1½ Bags of Cement
2½ lbs. of Bentonite
-- lbs. of Sand

Diameter of Casing 4"

Displacement grouted wells with neat cement from bottom up.

Casing Length 1'

Screen Length 8'

Total Depth 9'

I hereby certify that I have abandoned and sealed the well in accordance with N.J.S.A. 4A-4.1, "Standard Specifications for Sealing Abandoned Wells."

May 24, 1985 19 Date	Signature of Driller	1125 License No.

WELREC 107 1926

29-14473

Form DWR-138
1/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-12598

APPLICATION NO. _____

29.14.473

COUNTY Monmouth

WELL RECORD

29.12598

Redacted - Privacy Act

1. OWNER _____ ADDRESS 505 Branch Port Ave, Ocean Port

Owner's Well No. _____ SURFACE ELEVATION 10 Feet (Above mean sea level)

2. LOCATION Lot 20, Block 2

3. DATE COMPLETED 2-18-83 DRILLER Aqua Well Drilling, Inc.

4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 190 Feet

5. CASING: Type pvc Diameter 3 Inches Length 180 Feet

6. SCREEN: Type pvc Size of Opening .016 Diameter 3 Inches Length 10 Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation sand

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date 2-18-83 Yield 12 Gallons per minute

Static water level before pumping 15 Feet below surface

Pumping level 19 feet below surface after 4 hours pumping

Drawdown 4 Feet Specific Capacity 1/4 Gals. per min. per ft. of drawdown

How pumped test pumped How measured 5 gallon

Observed effect on nearby wells none

9. PERMANENT PUMPING EQUIPMENT:

Type jet - shallow Mfrs. Name Goulds

Capacity 12 G.P.M. How Driven electric H.P. 1/2 R.P.M. 3450

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR domestic - replacement AMOUNT { Average 250 Gallons Daily / Maximum 275 Gallons Daily

11. QUALITY OF WATER good Sample: Yes ____ No ____

Taste none Odor none Color clear Temp. 51 °F.

12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA Aqua Well Drilling, Inc.

14. DATA OBTAINED BY Claude Britton Date February 23, 1983

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29. 1A. 473
29. 12598

Log:
10- 35 med + coarse sand
35 - 160 silt and clay
160 - 190 med. sand

MAR 01 1983

WELREC 107 2021

29.13.635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29.13.635

Well No. 1 Application No. _____ Permit No. 29-12785
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 9'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 7'
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
	S-1	2'-4'		0'-2' Brown black medium SAND, some clay, trace fine gravel, no odors
	S-2	4'-6'	20 Slot well screen	2'-5' Grey green micaceous CLAY, moist, gasoline odor
5'				
	S-3	6'-8'		5'-7' Brown SILT and SAND, strong gasoline odor 7'-7'6" Grey medium SAND, little clay, free gasoline
	S-4	8'-10'		7'6"-9'6" Brown SILT and SAND, little+ clay, gasoline draining out of split spoon sampler from 6'-8', brown sand lenses at 8'-8'6", water saturated, gasoline visible at 8'
10'				9'6"-10' Tight grey SAND and CLAY, gasoline odor
				NOTE: 2'6" of gasoline in well 1 hour after completion, continued to recover after bailing
15'				

29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29·13·635

Well No. 2 Application No. _____ Permit No. 29-12786
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 9'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 7'
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Black green SAND, some clay, gasoline odor at 3'
	S-1	3'-5'	20 slot well screen	3'-6'6" Dark green SAND and CLAY, gasoline odor, wet, water in borehole from 5'-7'
5'	S-2	5'-7'		6'6"-7'6" Brown SAND and CLAY, gasoline odor
	S-3	7'-9'		7'6"-8' Brown SAND and SILT, water saturated
10'				8'-9' Brown SAND and CLAY, slight gasoline odor
				NOTE: 0.04' of gasoline in well 20 minutes after completion, 0.5' of gasoline in well 2 hours later.
15'				

29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29·13·635

BORING LOG

Well No. 3 Application No. _____ Permit No. 29-12787
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 9'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 7'
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-2'6" Brown medium SAND, little+ clay
				2'6"-3' Dark green SAND and CLAY, oily odor
	S-1	3'-5'	20 slot well screen	
5'	S-2	5'-7'		3'-6' Grey green micaceous SAND and CLAY, moist, slight gasoline odor
	S-3	7'-9'		6'-7'6" Brown SAND and CLAY, wet at 6'
				7'6"-8' Medium SAND, some clay, little gravel, no odors
10'				8'-9' Dark green brown SAND and CLAY
15'				

29.13.635

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29.13.635

BORING LOG

Well No. 4 Application No. _____ Permit No. 29-12788
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 10'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 8'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Black brown micaceous SAND and clayey SILT, slight waste oil odor
	S-1	3'-5'		3'-3'6" Brown SAND and SILT, wet, no odors
5'	S-2	5'-7'	20 slot well screen	3'6"-6'6" Grey green medium SAND and CLAY, no odors
	S-3	7'-9'		
10'				6'6"-10' Brown medium SAND and CLAY, no odors
15'				

29·13·635

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29·13·635

BORING LOG

Well No. 5' Application No. _____ Permit No. 29-12789
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method cuttings
Hole Diameter 12" Total Depth 9'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 7'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
5'			20 Slot well screen	0'-4' Black SAND, some+ clay, strong gasoline odor at 1'6", gasoline and water draining into borehole at 4'
10'				4'-7'6" Grey medium SAND, some+ clay, saturated with gasoline
15'				7'6"-9' Grey coarse to medium SAND, some clay, gasoline saturated
				9' Brown medium SAND and CLAY
				NOTE: 12" of gasoline in well on May 10, 1983

29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29·13·635

Well No. 6 Application No. _____ Permit No. 29-12790
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method cuttings
Hole Diameter 12" Total Depth 9'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 7'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-1'6" FILL
			20 Slot well screen	1'6"-5' Dark green SAND and CLAY
5'				
				5'-9' Dark brown SAND and CLAY, gasoline odor
				9' Dark green black SAND and CLAY
10'				
				NOTE: 0.04' of gasoline in well upon completion
15'				

Handex 29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG 29·13·635

Well No. 7 Application No. _____ Permit No. 29-12792
Date Drilled May 9, 1983 County Monmouth Use monitor
Location Citgo S/S, Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 9'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 7'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Dark green black micaceous CLAY and SAND, wet at 3'
	S-1	3'-5'	20 slot well screen	3'-5' Dark green SAND and CLAY, plant debris wet, strong gasoline odor
5'	S-2	5'-7'		5'-7' Dark green CLAY and SAND, saturated with gasoline
	S-3	7'-9'		7'-8' Dark green coarse to medium SAND, some (+) clay, strong gasoline odor
10'				8'-9' Brown hard medium SAND and CLAY
15'				

29-13-635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29-13-635

Well No. 8 Application No. _____ Permit No. 29-12793
Date Drilled May 10, 1983 County Monmouth Use monitor
Location Mobil S/S, 700 Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 10'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 8'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Dark green micaceous CLAY and SAND, slight oily odor
	S-1	3'-5'		3'-5' Dark green CLAY, some medium sand, gasoline odor (decomposed)
5'	S-2	5'-7'	20 slot well screen	5'-7' SAND and CLAY, decomposed gasoline odor, soft material, moist
	S-3	7'-9'		7'-11' Coarse to medium SAND, some+ clay, no water, water appeared in borehole when sampler was driven from 9'-11'
	S-4	9'-11'		
10'				NOTE: Slow recovery during bailing
15'				

29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29·13·635

Well No. 9 Application No. _____ Permit No. 29-12794
Date Drilled May 10, 1983 County Monmouth Use monitor
Location Mobil S/S, 700 Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 11'

Casing:
Type PVC Diameter 4" Length 2'

Screen:
Type PVC Slot 20 Diameter 4" Length 8'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Brown micaceous CLAY, little+ sand, no odor
	S-1	3'-5'		3'-5' Brown SAND and CLAY, organic odor at 4'
5'	S-2	5'-7'	20 Slot well screen	5'-6' Dark green micaceous SAND and CLAY, sweet chemical odor
	S-3	7'-9'		6'-9'6" Brown SAND and CLAY, moist, sweet odor, wet at 8'-9'
10'				9'6"-11' Green SAND and CLAY
15'				

Handex 29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29·13·635

Well No. 10 Application No. _____ Permit No. 29-12795
Date Drilled May 10, 1983 County Monmouth Use monitor
Location Mobil S/S, 700 Branch Avenue, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 11'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 9'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-5' Dark green CLAY, some sand, plant roots at 2'6", slight oily odor
5'	S-1	5'-7'	20 slot well screen	
				5'-8' Brown CLAY and SAND, moist, slight sweet odor
	S-2	7'-9'		
				8'-9' Medium SAND and CLAY, water saturated
	S-3	9'-11'		9'-9'6" Brown SAND and CLAY, water saturated
10'				9'6"-10' Black CLAY, some+ sand, threads to 1/8" diameter
15'				

29.13.635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29.13.635

Well No. 11 Application No. _____ Permit No. 29-12796
Date Drilled May 10, 1983 County Monmouth Use monitor
Location Texaco S/S, 333 Willow Drive, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method split spoon
Hole Diameter 12" Total Depth 10'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 8'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Green CLAY, little+ medium sand, slight oily odor
	S-1	3'-5'		3'-5' Brown CLAY and SAND, moist, no odor
5'	S-2	5'-7'	20 slot well screen	5'-8' Brown medium SAND and CLAY, water at 6'-7', no odor
	S-3	7'-9'		
10'				8'-10' Tight brown medium SAND and CLAY
15'				NOTE: Fast recovery during bailing

Handex 29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29·13·635

Well No. 12 Application No. _____ Permit No. 29-12797
Date Drilled May 10, 1983 County Monmouth Use monitor
Location Texaco S/S, 333 Willow Drive, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method cuttings
Hole Diameter 12" Total Depth 10'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 8'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-6' Dark green CLAY, some sand, waste oil odor
5'				
			20 slot well screen	6'-7' Light green CLAY and SAND, sweet odor at 8'
				7'-10' Brown SAND and CLAY
10'				
				NOTE: Water in borehole at 10', water saturated seam from 7' to 10'
15'				

29·13 635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

BORING LOG

29·13·635

Well No. 13 Application No. _____ Permit No. 29-12798
Date Drilled May 10, 1983 County Monmouth Use monitor
Location Texaco S/S, 333 Willow Drive, Little Silver, New Jersey
Owner _____ Address _____
Drilling Method hollow stem auger Sampling Method cuttings
Hole Diameter 12" Total Depth 10'

Casing:
Type PVC Diameter 4" Length 1'

Screen:
Type PVC Slot 20 Diameter 4" Length 8'6"
Gravel Pack Size #2 Casing Seal neat cement
Static Water Level _____ Geologic Formation Tinton

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-3' Brown medium SAND, some+ clay
5'			20 slot well screen	3'-7' Dark green micaceous CLAY and SAND, strong gasoline odor at 6'
10'				7'-10' Brown SAND and CLAY, gasoline on auger flytes, water draining into borehole at 8'
15'				NOTE: 0.01' of gasoline in well upon completion

Form DWR- 138
12/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-13696

APPLICATION NO. _____

29-13-635

FOR MONITORING PURPOSES ONLY

WELL RECORD

COUNTY Monmouth

2913696

1. OWNER Broadwell Realty Service Inc. ADDRESS 905 Broad Street, Newark, NJ 07102
   Owner's Well No. 3A SURFACE ELEVATION 104.11 (Assumed datum) (Above mean sea level)
2. LOCATION Citgo Station — Branch Ave, Little Silver, NJ
3. DATE COMPLETED 5/15/84 DRILLER NEPCCO
4. DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 11 Feet
5. CASING: Type PVC Diameter 4 Inches Length 2 Feet
6. SCREEN: Type PVC Size of Opening .020" Slot Diameter 4 Inches Length 9 Feet
   Range in Depth { Top 2 Feet / Bottom 11 Feet } Geologic Formation COHANSEY
   Tail Piece: Diameter ——— Inches Length ——— Feet
7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute
   Static water level before pumping _____ Feet below surface
   Pumping level _____ feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How pumped _____ How measured _____
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR monitoring AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER _____ Sample: Yes ____ No ____
    Taste _____ Odor _____ Color _____ Temp. _____ °F.
12. LOG See Attached Sheet Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA NEPCCO GEOLOGIST WELL LOG.
14. DATA OBTAINED BY H. Woike, B. Beahan NEPCCO Date 7/12/84

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.635

29-13696
29.13.635

New England Pollution Control Co, Inc
7 Edgewater Place
Norwalk, CT 06855

Page ___ of ___

Drill Master: Gary Birchard

Description	Thickness (in feet)	Depth
Asphalt	.5	0-.5
Gray loose coarse sand	2.5	.5-3'
Gray/blue clay with trace of fine sand. (Slight product odor at 5').	3	3'-6'
Some gray clay with trace of medium sand.	1	6'-7'
Reddish brown clay silt with trace of medium sand.	2.5	7'-9.5'
Clay change color back to gray still with trace of sand.	.5	9.5-10
Black very compact, dry layer, once broken it is loose silt which contains some coarse sand (marl).	1	10'-11'
Refusal, possible bedrock		11' -

Owner: Broadwell Realty

Location: Branch Ave Little Silver, NJ

Well No: #3A

Date Completed: 5/15/84

Drilling Method: Hollow Stem Auger

Sample Method: Split Spoon

Samples Examined By: H. Woike

Reference Point: Grade = Assumed Datum

Elevation Of R. P.: 104.11

Casing: N/A

Screen Type: 2' Solid PVC
9' Slotted PVC

Diameter: 4 inch

Static Water Level:

Remarks: Soils permeability poor.

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-13697

APPLICATION NO. _____

COUNTY Monmouth

FOR MONITORING PURPOSES ONLY

29.13.635

WELL RECORD

29 13697

1. OWNER Broadwell Realty Service Inc. ADDRESS 905 Broad Street Newark, NJ 07102
   Owner's Well No. 2A SURFACE ELEVATION 103.82' (Assumed Datum) Feet (Above mean sea level)
2. LOCATION Citgo Station - Branch Ave. Little Silver, NJ
3. DATE COMPLETED 5/15/84 DRILLER NEPCCO
4. DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 10 Feet
5. CASING: Type PVC Diameter 4 Inches Length 2 Feet
6. SCREEN: Type PVC Size of Opening .020" slot Diameter 4 Inches Length 8 Feet
   Range in Depth { Top 2 Feet / Bottom 10 Feet } Geologic Formation COHANSEY
   Tail Piece: Diameter — Inches Length — Feet
7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute
   Static water level before pumping _____ Feet below surface
   Pumping level _____ feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How pumped _____ How measured _____
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR Monitoring AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER _____ Sample: Yes ____ No ____
    Taste _____ Odor _____ Color _____ Temp. _____ °F.
12. LOG SEE ATTACHED SHEET Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA NEPCCO GEOLOGIST WELL LOG.
14. DATA OBTAINED BY H. WOIKE, B. BEAHAN } NEPCCO Date 7/12/84

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

New England Pollution Control Co, Inc
7 Edgewater Place
Norwalk, CT 06855

29.13.635
29-13697
29.13.635

Drill Master: Gary Birchard

Page ___ of ___

Description	Thickness (in feet)	Depth
Dark brown topsoil	.25	0-.25
Light brown clay or silt with no coarse fragments.	3.75	.25'-4'
Clay slightly reddish with trace of fine sand and very few pebbles. (Water at approximately 6').	5	4'-9'
Gray/brown clay or silt with some fine to medium sand.	1	9'-10'

Owner: Broadwell Realty

Location: Branch Ave Little Silver, NJ

Well No: #2A

Date Completed: 5/15/84

Drilling Method: Hollow Stem Auger

Sample Method: Cuttings

Samples Examined By: H. Woike

Reference Point: Grade = Assumed Datum

Elevation Of R. P.: 103.82

Casing: N/A

Screen Type: 2' Solid PVC
8' Slotted PVC

Diameter: 4 inch

Static Water Level:

Remarks: Soils permeability poor.
No product odor.

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-13698

APPLICATION NO.

29.13.635
WELL RECORD 29.13698

COUNTY Monmouth

FOR MONITORING PURPOSES ONLY

1. OWNER Broadwell Realty Service Inc. ADDRESS 905 Broad Street Newark, NJ 07102
   Owner's Well No. 1A SURFACE ELEVATION 103.99 (Assumed datum) (Above mean sea level)
2. LOCATION Citgo Station - Branch Ave. Little Silver, NJ
3. DATE COMPLETED 5/15/84 DRILLER NEPCLO
4. DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 10 Feet
5. CASING: Type PVC Diameter 4 Inches Length 2 Feet
6. SCREEN: Type PVC Size of Opening .020" slot Diameter 4 Inches Length 8 Feet
   Range in Depth { Top 2 Feet / Bottom 10 Feet } Geologic Formation COHANSEY
   Tail Piece: Diameter — Inches Length — Feet
7. WELL FLOWS NATURALLY ____ Gallons per minute at ____ Feet above surface
   Water rises to ____ Feet above surface
8. RECORD OF TEST: Date ____ Yield ____ Gallons per minute
   Static water level before pumping ____ Feet below surface
   Pumping level ____ feet below surface after ____ hours pumping
   Drawdown ____ Feet Specific Capacity ____ Gals. per min. per ft. of drawdown
   How pumped ____ How measured ____
   Observed effect on nearby wells ____
9. PERMANENT PUMPING EQUIPMENT:
   Type ____ Mfrs. Name ____
   Capacity ____ G.P.M. How Driven ____ H.P. ____ R.P.M. ____
   Depth of Pump in well ____ Feet Depth of Footpiece in well ____ Feet
   Depth of Air Line in well ____ Feet Type of Meter on Pump ____ Size ____ Inches
10. USED FOR Monitoring AMOUNT { Average ____ Gallons Daily / Maximum ____ Gallons Daily }
11. QUALITY OF WATER ____ Sample: Yes ____ No ____
    Taste ____ Odor ____ Color ____ Temp. ____ °F.
12. LOG SEE ATTACHED SHEET Are samples available? ____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA NEPCLO GEOLOGIST WELL LOG.
14. DATA OBTAINED BY H. WOIKE, B. BEAMAN } NEPCLO Date 7/12/84

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

New England Pollution Control Co, Inc
7 Edgewater Place
Norwalk, CT 06855

29.13.635
29-13698
29.13.635

Drill Master: Gary Birchard

Page ___ of ___

Description	Thickness (in feet)	Depth
Dark brown topsoil	1	0-1'
Light brown silt or clay with no coarse fragments.	3	1'-4'
Same, light brown clay with trace of fine sand. (Water at approximately 6').	6	5'-10'

Owner: Broadwell Realty

Location: Branch Ave Little Silver, NJ

Well No: 1A

Date Completed: 5/15/84

Drilling Method: Hollow Stem Auger

Sample Method: Cuttings

Samples Examined By: H. Woike

Reference Point: Grade = Assumed Datum

Elevation Of R. P.: 103.99

Casing: N/A

Screen Type: 2' Solid PVC
8' Slotted PVC

Diameter: 4 inch

Static Water Level:

Remarks: Permeability seems poor.
No product odor.

29.13.638 29.13.638

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: ~~2914474~~

PERMIT NO. 2913825

APPLICATION NO. _____

COUNTY Monmouth

WELL RECORD FOR MONITORING PURPOSES ONLY

1. OWNER N.J. TRANSIT CORP ADDRESS 95 ORANGE ST.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot: Block: Municipality: Little Silver Boro

3. DATE COMPLETED 6/11/84 DRILLER Warren George Inc. Silverside & Fairview Ave's

4. DIAMETER: Top 2½ inches Bottom _____ inches TOTAL DEPTH 35 Feet

5. CASING: Type _____ Diameter 4 Inches Length _____ Feet

6. SCREEN: Type _____ Size of Opening _____ Diameter 2 Inches Length _____ Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute

Static water level before pumping _____ Feet below surface

Pumping level _____ feet below surface after _____ hours pumping

Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How pumped _____ How measured _____

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type _____ Mfrs. Name _____

Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR _____ AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER _____ Sample: Yes _____ No _____

Taste _____ Odor _____ Color _____ Temp. _____ °F.

12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA Boring Log

14. DATA OBTAINED BY Warren George, Inc. Date 7/15/85

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

~~29.11.194~~
29.13.638

P# 29-13825

JOB LOCATION:

Long Branch RR

WARREN GEORGE, INC.

FOOT OF JERSEY AVENUE
P. O. BOX 413
JERSEY CITY, N.J. 07303

FOR: Edwards & Kelcey

SHEET 1 OF 1
LOCATION Long Branch RR
HOLE NO. 636W
LINE & STA. 29.13.638
OFFSET 29-13825

DEPTH ____ FT. ____ FT. CASING OUT DATE: ____
DEPTH ____ FT. ALL CASING OUT DATE: ____
DATE, START: 6/11/84
DATE, FINISH: 6/11/84
GROUND ELEVATION ____
GROUND WATER ELEVATION ____

CASING O.D. 4" I.D. ____
SAMPLER O.D. 2" I.D. ____
DIAMOND BIT SIZE ____
WEIGHT OF HAMMER 300-140 LBS.
INSIDE LENGTH OF SAMPLER ____ IN.
HAMMER FALL
CASING ____ SAMPLER ____

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELEV. / FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOILS REMARKS
0		1	0'-2'		7	8	8-12			
		2	5'-7'		2	3	5-7			
10		3	10'-12'		3	5	8-8		0'-14'	Sand with Silt, Trace Clay
		4	15'-17'		5	8	9-12			
20		5	20'-22'		6	7	9-12			
		6	25'-27'		5	9	13-17			
30		7	30'-32'		10	11	11-18			
		8	35'-37'		11	21	32-40		14'-37'	Green Marl
40										

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2914468

PERMIT NO. 2913978

APPLICATION NO. _____

COUNTY Monmouth

FOR MONITORING PURPOSES ONLY

WELL RECORD

1. OWNER NEW JERSEY TRANSIT CORP. ADDRESS 95 ORANGE ST.

   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot: Block: Municipality: Shrewsbury Twp.

3. DATE COMPLETED _____ DRILLER Warren George Inc.

4. DIAMETER: Top _____ inches Bottom _____ inches TOTAL DEPTH _____ Feet

5. CASING: Type _____ Diameter _____ Inches Length _____ Feet

6. SCREEN: Type _____ Size of Opening _____ Diameter _____ Inches Length _____ Feet

   Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____

   Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

   Water rises to _____ Feet above surface

8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute

   Static water level before pumping _____ Feet below surface

   Pumping level _____ feet below surface after _____ hours pumping

   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

   How pumped _____ How measured _____

   Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

   Type _____ Mfrs. Name _____

   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____

   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR _____ AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER _____ Sample: Yes _____ No _____

    Taste _____ Odor _____ Color _____ Temp. _____ °F.

12. LOG _____ Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA Boring Log

14. DATA OBTAINED BY Warren George, Inc. Date 7-15-85

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.14.468 29-13978

JOB LOCATION: Long Branch RR

WARREN GEORGE. INC.

FOOT OF JERSEY AVENUE
P. O. BOX 413
JERSEY CITY, N.J. 07303

FOR: Edwards & Kelcey

SHEET 1 OF 1
LOCATION Long Branch RR
HOLE NO. 665
LINE & STA. 29.14.468
OFFSET 29-13978

DEPTH _____ FT. ____ FT. CASING OUT DATE: _____
DEPTH _____ FT. ALL CASING OUT DATE: _____

DATE, START: 7/24/84
DATE, FINISH: 7/24/84

GROUND ELEVATION _____
GROUND WATER ELEVATION 9'-2:30pm

CASING O.D. 4" I.D. _____
SAMPLER O.D. 18" I.D. _____
DIAMOND BIT SIZE _____

WEIGHT OF HAMMER 300-140 LBS.
INSIDE LENGTH OF SAMPLER _____ IN.

HAMMER FALL
CASING ____ SAMPLER ____

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELEV. / FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOILS REMARKS
0		1	0'-2'			4-3	-4-4			
		2	5'-7'			3-5	-5-4		0'-7'	Black Sand
10			10'-12'			Pressure	Test			
		3	12'-13'6"			9-4	-6			
			15'-17'			Pressure	Test		7'-17'	Gray Fine/Coarse Sand Wet
		4	17'-18'6"			15-23	-39			
20			20'-22'			Pressure	Test			
		5	22'-23'6"			13-23	-37			
		6	25'-27'			15-29	-33-48			
30			30'-32'			Pressure	Test			
		7	33'-35'			9-13	-19-38		17'-35'	Light Brown Coarse/Fine Sand
40										

WELREC 107 2014

29-14-448

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-14157
APPLICATION NO. ✓
COUNTY Monmouth

29-1A-448

WELL RECORD

29-14157

Redacted - Privacy Act Redacted - Privacy Act

1. OWNER _____ ADDRESS _____
   Owner's Well No. 29-14157 SURFACE ELEVATION 85 (Above mean sea level) Feet
2. LOCATION River St. - Oceanport, NJ. Lot 20 Blk 1
3. DATE COMPLETED 9/24/84 DRILLER J. A. Conover 951
4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 72 Feet
5. CASING: Type drive Steel Diameter 4 inches Length 68 Feet
6. SCREEN: Type S.S. Size of Opening 18 slot Diameter 4 inches Length 4 Feet
   Range in Depth { Top 68 Feet / Bottom 72 Feet } Geologic Formation Black sand, clay & shell Trans
   Tail Piece: Diameter 3 inches Length 1 Feet
7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 9/24/84 Yield 10 Gallons per minute
   Static water level before pumping 4 Feet below surface
   Pumping level 42 feet below surface after 2 hours pumping
   Drawdown 38 Feet Specific Capacity 12+ Gals. per min. per ft. of drawdown
   How pumped rod & cylinder test pump How measured stop watch & 5gal pail
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type Submersible Mfrs. Name Red Jacket
   Capacity 7 G.P.M. How Driven electric H.P. 1/3 R.P.M. 3450
   Depth of Pump in well 45 Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR domestic AMOUNT { Average 150 Gallons Daily / Maximum 300 Gallons Daily }
11. QUALITY OF WATER good Sample: Yes ✓ No ____
    Taste _____ Odor None Color clear Temp. _____ °F.
12. LOG _____ Are samples available? No
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA _____
14. DATA OBTAINED BY J. Allyn Conover 951 Date 9/25/84

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.1A.448
29.1A157

0-30 yellow sand & clay
30-47 green clay, sand & shell traces
47-54 black sand, clay & shell "
54-68 gray clay
68-72 black sand, clay & shell traces

Titles adapter installed

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913695

PERMIT NO. 2914244

APPLICATION NO. _____

COUNTY Monmouth

29.13.695

WELL RECORD

Redacted - Privacy Act

1. OWNER _____ ADDRESS 112 ORCHID ST.
   Owner's Well No. (1)One. SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Lot: 1&2 Block: 106 Municipality: Oceanport Boro
3. DATE COMPLETED March,23,85 DRILLER Peter's Well Drilling
4. DIAMETER: Top 4. inches Bottom 4 inches TOTAL DEPTH 323 Feet
5. CASING: Type Black Steel Pipe. Diameter 4 Inches Length 317 Feet
6. SCREEN: Type S.S. Size of Opening 14 Slot Diameter Nom. 4 Inches Length 6 Feet
   Range in Depth Top 317 Feet Bottom 323 Feet Geologic Formation Englishtown/
   Riser With Riser&Packer 9'6"
   ~~Interval~~: Diameter 3 Inches Length 3 Feet
7. WELL FLOWS NATURALLY no Gallons per minute at no Feet above surface
   Water rises to no Feet above surface
8. RECORD OF TEST: Date March,18,85 Yield 100 Gallons per minute
   Static water level before pumping 16 Feet below surface
   Pumping level 56 feet below surface after 2 hours pumping
   Drawdown 40 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How pumped Air Compressor How measured Elec.Water Tester.
   Observed effect on nearby wells None.
9. PERMANENT PUMPING EQUIPMENT:
   Type Submersible Mfrs. Name (Customers Own Installed).
   Capacity 10-15 G.P.M. How Driven Elec. H.P. ½ R.P.M. 3450
   Depth of Pump in well 100? Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR Dwelling &Irrigation. AMOUNT Average 1000 Gallons Daily
    2000. Maximum _____ Gallons Daily
11. QUALITY OF WATER Good. Sample: Yes _____ No x
    Taste Good. Odor None. Color Clear. Temp. 53 °F.
12. LOG See Other Side. Are samples available? no.
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA Bailer & Mud Pit.
14. DATA OBTAINED BY Driller. Date May,15,1985

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.695
29.1A244

Log.

0 to 22Ft.Brown Grvl. &Clay Grvls.
22 to 62Ft.Black,Green Clay Sand W.Pep.&Hard Spot.
62 to 82Ft.Soft Silty Black Pep.Clay.
82 to 102Ft.Firm Grey Mica Clay.
102 to 128Ft.Softer,Firm.
128 to 130Ft.Pep.Sand & Clay.
130 to 135Ft.Same.
135 to 138Ft.Chattery &SofterMuddy Pe.Sand w.Lite Grey Clay Pieces.
138 to 141Ft.Hard Snaps,ConsolidatedSpots Shells &Pep.Sand Muddy.
141 to 150Ft.Muddy Pep.Sand w.Shells.
150 to 155Ft.Same.
155 to 163Ft.Same Muddy.
163 to 165Ft.SIightly Chattery,More Sandy.
165 to 167Ft.Same.
167 to 169Ft.Chattery &Drop Silty Sil.Sand w.Spots Shells.
169 to 175Ft.Firm Grey Clay Layers & Silt.
175 to 183Ft.Layers Grey Silty Sand &Clay.
183 to 195Ft.Firm Layer Same.
195 to 210Ft.Mostly Clay &Silt (Some Grvls.)
210 to 221Ft.Same
221 to 233Ft.Clay & Silt.
233 to 235Ft.Muddy Mica Sand.
235 to 243Ft.Mostly Grey Soft Clay.
243 to 245Ft.Hard Snaps ;Chalk Stones &Clay Rocks.
245 to 250Ft.Snaps & Chatters &Clay.
(250 to 265 Same).
265 to 281Ft.Same Stuff (Shelves Rocks &Clays-Snaps On & Off).
281 to 287Ft.Clay &Silt Mica Stones &S.P.
287 to 290Ft.Soft &Chattery &Snaps.
290 to 295Ft.Hard Snaps&Chattery;Silty Grey S.P.Sand.
295 to 300Ft.Firm Spots;Clay &Silt.
300 to 308Ft.Hard Snaps;Clay &SiIt.
308 to 310Ft.Same(Takes Water).
310 to 313Ft.Clean Med.Grey W.S.
313 to 315Ft. Same.
315 to 320Ft.Steady Hard Chatter.Grey S.P.Sand;Green Cast w.Shell Fragments.
320 to 323Ft.Chattery w.Clay Lenses;Clean S.P. Stop & Set Screen.

RECEIVED
MAY 20 1985
N.J. STATE DEPT. OF ENVIRONMENTAL PROTECTION
WATER SUPPLY & WATERSHED MGT. ADM.

29.13.653

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-14980

APPLICATION NO. _____

29.13.653

WELL RECORD

COUNTY Monmouth

Redacted - Privacy Act

29.14980

1. OWNER [redacted] ADDRESS 126 HockhocksonRd.
   Owner's Well No. 29-14980 SURFACE ELEVATION 95 Feet (Above mean sea level)
2. LOCATION Colts Neck Twp. Lot 1 Blk 53
3. DATE COMPLETED 6/11/85 DRILLER James Peltier 661
4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 62 Feet
5. CASING: Type drive Steel Diameter 4 Inches Length 54 Feet
6. SCREEN: Type None Size of Opening ____ Diameter ____ Inches Length ____ Feet
   Range in Depth { Top ____ Feet / Bottom ____ Feet } Geologic Formation Hard Black Sand
   Tail Piece: Diameter ____ Inches Length ____ Feet
7. WELL FLOWS NATURALLY ____ Gallons per minute at ____ Feet above surface
   Water rises to ____ Feet above surface
8. RECORD OF TEST: Date 6/11/85 Yield 10 Gallons per minute
   Static water level before pumping 8' Feet below surface
   Pumping level 20 feet below surface after 2 hours pumping
   Drawdown 12 Feet Specific Capacity .1 t Gals. per min. per ft. of drawdown
   How pumped test pump tool & cylinder How measured Stop watch & 5gal pail
   Observed effect on nearby wells ____
9. PERMANENT PUMPING EQUIPMENT: Present System
   Type ____ Mfrs. Name ____
   Capacity ____ G.P.M. How Driven ____ H.P. ____ R.P.M. ____
   Depth of Pump in well ____ Feet Depth of Footpiece in well ____ Feet
   Depth of Air Line in well ____ Feet Type of Meter on Pump ____ Size ____ Inches
10. USED FOR domestic AMOUNT { Average 150 Gallons Daily / Maximum 300 Gallons Daily }
11. QUALITY OF WATER Fair Sample: Yes ✓ No ____
    Taste ____ Odor ____ Color ____ Temp. ____ °F.
12. LOG ____ Are samples available? No
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA ____
14. DATA OBTAINED BY J. Allyn Conover 951 Date 6/12/85

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.653
29.14980

0–2	top soil
2–15	yellow sand
15–20	black clay
20–32	grey sand & clay
32–55	hard green sand
55–62	" black sand



46'10" 59'9"

well

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2914458

PERMIT NO. 2915005

APPLICATION NO. _____

COUNTY Monmouth

WELL RECORD

Redacted - Privacy Act

1. OWNER _____ ADDRESS 417 RIVER ST.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot: 18 Block: 1 Municipality: Oceanport Boro

3. DATE COMPLETED 5/15/85 DRILLER Tiger Construction Corp.

4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 195 Feet

5. CASING: Type PVC Diameter 2 Inches also used Length 15' Feet

6. SCREEN: Type PVC Size of Opening .012 Diameter 2 Inches 30' riser 150' 150' Length 180' Feet

Range in Depth { Top 180 Feet / Bottom 195 Feet } Geologic Formation Mt. Laurel

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date 5/15/85 Yield 30 Gallons per minute

Static water level before pumping 10 Feet below surface

Pumping level 65 feet below surface after 1 hours pumping

Drawdown 55 Feet Specific Capacity 1/1 Gals. per min. per ft. of drawdown

How pumped air How measured surface

Observed effect on nearby wells none

9. PERMANENT PUMPING EQUIPMENT:

Type submersible Mfrs. Name Goulds

Capacity 10 G.P.M. How Driven electric H.P. 3/4 R.P.M. 3450

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR domestic AMOUNT { Average 400 Gallons Daily / Maximum 800 Gallons Daily }

11. QUALITY OF WATER good Sample: Yes ✓ No _____

Taste _____ Odor _____ Color _____ Temp. _____ °F.

12. LOG on back Are samples available? no
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA Driller

14. DATA OBTAINED BY Virginia Lucas Date 7/22/85

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.14.A58
29.19005

RECEIVED
JUL 25 1985
N.J. STATE DEPT. OF ENVIRONMENTAL PROTECTION
WATER SUPPLY & WATERSHED MGT. ADM.

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2914456

PERMIT NO. 2915421

APPLICATION NO. _____

COUNTY Monmouth

WELL RECORD

Redacted - Privacy Act

1. OWNER _____ ADDRESS OCEANPORT ALGONQUIN RD.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot: 14 Block: 18 Municipality: Oceanport Boro

3. DATE COMPLETED 11-25-85 DRILLER Engineering Drilling Co.

4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 60 Feet

5. CASING: Type PVC Diameter 4 Inches Length 50 Feet

6. SCREEN: Type PVC Size of Opening .025 Diameter 4 Inches Length 10 Feet

Range in Depth { Top 50 Feet / Bottom 60 Feet } Geologic Formation Coastal

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date 11-25-85 Yield 30 Gallons per minute

Static water level before pumping 9 Feet below surface

Pumping level 50 feet below surface after 2 hours pumping

Drawdown 12 Feet Specific Capacity 30 Gals. per min. per ft. of drawdown

How pumped Air How measured Elec.

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type Submersible Mfrs. Name Berkeley

Capacity 12 G.P.M. How Driven Elec. H.P. 1/2 R.P.M. 3450

Depth of Pump in well 50 Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR Domestic AMOUNT { Average 800 Gallons Daily / Maximum 1000 Gallons Daily }

11. QUALITY OF WATER Good Sample: Yes ____ No ____

Taste _____ Odor _____ Color _____ Temp. _____ °F.

12. LOG Yes Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA Cuttings

14. DATA OBTAINED BY V. Kutania Date 7-2-86

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.14.456
29-15421

Engineering Drilling Company

Redacted - Privacy Act

PROJECT
LOCATION OCEAN PORT

BEGIN BORING: DATE 29.14.456 TIME
FINISH BORING: DATE TIME

BORING Nº. GROUND ELEV. B.M. ELEV.

DRIVE HAMMER: DISTANCE DROP INCHES; WEIGHT POUNDS; CASING SIZE
SPOON HAMMER: DISTANCE DROP INCHES; WEIGHT POUNDS; SPOON SIZE INCHES
WATER OBSV. PIPE FT.; CORE BIT SIZE; UNDISTURBED SAMPLE SIZE INCHES O.D.; ANGLE OF INCLINATION; WATER PRES. TEST

GROUND WATER	DATE	HOUR AM	HOUR PM	DEPTH

* IF NO WATER IS ENCOUNTERED WRITE - "NONE"

CASING BLOWS	DEPTH FROM-TO	DESCRIPTION Lot # 14 Block # 18	EARTH SAMPLE NUMBER	EARTH DEPTH FROM-TO	EARTH SPOON BLOWS PER 6 INCHES	REMARKS
0- 1	0-2	Brown sand				
1- 2	2-7	Gray clay				
2- 3	7-12	Brown clay				
3- 4	12-30	Gray clay w/sand				
4- 5	30-35	Gray clay				
5- 6	35-62	Black sand med to fine				
6- 7	62-	Black sand w/clay				
7- 8						
8- 9						
9-10						
10-11		well at 60				
11-12		Pumping				
12-13		water				
13-14		GPM				
14-15		2 4X6 screen				
15-16						
16-17						
17-18						
18-19						
19-20						
20-21						
21-22						
22-23						
23-24						
24-25						
25-26						
26-27						
27-28						
28-29						
29-30						
30-31						
31-32						
32-33						
33-34						
34-35						
35-36						
36-37						
37-38						
38-39						
39-40						
40-41						
41-42						
42-43						
43-44						
44-45						
45-46						
46-47						
47-48						
48-49						
49-50						
50-51						
51-52						
52-53						
53-54						
54-55						

JOB Nº RIG Nº WEATHER TEMP.
DRILLER HELPER SHEET OF

WELREC 107 1970

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913634

PERMIT NO. ~~2916628~~

APPLICATION NO. _____

29-13634

WELL RECORD

COUNTY Monmouth

1. OWNER GLOBE PETROLEUM INC. ADDRESS 9 CENTER AVENUE
   Owner's Well No. P1 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Lot: 1423 Block: 30 Municipality: ~~Little Silver Boro~~
3. DATE COMPLETED 6-18-86 DRILLER ~~Diamond Drilling Co., Inc.~~
4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 12 Feet
5. CASING: Type PVC Diameter 4 Inches Length 2 Feet
6. SCREEN: Type PVC Size of Opening .30 Diameter 4 Inches Length 10 Feet
   Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation Silt Clay.
   Tail Piece: Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute
   Static water level before pumping 6.16 Feet below surface
   Pumping level _____ feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How pumped _____ How measured _____
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type _____ Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR OBSERVATION AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
    38' OC mL
11. QUALITY OF WATER ? Sample: Yes ___ No ___
    Taste ? Odor ? Color CLEAR Temp. ___ °F.
12. LOG _____ Are samples available? _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA ~~Well~~ Driller
14. DATA OBTAINED BY Louis Ohrtman Date 6-20-86

FOR OBSERVATION PURPOSES ONLY

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29-13-634

PROJECT Globe Petroleum
9 Center Ave.
Red Bank New Jersey

Diamond Drilling Co. Inc.
R. D. 3, BOX 388
JACKSON, N. J. 08527
BORING LOG 29-13-634

SHEET ____ OF ____
Job No. 8823
BORING NO. D1
LINE & STA. ____
OFFSET 29-16628

Site Little Silver Citgo
697 Branch Ave.
Little Silver New Jersey

DATE, START: ____
DATE, FINISH: 6-18-86

GROUND ELEVATION ____
GROUND WATER ELEV. 6.08

CASING O.D. ____ I.D. ____
SAMPLER O.D. ____ I.D. ____
COUPLING O.D. ____ I.D. ____

WEIGHT OF HAMMER
CASING ____ LBS.
SAMPLER ____ LBS.
INSIDE LENGTH OF SAMPLER ____ IN.

HAMMER FALL ON
CASING ____ SAMPLER ____

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NO. DEPTH FT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	DENSITY OR CONSIST.	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS REMARKS
0		S-1							
		0-2'4"	Auger						Dark Brown
		S-2							Sandy Silty Clay.
		2'4-6'6"						2'-4"	
		S-3							Olive Gray
		6'6"-11'							Silty Clay Trace Of Fine
		S-4					4"x10' Screen		Sand.
		11'-14'						6'-6"	
10									Red Brown
									Silty Clay Little Fine Sand
									Trace Of Gravel.
								11'	
								12'	Olive
									Silt Some Clay Little Fine
									Sand.
								14'	
20									
									State Permit 29-16628-4
30									
40									

Soils Engineer: ____ Driller: Louis Ontek
Drilling Inspector: ____ Helper: Walter Ontek

VISUAL IDENTIFICATION TERMS USED

	Clayey Soils	At Ball Moisture
Clayey SILT	slight PI	Thread 1/4"
SILT & CLAY	low PI.	Thread 1/8"
CLAY & SILT	medium PI	Thread 1/16"
Silty CLAY	high PI.	Thread 1/32"
CLAY	very high PI.	Thread 1/64"

Relative Density (D_R) of granular soils

loose	(L)	0 - 40%
medium compact	(MC)	40 - 70%
compact	(C)	70 - 90%
very compact		

Consistency of Clayey soils

soft	(S)	0.1 - 0.5 tsf
firm	(F)	0.5 - 1.0 tsf
med. hard	(MH)	1.0 - 2.0 tsf
hard	(H)	2.0 - 4.0 tsf
very hard	(VH)	over 4.0 tsf

Proportions used: trace = 1 - 10%, little = 10 - 20%, some = 20 - 35%, and = 35 - 50%

Form DWR-138
11/80

Coord: 2913634

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2916629

APPLICATION NO. _____

COUNTY Monmouth

29.13.634

WELL RECORD

1. OWNER GLOBE PETROLEUM INC. ADDRESS 9 CENTER AVENUE

Owner's Well No. D2 SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot: 1423 Block: 30 Municipality: Little Silver Boro

3. DATE COMPLETED 6-18-86 DRILLER Diamond Drilling Co., Inc.

4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 12 Feet

5. CASING: Type Pvc Diameter 4 Inches Length 2 Feet

6. SCREEN: Type Pvc Size of Opening 30 Diameter 4 Inches Length 10 Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet } Geologic Formation SILT CLAY

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

FOR OBSERVATION PURPOSES ONLY

8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute

Static water level before pumping 6.50 Feet below surface

Pumping level _____ feet below surface after _____ hours pumping

Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How pumped _____ How measured _____

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type _____ Mfrs. Name _____

Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR OBSERVATION AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER ? Sample: Yes _____ No _____

Taste T Odor GAS Color Slight Temp. _____ °F.

12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA DRILLER

14. DATA OBTAINED BY Louis OMTEK Date 6-18-86

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.634

PROJECT Globe Petroleum
Red Bank New Jersey

Diamond Drilling Co. Inc.
R. D. 3, BOX 365
JACKSON, N. J. 08527
BORING LOG 29.13.634

SHEET ____ OF ____
Job No. 8823
BORING NO. D2
LINE & STA. ____
OFFSET 29-16629

Site Little Silver Citgo
697 Branch Ave. Little Silver N.J.

DATE, START: ____
DATE, FINISH: 6-18-86

GROUND ELEVATION ____
GROUND WATER ELEV. 6.50'

CASING O.D. ____ I.D. ____
SAMPLER O.D. ____ I.D. ____
COUPLING O.D. ____ I.D. ____

WEIGHT OF HAMMER CASING ____ LBS. SAMPLER ____ LBS.
INSIDE LENGTH OF SAMPLER ____ IN.

HAMMER FALL ON CASING ____ SAMPLER ____

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NO. DEPTH TOP BOT.	BLOWS PER 6" ON SAMPLER 0-6 / 6-12 / 12-18 / 18-24	DENSITY OR CONSIST.	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS REMARKS
0		S-1 1'-3'		4"x10' Screen		Brown Sand Silt Gravel (Fill)
		S-2 3'-6'			1'	
		S-3 6'-9'				Gray Silty Clay Trace Of Fine Sand.
		S-4 9'-12'			3'	
10						Red Silty Clay Trace Of fine Sand (Wet) (No Product Odor)
				12'	6'	
					9'	Olive Silt Trace Of Clay and Fine Sand. (Dry)
20					12'	Olive Silt Trace Of Clay And Fine Sand With Stringers Of Red Sand Iron. (Hight Product-Odor)
30						State Permit 29-16629-2
40						

Soils Engineer: ____ Driller: Louis Ontek
Drilling Inspector: ____ Helper: Walter Ontek

VISUAL IDENTIFICATION TERMS USED

	Clayey Soils	At Ball Moisture
Clayey SILT	slight PI	Thread 1/4"
SILT & CLAY	low PI.	Thread 1/8"
CLAY & SILT	medium PI.	Thread 1/16"
Silty CLAY	high PI.	Thread 1/32"
CLAY	very high PI.	Thread 1/64"

Relative Density (D_R) of granular soils

loose	(L)	0 - 40%
medium compact	(MC)	40 - 70%
compact	(C)	70 - 90%
very compact		

Consistency of Clayey soils

soft	(S)	0.1 - 0.5 tsf
firm	(F)	0.5 - 1.0 tsf
med. hard	(MH)	1.0 - 2.0 tsf
hard	(H)	2.0 - 4.0 tsf
very hard	(VH)	over 4.0 tsf

Proportions used: trace = 1 - 10%; little = 10 - 20%; some = 20 - 35%; and = 35 - 50%

WELREC 107 0561

Form DWR-138
11/80

Coord: 2913634

2916630

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. _____

APPLICATION NO. _____

COUNTY Monmouth

29.13.634

WELL RECORD

1. OWNER GLOBE PETROLEUM INC. ADDRESS 9 CENTER AVENUE

Owner's Well No. D3 SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot: 1423 Block: 30 Municipality: Little Silver Boro

3. DATE COMPLETED 6-18-86 DRILLER Diamond Drilling Co., Inc.

4. DIAMETER: Top 4 inches Bottom _____ inches TOTAL DEPTH 12 Feet

5. CASING: Type PVC Diameter 4 Inches Length 2 Feet

6. SCREEN: Type PVC Size of Opening .30 Diameter 4 Inches Length 10 Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation SILT - CLAY.

Tail Piece: Diameter _____ Inches Length _____ Feet

7. WELL FLOWS NATURALLY _____ Gallons per minute at _____ Feet above surface

Water rises to _____ Feet above surface

8. RECORD OF TEST: Date _____ Yield _____ Gallons per minute

Static water level before pumping 5.95 Feet below surface

Pumping level _____ feet below surface after _____ hours pumping

Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How pumped _____ How measured _____

Observed effect on nearby wells _____

FOR OBSERVATION PURPOSES ONLY

9. PERMANENT PUMPING EQUIPMENT:

Type _____ Mfrs. Name _____

Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____

Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR OBSERVATION AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily

11. QUALITY OF WATER ? Sample: Yes ____ No ____

Taste ? Odor NO Color CLEAR Temp. _____ °F.

12. LOG _____ Are samples available? _____

(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)

13. SOURCE OF DATA DRILLER

14. DATA OBTAINED BY LOUIS ONTEK Date 6-18-86

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.634

PROJECT Globe Petroleum
9 Center Ave.
Red Bank N.J.

Diamond Drilling Co. Inc.
R. D. 3, BOX 368
JACKSON, N. J. 08527
BORING LOG 29.13.634

SHEET ____ OF ____
Job No. 8823
BORING NO. D-3
LINE & STA. ____
OFFSET 29-16630

Site Little Silver Citgo
697Branch Ave. Little Silver N.J.

DATE, START: ____
DATE, FINISH: 6-18-86
GROUND ELEVATION ____
GROUND WATER ELEV. 5.95'

CASING O D ____ I.D. ____
SAMPLER O D ____ I D ____
COUPLING O.D. ____ I D ____

WEIGHT OF HAMMER CASING ____ LBS.
SAMPLER ____ LBS.
INSIDE LENGTH OF SAMPLER ____ IN.

HAMMER FALL ON
CASING ____ SAMPLER ____

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NO. DEPTH ELEV. FT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS REMARKS
0		S-1					4"x10' Screen		Brown Silty Clay Trace Sand And Gravel.
		0-6'						6'	
		S-2							Dark Green Silty Clay With Iron Stringers
		6'-12'						12'	
10							12'		State Permit 29-16630-6
20									
30									
40									

Soils Engineer: ____ Driller: Louis Ontek
Drilling Inspector: ____ Helper: Walter Ontek

VISUAL IDENTIFICATION TERMS USED

	Clayey Soils	At Roll Moisture
Clayey SILT	slight PI	Thread 1/4"
SILT & CLAY	low PI.	Thread 1/8"
CLAY & SILT	medium PI	Thread 1/16"
Silty CLAY	high PI.	Thread 1/32"
CLAY	very high PI.	Thread 1/64"

Relative Density (D_R) of granular soils		
loose	(L)	0 - 40%
medium compact	(MC)	40 - 70%
compact	(C)	70 - 90%
very compact		

Consistency of Clayey soils		
soft	(S)	0.1 - 0.5 tsf
firm	(F)	0.5 - 1.0 tsf
med. hard	(MH)	1.0 - 2.0 tsf
hard	(H)	2.0 - 4.0 tsf
very hard	(VH)	over 4.0 tsf

Proportions used: trace = 1 - 10%, little = 10 - 20%, some = 20 - 35%, and = 35 - 50%

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 19474
Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address Redacted - Privacy Act
City Redacted - Privacy Act State Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Horseneck Point Road
County Monmouth Municipality Oceanport Boro Lot No. 8 Block No. 108

WELL USE Withdrawal Status In Use

WATER USE Domestic Average 2000 gals. daily Maximum 4000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 88 / 03 / 06
Depths: Total 193 ft. Finished ft.
Diameter: Top 8.5" in. Bottom in.
Land Surface Elevation at well 20 ft. Elevation was determined using Topographic Map
Casing Height (stick-up) above land surface 1.5' ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		178	4.0"	Schedule 40 PVC
Casing 2				
Casing 3				
Screen 1	178	10	4"	Schedule 40 PVC/.020
Screen 2				
Tail Piece		5'	4.0"	
Gravel Pack	168	25'	8.5"	.025 Blended
Grout	Surface	168		200 Mesh Bentonite
Grouting Method	Pressure thru tremie pipe			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date 88 / 03 / 06
Static water-level before pumping 12 Estimated ft. below land surface. Water level 137 ft. below land surface after 1 hrs. of pumping.
Water level was measured using Measured Container Drawdown 125 - 20 ft.
Discharge rate measured using Air Lift Discharge Rate 0.2 gals. per min.
Well was pumped using Specific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by PICKWICK WELL DRLG Pump Type Submersible
Mfrs. Name Gould Model 13EM
CAPACITY: Pump delivers 15 GPM at 40 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source Electric
DEPTHS: Pump 150 ft. Footpiece ft. Airline ft.
FLOW METER: Model installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING
Address P.O. Box 4 Farmingdale, NJ 07727 (201) 938 5300
City ~~David Primost M1041~~ State Zip Code
Name of Driller Norman Primost J1040 License No.
~~Allan Primost J1402~~
Signature of Contractor Date 88 / 05 / 24

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 19474
29:14:443

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Mud Rotary

Type of Rig T. H. Drive

Aquifer/Geo. Fm. KMW

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

LOG		Thick.	Lith.	Fm.
0–15	Clayey brown med. sand with some yellow gravel			
15–25	Silty green-gray clay			
25–35	Fine & med. Silty black sand with some green clay			
35–65	Green clay with some silty fine black sand and silty gray clay			
65–165	Silty gray clay with some fine black sand and a trace of shells			
165–193	Fine & med black sand with a trace of shells and green pebbles			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 19537
Atlas Sheet Coordinates 29 : 14 : 453

Redacted - Privacy Act

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address
City (WR:4D) State Redacted - Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Property: 340 Shrewsbury Ave.; Oceanport, NJ
County City: Monmouth Municipality OCEANPORT BORO Lot No. 6 Block No. 66

WELL USE WITHDRAWAL Status IN USE

WATER USE DOMESTIC Average 1,000 gals. daily Maximum 2,000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed COMPLETED: 88/01/14
Depths: Total TD: 59 ft. Finished --- ft.
Diameter: Top 8.5" in. Bottom --- in.
Land Surface Elevation at well E: 20 ft. Elevation was determined using Topographic map
Casing Height (stick-up) above land surface 1.5" ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		L: 44	4.0"	Sched 40 PVC
Casing 2				
Casing 3	Top: 44	10'	4.0"	Sched 40 PVC/.020
Screen 1				
Screen 2		5'	4.0"	Sched 40 PVC
Tail Piece	Top: 34	25'	8.5"	.025 Blended
Gravel Pack	Surface	L: 34		200 Mesh Bentonite
Grout	Pressure thru tremie pipe			
Grouting Method				

WELL FLOWS NATURALLY ____ gals. per min. at ____ ft. above the land surface.
Water rises to ____ ft. above the land surface.

RECORD OF TEST Test Date Test Date: 88/01/14 Level: 37
Static water-level before pumping Static: 10 ft. below land surface.
Water level was measured using estimated
Discharge rate measured using measured container
Well was pumped using Air Lift
Observed effects on nearby wells none
Water Quality (taste, odor, color, etc.) good
Water level DD: 27 ft. below land surface after 1 hrs. of pumping.
Drawdown
Discharge Rate Yield: 10 gals. per min.
Specific Capacity Sp. C: 0.4 gals. per min. per ft. of drawdown

PERMANENT PUMPING EQUIPMENT Installed by PICKWICK WELL DRLG Pump Type Submersible
Mfrs. Name Gould/Red Jacket Model Model: RJ 50 UWI
CAPACITY: Pump delivers 12 gpm GPM at 40 PSI pressure.
POWER: 1/2 HP HP at 3450 RPM Power Source Electric
DEPTHS: Pump Set: 48 ft. Footpiece ____ ft. Airline ____ ft.
FLOW METER: Model ____ installed on ____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING
Address P.O. Box 6, Farmingdale, NJ 07727 (201 938 5300)
City ____ State ____ Zip Code ____
Name of Driller David Primost M 1041
Norman Primost J 1040
Allen Primost J 1407
License No. ____

Signature of Contractor [signature] Date 88/02/07

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 19537
29: 14: 453

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Mud Rotary

Type of Rig T.H. Drive

Aquifer/Geo. Fm. KRB

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

LOG

		Thick.	Lith.	Fm.
0-45	Silty fine black sand with a few shells			
45-59	Fine black sand with green clay			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 _ 19952
Atlas Sheet Coordinates 29 : 14 : 461

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address Redacted - Privacy Act
City Redacted - Priva State Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address 26 TECUMSEH AVE, OCEANPORT, NJ
County MONMOUTH Municipality OCEANPORT BORO Lot No. 7 Block No. 201

WELL USE WITHDRAWAL Status IN USE

WATER USE DOMESTIC Average 1000 gals. daily Maximum 2000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 08 / 03 / 72
Depths: Total 348 ft. Finished ___ ft.
Diameter: Top 8" in. Bottom 3 7/8 in.
Land Surface Elevation at well 20 ft. Elevation was determined using TOPOGRAPHIC MAP
Casing Height (stick-up) above land surface 1.5 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL Screens: Note Slot Size(s)
Casing 1		187	4"	PVC SCH 40
Casing 2		154	3"	PVC SCH 40
Casing 3	341			
Screen 1		6	3"	STAINLESS .010 Screen
Screen 2				
Tail Piece				
Gravel Pack				
Grout	187	187		BENTONITE
Grouting Method	PRESSURE THRU TREMIE.			

WELL FLOWS NATURALLY ___ gals. per min. at ___ ft. above the land surface.
Water rises to ___ ft. above the land surface.

RECORD OF TEST Test Date 08 / 08 / 03
Static water-level before pumping 25 ft. below land surface. Water level 145 ft. below land surface after 2 hrs. of pumping.
Water level was measured using ESTIMATED Drawdown 120 ft.
Discharge rate measured using MEASURED CATCH BASIN Discharge Rate 40 gals. per min.
Well was pumped using AIR LIFT Specific Capacity 0.33 gals. per min. per ft. of drawdown
Observed effects on nearby wells NONE
Water Quality (taste, odor, color, etc.) GOOD

PERMANENT PUMPING EQUIPMENT Installed by P. KURK Pump Type SUB
Mfrs. Name JACUZZI Model 10E07
CAPACITY: Pump delivers ___ GPM at ___ PSI pressure.
POWER: 3/4 HP at 3450 RPM Power Source ELECTRIC
DEPTHS: Pump 100 ft. Footpiece ___ ft. Airline ___ ft.
FLOW METER: Model ___ installed on ___ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING
Address 10 WATER ST, EMMONSDALE, NJ 07777
City ___ State ___ Zip Code ___
Name of Driller NORMAN PREMOST License No. J1040

Signature of Contractor [signature] Date 08 / 08 / 03

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 19952
29-14-4161

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method MUD ROTARY

Type of Rig T. H. DRIVE

Aquifer/Geo. Fm. KET

LOG

0-20 FINE & MED silty ochre SAND
20-40 FINE Black silt
40-55 FINE Black SAND Some green SAND
55-100 green CLAY
100-185 GRAY Silty SAND & CLAY
185-205 FINE silty gray SAND W/ green pebbles & shells
205-295 GRAY CLAY
295-350 fine gray SAND, Some Lignite

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10' ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 _ 20242
Atlas Sheet Coordinates 29 : 14 : 482

OWNER IDENTIFICATION - Owner JERSEY CENTRAL POWER COMP
Address 310 MADISON AVENUE
City MORRISTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. 5
Address NJ NATURAL GAS 100 BROOKS ST LONGBRANCH NJ.
County ~~LONGBRN~~ MONMOUTH Municipality LONG VALLEY CIT Lot No. 6.01(6A) Block No. 309
WELL USE RECOVERY Status

WATER USE RECOVERY Average 50000 gals. daily Maximum 50,000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 4 / 20 / 88
Depths: Total 79 ft. Finished 79 ft.
Diameter: Top 8" in. Bottom 8" in.
Land Surface Elevation at well _____ ft. Elevation was determined using
Casing Height (stick-up) above land surface _____ ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		29	8"	STEEL SCH 40
Casing 2				
Casing 3	29'			
Screen 1	GALVANIZED	60'	8"	GALVANIZED SLOT 10
Screen 2				
Tail Piece				
Gravel Pack	29			
Grout	0	29		
Grouting Method	TREMIE		CEMENT BENTONITE VOLCLAY TABLETS	

WELL FLOWS NATURALLY _____ gals. per min. at _____ ft. above the land surface.
Water rises to _____ ft. above the land surface.

RECORD OF TEST Test Date 4 / 26 / 1988
Static water-level before pumping _____ ft. below land surface. Water level _____ ft. below land surface after _____ hrs. of pumping.
Water level was measured using ELEC Drawdown _____ ft.
Discharge rate measured using METER Discharge Rate _____ gals. per min.
Well was pumped using AIR Specific Capacity _____ gals. per min. per ft. of drawdown
Observed effects on nearby wells NO
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by ENG Pump Type SUB
Mfrs. Name BERKLEY Model
CAPACITY: Pump delivers 90 GPM at ~~3500~~ 40 PSI pressure.
POWER: ELEC 10 HP at ~~1750~~ 0 RPM Power Source
DEPTHS: Pump 65 ft. 360 Footpiece — ft. Airline — ft.
FLOW METER: Model YES installed on 2 1/2 in. diameter pipe.

ENGINEERING DRILLING CO.

CONTRACTOR - Name of Drilling Contractor
Address 316 WINDSOR RD
City ROBBINSVILLE State NJ Zip Code 08691
Name of Driller BOBBY SZEKLEZYK License No. ~~0330~~ J1290

Signature of Contractor [signature] Date 2 / 10 / 1989

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29-20242
29.14-482

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method ROTARY

Type of Rig GARDNER DENVER

Aquifer/Geo. Fm. COASTAL

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

Thick.	Lith.	Fm.	
0-4'			BROWN SILTY SAND GLASS, WOOD, DEBRIS FILL
4'-8'			BROWN CLAYEY SILT (MARSH)
8'-20'			BROWN M-F SAND TRACE SILT (VINCENTOWN)
20-40			GREENISH GRAY M/F SAND TRACE SILT SHELL FRAGMENTS.
40-80'			BLACK SILT HIGH GLAUCONITE HORNERSTOWN

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

WELREC 107 2025

29.14.482
29.1A.482
29-2024

PRODUCTION WELL INSTALLATION REPORT

Production Well No. PW-1

Project LONG BRANCH Location Long Branch, NJ.

Project No. 88C4100 Installed By Engineering Drilling Co Date 4/20/88 Time

Method of Installation Double Casing - pilot hole to 8.5' using 3 3/4" tricone - mud rotary, reamed to 9.5' using a 7 3/4" bit, reamed again using a 14 3/4" bit, installed 12" OD steel casing and grouted in place. Final hole - pilot hole to 86' using 3 3/4" tricone - mud rotary, reamed to 75' using 7 3/4" bit, reamed again using 11 1/4" bit to 79'.

LOG OF BORING

Depth in ft.	Description	Symbol
0	Brown silty SAND, glass, wood debris (FILL)	SM
	Brown clayey SILT (MARSH)	ML/OH
20	Brown m-f SAND, trace silt. (VINCENTOWN)	SP
40	Greenish gray m.-f. SAND, trace silt, shell fragments	SP
60		
79.0		
80	Black SILT, mica, glauconite (HORNERSTOWN) 86.0	ML
	End of Boring at 86'	
100		

PRODUCTION WELL

Type of Production Well pump test/aquifer test well

Ground Elev. 9.3 Top of Riser Elev. 11.82

L_1 = 2.0
L_2 = 10.5
L_3 = 3.0
L_4 = 62.5
L_5 = 18.0
L_6 = 60.0
L_7 = 79.0

- Vented Cap
- I.D. of Riser Pipe 8"
- Type of Pipe galvanized steel
- Type of Backfill Around Riser cement-bentonite grout
- Top of Seal Elev. -0.7
- Type of Seal Material volclay tablets
- Top of Filter Elev. -3.7
- Type of Filter Material #0 sand
- Size of Openings 0.010"
- Diameter of Production Well Tip 8"
- Type of screen galvanized Johnson with wimp
- Bottom of Well Elev. -66.2
- Bottom of Boring Elev. -69.2
- Diameter of Boring 11 1/4"

Remarks Well is double cased to 9.5' with 12" OD steel casing, casing set and grouted using cement-bentonite grout allowed to set up 7 days.
Development: 4-26-88, rig air compressor inside a 4" PVC pipe lowered to 75', air hose at 76', ±100 GPM for 95 minutes; 9000 to 10,000 gallons removed, stored onsite in holding pool.

Inspected By Paul Kaneth

WELREC 107 2026

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

0-W-26

WELL RECORD

Well Permit No. 29 – 20243
Atlas Sheet Coordinates 29 : 14 : 482

OWNER IDENTIFICATION - Owner JERSEY CENTRAL POWER & LT
Address 310 MADISON AVENUE
City MORRISTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. 0-W-26
Address JERRY MORGAN PARK
County MONMOUTH Municipality LONG VALLEY CIT Lot No. ~~6.02(6B)~~ Block No. ~~303~~

WELL USE MONITORING WELL Status

WATER USE MONITORING Average / gals. daily Maximum / gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed APR. / 16 / 1988
Depths: Total 6 ft. Finished 6 ft.
Diameter: Top 2" in. Bottom 2" in.
Land Surface Elevation at well ft. Elevation was determined using
Casing Height (stick-up) above land surface 1 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		2½	2"	PVC SCH 40
Casing 2				
Casing 3		3½'	2"	2" PVC SCH 40 SLOT 020
Screen 1				
Screen 2				
Tail Piece				
Gravel Pack	2'	3½		
Grout	0	2½		CEMENT PELEC BENTONITE
Grouting Method	TREMIE			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date / /
Static water-level before pumping ft. below land surface. Water level ft. below land surface after hrs. of pumping.
Water level was measured using Drawdown ft.
Discharge rate measured using Discharge Rate gals. per min.
Well was pumped using Specific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by Pump Type
Mfrs. Name Model
CAPACITY: Pump delivers GPM at PSI pressure.
POWER: HP at RPM Power Source
DEPTHS: Pump ft. Footpiece ft. Airline ft.
FLOW METER: Model installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor ENGINEERING DRILLING CO.
Address 316 WINDSOR RD
City ROBBINSVILLE State NJ Zip Code 08691
Name of Driller BOGDAN SZCZELCZYK License No. J-12 90

Signature of Contractor Joseph Strauch Date 2 / 10 / 1989

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

O-W26

WELL RECORD

Well Permit No. 29-20243

29-14-482

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method ROTARY

Type of Rig GARDNER DENVER

Aquifer/Geo. Fm. COASTAL

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

LOG

Thick.	Lith.	Fm.	
			0- 4' FILL - BROWN SILTY SAND GLASS WOOD BRICK
			4-6' BROWN CLAYEY SILT ROOTHAIRS LENS OF GRAVELLY SAND MARSH

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

29.14.482

29-20243

29.1A A82

MONITOR WELL INSTALLATION REPORT

Monitor Well No. OW-26

Project LONG BRANCH

Location LONG BRANCH, NJ

Project No. 88C4100 Installed By Engineering Drilling Co Date 4/15/88 Time

Method of Installation water rotary, pilot hole using 3 3/4" roller bit, reamed with 5 3/4" bit to 4.5'

LOG OF MONITOR WELL

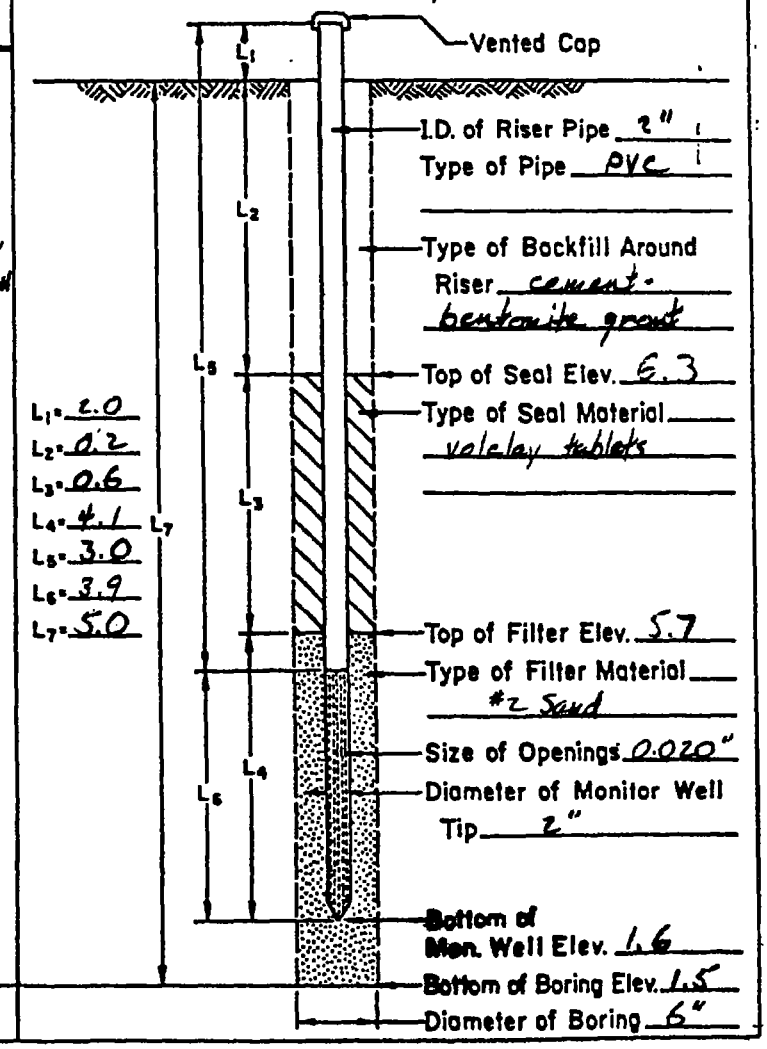
BORING

Depth in ft.	Description	Symbol
	FILL - brown silty sand, glass, wood, brick	
5	Brown clayey SILT, root hairs lens of gravelly sand MARSH	ML/OH
10		

MONITOR WELL

Type of Monitor Well shallow overburden

Ground Elev. 6.6 Top of Riser Elev. 8.45



L1 = 2.0
L2 = 0.2
L3 = 0.6
L4 = 4.1
L5 = 3.0
L6 = 3.9
L7 = 5.0

I.D. of Riser Pipe 2"

Type of Pipe PVC

Type of Backfill Around Riser cement-bentonite grout

Top of Seal Elev. 6.3

Type of Seal Material volclay tablets

Top of Filter Elev. 5.7

Type of Filter Material #2 Sand

Size of Openings 0.020"

Diameter of Monitor Well Tip 2"

Bottom of Mon. Well Elev. 1.6

Bottom of Boring Elev. 1.5

Diameter of Boring 6"

Remarks development: 4.28.88 using a centrifugal pump 5GAM for 5 min. removed 25 gallons, water slightly turbid, good flow rate, fast recovery all water was barreled

Inspected By Paul Kaneth

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

OW-25

WELL RECORD

Well Permit No. 29 - 20244
Atlas Sheet Coordinates 29 : 14 : 482

OWNER IDENTIFICATION - Owner JERSEY CENTRAL POWER & LI
Address 310 MADISON AVENUE
City MORRISTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. OW25
Address JERRY MORGAN PARK
County MOUNMONTH Municipality LONG VALLEY CIT Lot No. 6.02(6B) Block No. 309

WELL USE MONITOR WELL Status

WATER USE MONITOR Average / gals. daily Maximum / gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed APR / 24 / 1989
Depths: Total 6 ft. Finished 6 ft.
Diameter: Top 12" in. Bottom 2" in.
Land Surface Elevation at well ft. Elevation was determined using
Casing Height (stick-up) above land surface 1' ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		2	2"	PVC SCH 40
Casing 2				
Casing 3				
Screen 1	2	4'	2'	PVC SCH 40 SLOT 20
Screen 2				
Tail Piece				
Gravel Pack	2	4'		NO 2 SILICA
Grout	0	2		CEMENT PELEC BENTONITE
Grouting Method	TRIMIE			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date / /
Static water-level before pumping ft. below land surface. Water level ft. below land surface after hrs. of pumping.
Water level was measured using Drawdown ft.
Discharge rate measured using Discharge Rate gals. per min.
Well was pumped using Specific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by Pump Type
Mfrs. Name Model
CAPACITY: Pump delivers GPM at PSI pressure.
POWER: HP at RPM Power Source
DEPTHS: Pump ft. Footpiece ft. Airline ft.
FLOW METER: Model installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor ENGINEERING DRILLING CO.
Address 316 WINDSOR RD
City ROBBINSVILLE State NJ Zip Code 08691
Name of Driller BOGDAN STRZELCZYK License No. J-12-90

Signature of Contractor Date 2 / 10 / 1989

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

OW-25

WELL RECORD

Well Permit No. 29-20244
29-14-482

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☐ No

Drilling Method GARDNER DENVER ROTARY

Type of Rig GARDNER DENVER

Aquifer/Geo. Fm. COASTAL

LOG

0 - 5' FILL BROWN SILTY SAND GLASS, WOOD, BRICK

5' - 7' BLACK CLAYEY SILT ROOT HAIRS MARSH

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

29.14.482
29-20244
29.14.482

MONITOR WELL INSTALLATION REPORT

Monitor Well No. OW-25
Project LONG BRANCH
Location LONG BRANCH, NJ
Project No. 88C4100 Installed By Engineering Drilling Co. Date 4/25/88 Time
Method of Installation water rotary, pilot hole with 3 3/4" tricone bit, reamed with 5 3/4" bit to 6.5', reamed again with 7 3/4" bit to 6.5'.

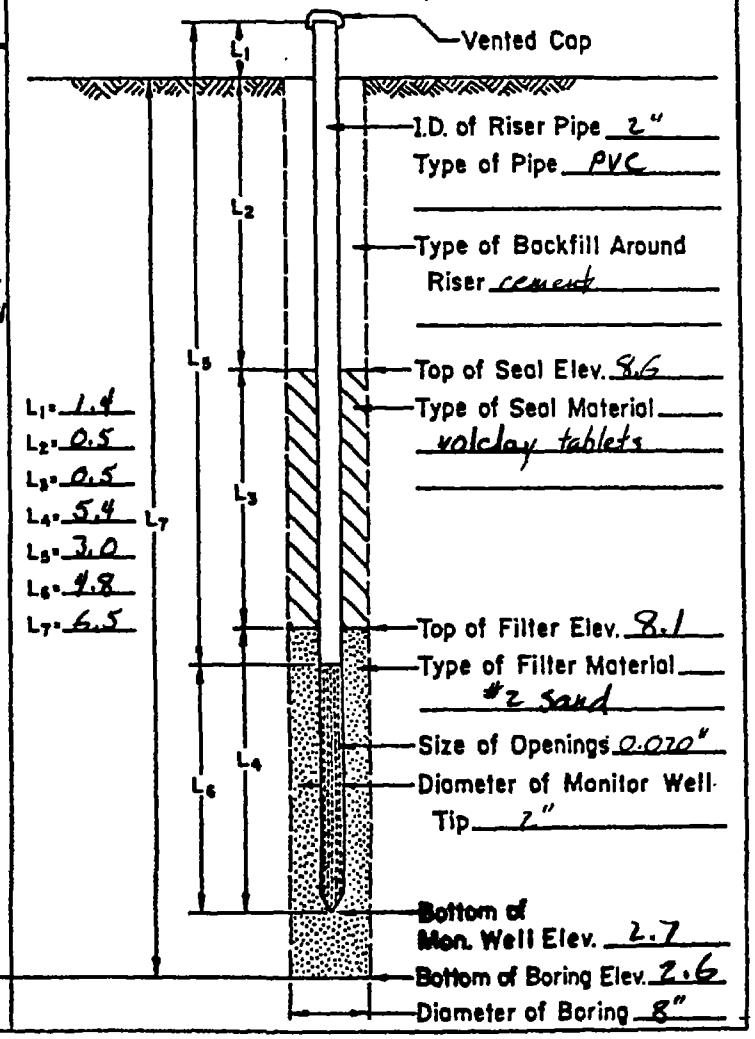
LOG OF MONITOR WELL

BORING

Depth in ft.	Description	Symbol
	FILL- brown silty sand, glass, wood, brick.	
5	Black clayey SILT, root hairs MARSH	ML/OH
10		

MONITOR WELL

Type of Monitor Well shallow overburden piezometer
Ground Elev. 8.8 Top of Riser Elev. 10.51



L1 = 1.4
L2 = 0.5
L3 = 0.5
L4 = 5.4
L5 = 3.0
L6 = 4.8
L7 = 6.5

Vented Cap
I.D. of Riser Pipe 2"
Type of Pipe PVC
Type of Backfill Around Riser cement
Top of Seal Elev. 8.6
Type of Seal Material volclay tablets
Top of Filter Elev. 8.1
Type of Filter Material #2 sand
Size of Openings 0.020"
Diameter of Monitor Well Tip 2"
Bottom of Mon. Well Elev. 2.7
Bottom of Boring Elev. 2.6
Diameter of Boring 8"

Remarks development: 4-28-88 - using a centrifugal pump, 4.5 gal/dry, 1.5 gal/dry, 1.5 gal/dry 2.5 gal/dry allowing 90% recovery, total of 180 gallons removed. All water was bucketed.

Inspected By Paul Kaeth

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

OW-24

WELL RECORD

Well Permit No. 29 20245
Atlas Sheet Coordinates ~~29~~ : ~~14~~ : ~~482~~

OWNER IDENTIFICATION - Owner JERSEY CENTRAL POWER & LI
Address 310 MADISON AVENUE
City MORRISTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. OW 24
Address 100 BROOK ST LONGBRECH
County MONMOUTH Municipality LONG VALLEY CIT Lot No. 6.01(6A) Block No. 309

WELL USE MONITOR WELL Status

WATER USE MONITOR Average / gals. daily Maximum / gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed APR. / 28 / 1988
Depths: Total 8 ft. Finished 8 ft.
Diameter: Top 2" in. Bottom 2' in.
Land Surface Elevation at well ft. Elevation was determined using
Casing Height (stick-up) above land surface 1' ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL Screens: Note Slot Size(s)
Casing 1		5	2"	PVC SCH 40 ~~SLOT 020~~
Casing 2				
Casing 3	3'	3'	2'	PVC SCH 40 SLOT 020
Screen 1				
Screen 2				
Tail Piece				
Gravel Pack	4½			
Grout	0	4½		BENTONITE PEL6C CEMENT
Grouting Method	TRIMIE			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date / /
Static water-level before pumping ft. below land surface. Water level ft. below land surface after hrs. of pumping.
Water level was measured using Drawdown ft.
Discharge rate measured using Discharge Rate gals. per min.
Well was pumped using Specific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by Pump Type
Mfrs. Name Model
CAPACITY: Pump delivers GPM at PSI pressure.
POWER: HP at RPM Power Source
DEPTHS: Pump ft. Footpiece ft. Airline ft.
FLOW METER: Model installed on in. diameter pipe.

ENGINEERING DRILLING CO.

CONTRACTOR - Name of Drilling Contractor
Address 316 WINDSOR RD
City ROBBINSVILLE State NJ Zip Code 08691
Name of Driller BOGDAN Strelczyk License No. 7-1240

Signature of Contractor Date 2 / 10 / 1989

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

OW-24

WELL RECORD

Well Permit No. 29-20245
29-14-482

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☐ No

Drilling Method ROTARY

Type of Rig GARDNER DENVER

Aquifer/Geo. Fm. COASTAL

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

Thick.	Lith.	Fm.	
			0-6' FILL BROWN SILT SAND CONSTRUCTION DEBRES, GLASS WOOD, BRICK
			6'-9' BLACK CLAYES SILT TRACE SAND ROOTS, MARSH

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

29.14.482
29-20245
29.14.482

MONITOR WELL INSTALLATION REPORT

Monitor Well No. OW-24
Project LONG BRANCH Location LONG BRANCH, NJ
Project No. 88C4100 Installed By Engineering Drilling Co. Date 4/12/88 Time
Method of Installation water rotary - pilot hole using 3 3/4 tricone, reamed with 5 3/4" bit to 8.0'

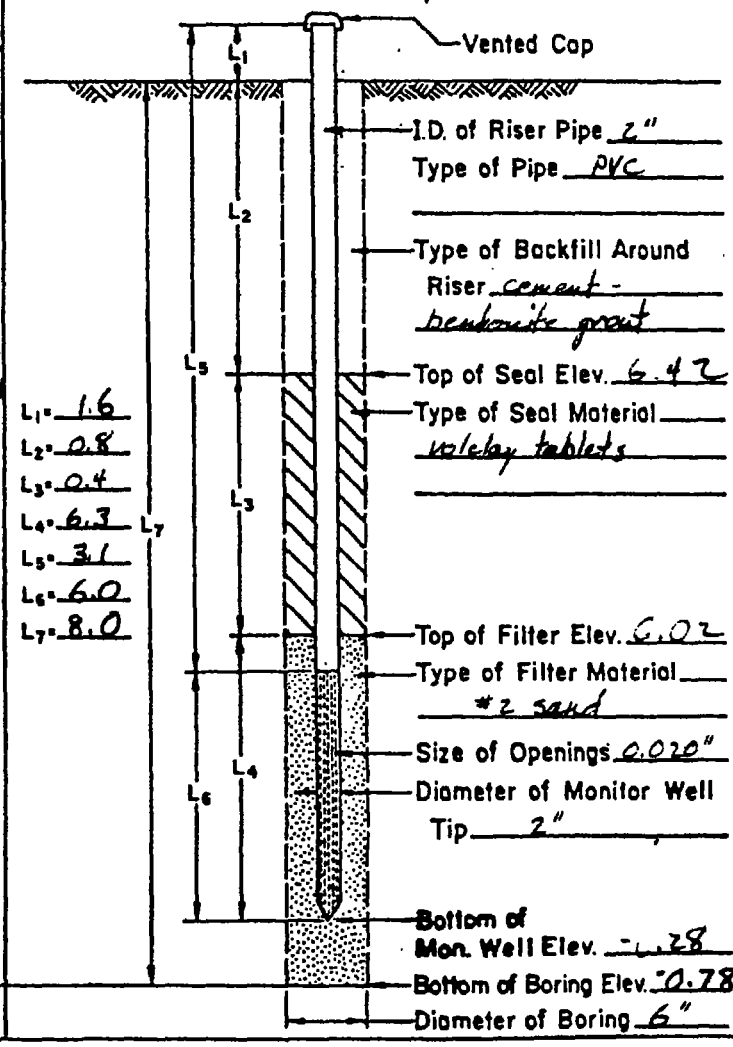
LOG OF MONITOR WELL

BORING

Depth in ft.	Description	Symbol
5	FILL - brown silt, sand, construction debris, glass wood, brick	
	Black clayey SILT, trace sand roots, MARSH	ML/OH
10		

MONITOR WELL

Type of Monitor Well shallow overburden piezometer
Ground Elev. 7.1 Top of Riser Elev. 8.82



L1 = 1.6
L2 = 0.8
L3 = 0.4
L4 = 6.3
L5 = 3.1
L6 = 6.0
L7 = 8.0

Remarks development: 4-28-88 using a centrifugal pump. 8 GPM for 10 min. total 80 gallons removed. water clarity was good. All water was barreled

Inspected By Paul Kaneth

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

OW 23C

Well Permit No. 29 _ 22246
Atlas Sheet Coordinates 29 : 14 : 482

OWNER IDENTIFICATION - Owner JERSEY CENTRAL POWER & LI
Address 310 MADISON AVENUE
City MORRISTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. OW 23C
Address 100 BROOK ST LONG BRANCH NJ
County MONMOUTH Municipality LONG VALLEY CTT Lot No. 6.01(6A) Block No. 308

WELL USE MONITOR WELL Status

WATER USE MONITOR Average — gals. daily Maximum — gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed APR. / 18 / 1989
Depths: Total 61 ft. Finished 61 ft.
Diameter: Top 2 in. Bottom 2 in.
Land Surface Elevation at well ft. Elevation was determined using
Casing Height (stick-up) above land surface 1' ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		45	2	
Casing 2				
Casing 3				
Screen 1	45	16	2	PVC SCH 40 SLOT 20
Screen 2				
Tail Piece				
Gravel Pack	45	18		E
Grout	0			CEMENT PELEC BENTONITE
Grouting Method	TREMIE			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date / /
Static water-level before pumping ft. below land surface. Water level ft. below land surface after hrs. of pumping.
Water level was measured using Drawdown ft.
Discharge rate measured using Discharge Rate gals. per min.
Well was pumped using Specific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by E Pump Type
Mfrs. Name Model
CAPACITY: Pump delivers GPM at PSI pressure.
POWER: HP at RPM Power Source
DEPTHS: Pump ft. Footpiece ft. Airline ft.
FLOW METER: Model installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor ENGINEERING DRILLING CO.
Address 316 WINDSOR RD
City ROBBINSVILLE State NJ Zip Code 08691
Name of Driller BOGDAN STRZELCZYK License No. J-12 90

Signature of Contractor Date 2 / 10 / 1989

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

OW23.C

WELL RECORD

Well Permit No. 29-20246
29-14-482

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method ROTARY

Type of Rig GARDNER DENVER

Aquifer/Geo. Fm. COASTAL

LOG

0-8 BROWN SILTY SAND

8-11.8 BROWN CLAYEY SILT MARSH

11-8-61' COARSE TO FINE SAND TRACE SILT OCCASSIONAL SEA SHELLS

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

29.14.482

29-20246

29.14.A82

MONITOR WELL INSTALLATION REPORT

Project LONG BRANCH — Monitor Well No. OW-23C

Project No. 88C4100 — Installed By ~~Engineering Drilling Co.~~ — Location LONG BRANCH, NJ — Date 4/14/88 — Time

Method of Installation 3 3/4" pilot hole, mud rotary, reamed to 61' using a 5 3/4" bit

LOG OF MONITOR WELL

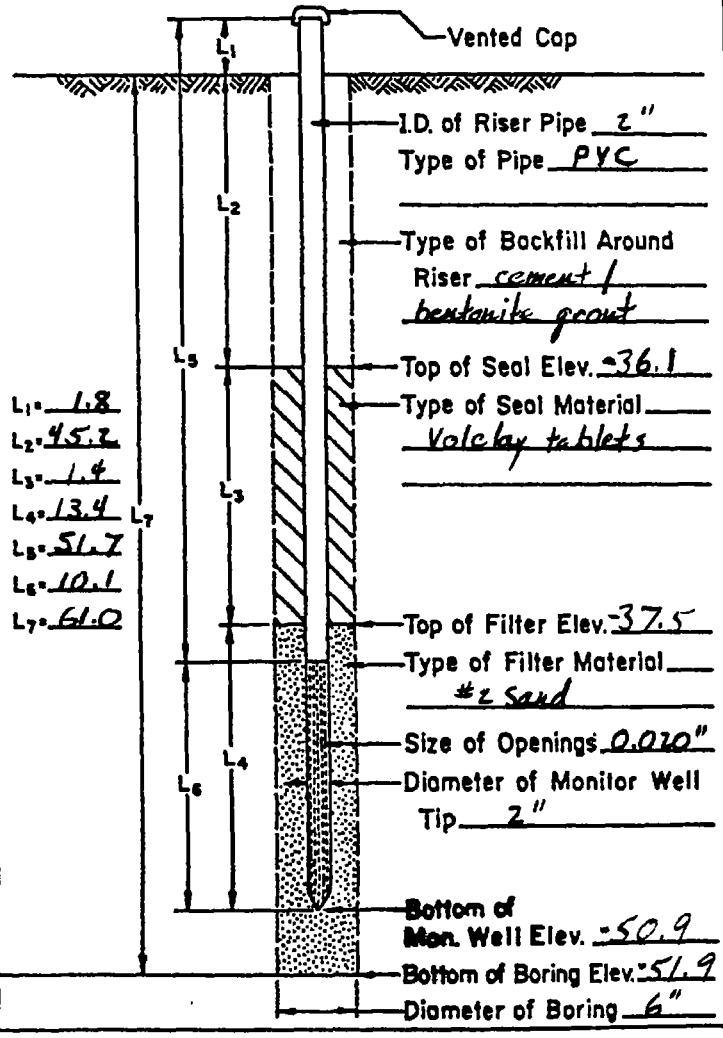
BORING

Depth in ft.	Description	Symbol
	Brown silty sand, wood, glass, brick. FILL	
8.0		
	Brown clayey SILT, ML/OH - MARSH	
11.8		
20	SP - Coarse to fine Sand, trace silt, occassional sea shells.	
40		
60		
61.0		
80		

MONITOR WELL

Type of Monitor Well 2" PVC deep tip vacuum piezometer

Ground Elev. 9.1 — Top of Riser Elev. 10.90



L1 = 1.8
L2 = 45.2
L3 = 1.4
L4 = 13.4
L5 = 51.7
L6 = 10.1
L7 = 61.0

- I.D. of Riser Pipe 2"
- Type of Pipe PVC
- Type of Backfill Around Riser cement / bentonite grout
- Top of Seal Elev. -36.1
- Type of Seal Material Volclay tablets
- Top of Filter Elev. -37.5
- Type of Filter Material #2 Sand
- Size of Openings 0.020"
- Diameter of Monitor Well Tip 2"
- Bottom of Mon. Well Elev. -50.9
- Bottom of Boring Elev. -51.9
- Diameter of Boring 6"

Remarks development 4-18-88 using rig air compressor, bottom of hose set at 45' (five feet above top of screen) 10-12 GPM for 20 minutes, total of 220 gallons removed, water clarity is clear. All water was barreled.

Inspected By Paul Kaneth

WOODWARD-CLYDE CONSULTANTS

WELREC 107 2038

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

OW-27

WELL RECORD

Well Permit No. 29 – 20248
Atlas Sheet Coordinates 29 : 14 :482

OWNER IDENTIFICATION - Owner JERSEY CENTRAL POWER & LT
Address 310 MADISON AVENUE
City MORRISTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. OW27
Address LONG BRANCH 100 BROOD ST NJ
County MONMOUTH Municipality ~~LONG VALLEY CIT~~ Lot No. ~~6.01(6A)~~ Block No. ~~320~~

WELL USE MONITOR WELL NO OW-27 Status

WATER USE MONITOR Average — gals. daily Maximum — gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed APR / 20 / 1988
Depths: Total 6' ft. Finished 6' ft.
Diameter: Top 2" in. Bottom 2" in.
Land Surface Elevation at well ____ ft. Elevation was determined using
Casing Height (stick-up) above land surface ____ ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		2½	2"	PVC SCH 40
Casing 2				
Casing 3				
Screen 1	2½	3½	2	PVC SCH 40 SLOT 020
Screen 2				
Tail Piece				
Gravel Pack	2½	3½		
Grout	0	2½		CEMENT BENTONITE VEL CLD PELL
Grouting Method	TREMIE			

WELL FLOWS NATURALLY ____ gals. per min. at ____ ft. above the land surface.
Water rises to ____ ft. above the land surface.

RECORD OF TEST Test Date ___/___/___
Static water-level before pumping ____ ft. below land surface. Water level ____ ft. below land surface after ____ hrs. of pumping.
Water level was measured using Drawdown ____ ft.
Discharge rate measured using Discharge Rate ____ gals. per min.
Well was pumped using Specific Capacity ____ gals. per min. per ft. of drawdown
Observed effects on nearby wells
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by Pump Type
Mfrs. Name Model
CAPACITY: Pump delivers ____ GPM at ____ PSI pressure.
POWER: ____ HP at ____ RPM Power Source
DEPTHS: Pump ____ ft. Footpiece ____ ft. Airline ____ ft.
FLOW METER: Model ____ installed on ____ in. diameter pipe.

ENGINEERING DRILLING CO.

CONTRACTOR - Name of Drilling Contractor
Address 316 WINDSOR RD
City ROBBINSVILLE NJ State NJ Zip Code 08691
Name of Driller BOGDAN SZCZECZAK License No. J1246

Signature of Contractor Date 2 / 10 / 1989

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/88

OW-27

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29-20248
29-14-482

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method ROTARY

Type of Rig GARDNER DENVER

Aquifer/Geo. Fm. COSTAL

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

	Thick.	Lith.	Fm.
0-4' FILL BROWN SILTY SAND GLASS WOOD BRICK			
4'-6' BROWN CLAYEY SILT ROOTMATTING			
LEASE OF C-F SAND MARSH			

GWPI No. ____ - ____ NJPDES No. ____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

29.14.482
29-20248
29.14.482

MONITOR WELL INSTALLATION REPORT

Monitor Well No. OW-27
Project LONG BRANCH
Location LONG BRANCH, NJ
Project No. 88C4100 Installed By Engineering Drilling Co
Date 4/15/88 Time
Method of Installation water rotary, pilot hole using a 3 3/4" tricone bit, reamed with a 5 3/4" bit to 6'.

LOG OF MONITOR WELL

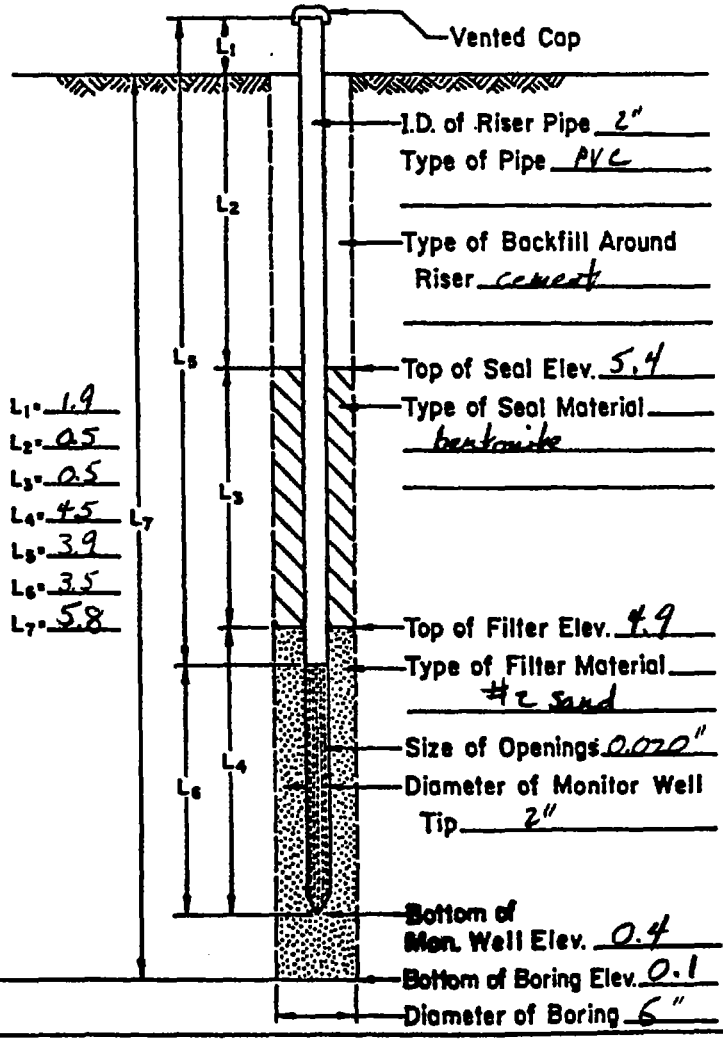
BORING

Depth in ft.	Description	Symbol
	FILL - brown silty sand, glass, wood, brick.	
5	Brown clayey SILT, roothairs, lense of c.-f. SAND MARSH	
10		

MONITOR WELL

Type of Monitor Well shallow overburden

Ground Elev. 6.1
Top of Riser Elev. 7.80



L1 = 1.9
L2 = 0.5
L3 = 0.5
L4 = 4.5
L5 = 3.9
L6 = 3.5
L7 = 5.8

Vented Cap
I.D. of Riser Pipe 2"
Type of Pipe PVC
Type of Backfill Around Riser cement
Top of Seal Elev. 5.4
Type of Seal Material bentonite
Top of Filter Elev. 4.9
Type of Filter Material #2 sand
Size of Openings 0.020"
Diameter of Monitor Well Tip 2"
Bottom of Mon. Well Elev. 0.4
Bottom of Boring Elev. 0.1
Diameter of Boring 6"

Remarks Development: 4-28-88 using centrifugal 2.0 gal/dry, 1.5 gal/dry water turbid. All water was barreled.

Inspected By Paul Kaveth

WOODWARD-CLYDE CONSULTANTS

WELREC 107 2041

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 21780
Atlas Sheet Coordinates 29 : 14 : 449

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address Redacted - Privacy Act
City _____ State Redacted - I Zip Code 07757

WELL LOCATION - If not the same owner please give address. Owner's Well No. 1
Address Redwood Avenue
County Monmouth Municipality OCEANPORT BORO Lot No. 1 & 2 Block No. 96

WELL USE Withdrawal Status IN USE

WATER USE IRRIGATION Average 300 gals. daily Maximum 400 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed NOV / 19 / 88
Depths: Total 45 ft. Finished 45 ft.
Diameter: Top 8 in. Bottom 8 in.
Land Surface Elevation at well 9' ft. Elevation was determined using 9' Bench Marker
Casing Height (stick-up) above land surface 1 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1				
Casing 2		1'		
Casing 3		35'	4"	sch #40 PVC
Screen 1		10'	4"	sch #40 PVC x 15-slot
Screen 2				
Tail Piece				
Gravel Pack		10'	8	#2 Sand
Grout		15'		Benton.
Grouting Method		Pressure Grout		

WELL FLOWS NATURALLY _____ gals. per min. at _____ ft. above the land surface.
Water rises to _____ ft. above the land surface.

RECORD OF TEST Test Date NOV / 19 / 88
Static water-level before pumping 2' ft. below land surface. Water level 4' ft. below land surface after 2 hrs. of pumping.
Water level was measured using Boiler Line Drawdown 2 ft.
Discharge rate measured using 5 GAL pail Discharge Rate 20 gals. per min.
Well was pumped using GAS Pump Specific Capacity 10 gals. per min. per ft. of drawdown
Observed effects on nearby wells None
Water Quality (taste, odor, color, etc.) Good

PERMANENT PUMPING EQUIPMENT Installed by Jonas Endreson Pump Type Submersible
Mfrs. Name Red-Jacket Model 22 GPM
CAPACITY: Pump delivers 22 GPM at 40 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source Electric
DEPTHS: Pump 35 ft. Footpiece _____ ft. Airline _____ ft.
FLOW METER: Model _____ installed on _____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor JONAS ENDRESON
Address 40-3rd Bayway
City Toms River State nj Zip Code 08753
Name of Driller Jonas Endreson License No. 1138

Signature of Contractor [signature] Date NOV / 19 / 88

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 21780
29 14 449

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☑ No

Drilling Method Rotary

Type of Rig 1250 Failing

Aquifer/Geo. Fm. KIRKWOOD

LOG

0"-7' Sa/sm/mL
7-35' CH/CL
35-45 SP/SM

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 22063
Atlas Sheet Coordinates 29 : 14 : 453

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address ~~77 TECUMSEH AVE.~~
City ~~OCEANPORT~~ State ~~NJ~~ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address
County MONMOUTH Municipality ~~OCEANPORT BORO~~ Lot No. ~~17~~ Block No. ~~8~~

WELL USE WITHDRAWL Replacement Status IN USE

WATER USE DOMESTIC Average 1000 gals. daily Maximum 1500 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 1 / 24 / 89
Depths: Total 70 ft. Finished 70 ft.
Diameter: Top 8 in. Bottom 8 in.
Land Surface Elevation at well ____ ft. Elevation was determined using TOP
Casing Height (stick-up) above land surface 1½ ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL Screens. Note Slot Size(s)
Casing 1		50	4	Sched 40 PVC
Casing 2				
Casing 3				
Screen 1	50	20	4	Sched 40 PVC .016"
Screen 2				
Tail Piece				
Gravel Pack	50	20		entire Screen.
Grout	TIE IN	10 min		Sodium Bentonite Hole-Plug.
Grouting Method	Gravity Feed to Tie On.			

WELL FLOWS NATURALLY 0 gals. per min. at 0 ft. above the land surface.
Water rises to 0 ft. above the land surface.

RECORD OF TEST Test Date 1 / 24 / 89
Static water-level before pumping 13 ft. below land surface. Water level 41 ft. below land surface after 1 hrs. of pumping.
Water level was measured using Electronic Gauge Drawdown ____ ft.
Discharge rate measured using Calibrated Bucket Discharge Rate 30 gals. per min.
Well was pumped using Air lift Specific Capacity ____ gals. per min. per ft. of drawdown
Observed effects on nearby wells NONE
Water Quality (taste, odor, color, etc.) FE, - Sulfur - Clear.

PERMANENT PUMPING EQUIPMENT Installed by ____ Pump Type Submersible
Mfrs. Name Red Jacket Model ____
CAPACITY: Pump delivers 10 GPM at 50 PSI pressure.
POWER: ½ HP at 3450 RPM Power Source 220V electric
DEPTHS: Pump 40 ft. Footpiece ____ ft. Airline ____ ft.
FLOW METER: Model ____ installed on 1¼ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor G. COLANGELO
Address P.O. Box 457
City COLTS NECK, N.J. State ____ Zip Code 07722
Name of Driller G. Colangelo License No. 13395

Signature of Contractor G Colangelo Date 3 / 1 / 89

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form GWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 22063

29 14 453

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Mud

Type of Rig Rotary 8" Bit

Aquifer/Geo. Fm. ?
0

LOG

0-30 Med Yellow Sand

31-45 Black Mushy Clay

45-70' Med Coarse Sand Clayish

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 – 22181
Atlas Sheet Coordinates 29 : 14 : 419

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 13 Alwin Terrace
City Little Silver State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address same as above
County Monmouth Municipality Little Silver Lot No. 2 Block No. 84

WELL USE Withdrawal Status In Use

WATER USE Irrigation Average 2000 gals. daily Maximum 4000 gals. daily

WELL CONSTRUCTION Date well completed 89 / 03 / 27
BOREHOLE DIMENSIONS Depths: Total 192 ft. Finished ft.
Diameter: Top 8.5" in. Bottom ----- in.
Land Surface Elevation at well 20 ft. Elevation was determined using Topographic Map
Casing Height (stick-up) above land surface 1.5' ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		168	4.0"	Schedule 40 PVC
Casing 2				
Casing 3				
Screen 1	168	20	4"	Schedule 40 PVC/.020
Screen 2				
Tail Piece		5'	4"	
Gravel Pack	158	25'	8.5"	.025 Blended
Grout	Surface	158		200 mesh Bentonite
Grouting Method	Pressure, Thru Tremie Pipe			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date 89 / 03 / 27
Static water-level before pumping 8 ft. below land surface. Water level 142 ft. below land surface after 1 hrs. of pumping.
Water level was measured using Estimated Drawdown 134 ft.
Discharge rate measured using Measured Container Discharge Rate 75 gals. per min.
Well was pumped using Air Lift Specific Capacity 0.5 gals. per min. per ft. of drawdown
Observed effects on nearby wells None
Water Quality (taste, odor, color, etc.) Good

PERMANENT PUMPING EQUIPMENT Installed by PICKWICK WELL DRLG Pump Type Submersible
Mfrs. Name Gould Model 25EL
CAPACITY: Pump delivers 25 GPM at 40 PSI pressure.
POWER: 2HP HP at 3450 RPM Power Source Electric
DEPTHS: Pump 100 ft. Footpiece ft. Airline ft.
FLOW METER: Model Installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING
Address P.O. Box 6, Farmingdale, NJ 07727 (201) 938 5300
City ~~David Primost M1041~~ State Zip Code
Name of Driller Norman Primost J1040 License No.
~~Allen Primost J1407~~

Signature of Contractor Date 89 / 04 / 10

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29-22181

29.14.4.19

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Mud Rotary

Type of Rig T.H. Drive

Aquifer/Geo. Fm. Kmw

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

LOG

		Thick.	Lith.	Fm.
0-10	Slightly Clayey Coarse+med. reddish-brown Sand			
10-20	Gray Silty Clay			
20-30	Dark Green Clay			
30-150	Gray Clay w/ Some Fine Gray Sand			
150-192	Fine & Some med. Silty gray Sand w/ Some green pebbles + Some black sand, trace Few Shells			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 22236
Atlas Sheet Coordinates 29 : 14 : 453

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address Redacted - Privacy Act
City State Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Shrewsbury Ave. Oceanport, N.J.
County Monmouth Municipality Oceanport Lot No. 4 Block No. 67

WELL USE Withdrawal Status In Use

WATER USE Domestic Average 2000 gals. daily Maximum 4000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 89 / 09 / 06
Depths: Total 191 ft. Finished ------ ft.
Diameter: Top 8.5" in. Bottom ------ in.
Land Surface Elevation at well 20 ft. Elevation was determined using Topographic Map
Casing Height (stick-up) above land surface 1.5' ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		166	4.0"	Schedule 40 PVC
Casing 2				
Casing 3	165	~~20~~	~~4~~	~~Schedule 40 PVC/.020~~
Screen 1				
Screen 2				
Tail Piece		~~5'~~	~~4"~~	
Gravel Pack	155	~~25'~~	~~8.5"~~	.025 Blended
Grout	Surface	~~155~~		~~200 mesh Bentonite~~
Grouting Method	Pressure, Thru Tremie Pipe			

WELL FLOWS NATURALLY ____ gals. per min. at ____ ft. above the land surface.
Water rises to ____ ft. above the land surface.

RECORD OF TEST Test Date 89 / 09 / 06
Static water-level before pumping 15 ft. below land surface. Water level 140 ft. below land surface after 1 hrs. of pumping.
Water level was measured using ~~Estimated~~ Drawdown ~~125~~ ft.
Discharge rate measured using Measured Container Discharge Rate 17 gals. per min.
Well was pumped using Air Lift Specific Capacity 0.1 gals. per min. per ft. of drawdown
Observed effects on nearby wells None
Water Quality (taste, odor, color, etc.) Good

PERMANENT PUMPING EQUIPMENT Installed by PICKWICK WELL DRLG Pump Type Submersible
Mfrs. Name Gould Model 13EM
CAPACITY: Pump delivers 15 GPM at 40 PSI pressure.
POWER: 1 ~~160~~ HP at 3450 RPM Power Source Electric
DEPTHS: Pump ____ ft. Footpiece ____ ft. Airline ____ ft.
FLOW METER: Model ____ Installed on ____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING
Address P.O. Box 6, Farmingdale, NJ 07727 (201) 938 5300
City ~~David Primost M1041~~ Norman Primost J1040 State Zip Code
Name of Driller ~~Allen Primost J1407~~ License No.

Signature of Contractor [signature] Date 89 / 11 / 17

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 22236

29.14.453

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method MUD ROTORY

Type of Rig T. H. DRIVE

Aquifer/Geo. Fm. KMW

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

LOG

	Thick.	Lith.	Fm.
0-10 Fill & Gray Clay			
10-30 Silty Gray Clay & Some Fine Gray Sand			
30-50 Gray Clay & Fine & Med. Black Sand			
50-70 Fine & Med. Black Silty Sand & trace Green Clay			
70-80 Green & Gray Clay			
80-150 Gray Clay			
150-191 Fine Black Silty Sand & Few Shells & some med. Black & White Sand			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☒ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 – 22526
Atlas Sheet Coordinates 29 : 14 :419

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 30 Alwin Terrace
City Little Silver State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Same As Above
County Monmouth Municipality Little Silver Lot No. 10 Block No. 83

WELL USE Withdrawal Status In Use

WATER USE Irrigation Average 2000 gals. daily Maximum 4000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 89 / 06 / 02
Depths: Total 173 ft. Finished ~~173~~ ft.
Diameter: Top 8.5" in. Bottom ~~8.5"~~ in.
Land Surface Elevation at well 20 ft. Elevation was determined using Topographic Map
Casing Height (stick-up) above land surface ~~2'~~ 0 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		158	4.0"	Schedule 40 PVC
Casing 2				
Casing 3	158	~~10~~	~~4"~~	~~Schedule 40 PVC/.020~~
Screen 1				
Screen 2				
Tail Piece		~~5'~~	~~4"~~	
Gravel Pack	148	~~25'~~	~~8.5"~~	.025 Blended
Grout	Surface	148		200 mesh Bentonite
Grouting Method	Pressure, Thru Tremie Pipe			

WELL FLOWS NATURALLY _____ gals. per min. at _____ ft. above the land surface.
Water rises to _____ ft. above the land surface.

RECORD OF TEST Test Date 89 / 06 / 02
Static water-level before pumping 6 ft. below land surface. Water level 130 ft. below land surface after 1 hrs. of pumping.
Water level was measured using Estimated Drawdown 124 ft.
Discharge rate measured using Measured Container Discharge Rate 40 gals. per min.
Well was pumped using Air Lift Specific Capacity 0.3 gals. per min. per ft. of drawdown
Observed effects on nearby wells None
Water Quality (taste, odor, color, etc.) Good

PERMANENT PUMPING EQUIPMENT Installed by PICKWICK WELL DRLG Pump Type Submersible
Mfrs. Name Gould Model 18E15
CAPACITY: Pump delivers 20 GPM at 40 PSI pressure
POWER: 1 1/2 HP at 3450 RPM Power Source Electric
DEPTHS: Pump ~~130~~ ft. Footpiece ~~20~~ ft. Airline ~~130~~ ft.
FLOW METER: Model _____ installed on _____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING
Address P.O. Box 6, Farmingdale, NJ 07727 (201) 938 5300
City ~~David Primost M1041~~ State Zip Code
Name of Driller ~~Norman Primost J1040~~ License No.
~~Allen Primost J1407~~

Signature of Contractor David Primost Date 89 / 07 / 25

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29.14.A19
WELL RECORD
29 22526

Well Permit No. 29 - 22526
29.14.419

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Mud Rotary

Type of Rig T.H. Drive

Aquifer/Geo. Fm. KMW

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

	Thick.	Lith.	Fm.
0-7 Med ochre Clayey Sand			
7-20 Green Clay / Some Fine & med. black Sand			
20-40 Dark green clay / Some med & Fine black Sand			
40-160 Gray Silty Clay / Some black Sand / Few Shells			
160-173 Fine, med & Some coarse gray Silty Sand.			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ 28° 35 ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 22549
Atlas Sheet Coordinates 29 : 14 : 473

OWNER IDENTIFICATION - Owner BRIDGEWATER TOWNHOUSE CON
Address 57 BRIDGEWATERS DRIVE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address 57 Bridgewater Drive
County Monmouth Municipality OCEANPORT BORO Lot No. 3/1 Block No. 99/100

WELL USE irrigation Status

WATER USE irrigation Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 5 / 30 / 89
Depths: Total 180 ft. Finished 180 ft.
Diameter: Top 8 in. Bottom 8 in.
Land Surface Elevation at well 30 ft. Elevation was determined using topography map #29
Casing Height (stick-up) above land surface ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		155	4	sch 40 PVC
Casing 2				
Casing 3				
Screen 1				
Screen 2	175	20	4	.015" PVC
Tail Piece				
Gravel Pack		5	4	
Grout	170	30	8	800# of #1 sand
Grouting Method	4	min. 50 drop		hole plug/benseal

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date 5 / 30 / 89
Static water-level before pumping 12 ft. below land surface. Water level 100 ft. below land surface after 1 hrs. of pumping.
Water level was measured using dropline/M-scope Drawdown 88 ft.
Discharge rate measured using bucket Discharge Rate 80 gals. per min.
Well was pumped using air Specific Capacity .91 gals. per min. per ft. of drawdown
Observed effects on nearby wells none
Water Quality (taste, odor, color, etc.)

PERMANENT PUMPING EQUIPMENT Installed by David Van Brunt Jr. Pump Type
Mfrs. Name Red Jacket Model submersible 7GC
CAPACITY: Pump delivers 25 GPM at PSI pressure.
POWER: HP at RPM 3450 Power Source 40
DEPTHS: Pump 1 1/2 ft. Footpiece ft. Airline ft. electricity
FLOW METER: Model 175 installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor TIGER CONSTRUCTION CORP.
Address 806 Highway 71, P.O. Box 394
City Spring Lake Heights State N.J. Zip Code 07762
Name of Driller Dennis Buchannan License No. J1393

Signature of Contractor Tiger Construction Service Corp Date 6 / 7 / 89

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29.1A.473
WELL RECORD

Well Permit No. 29- 22549
29.14.473

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☐ No

Drilling Method XX
mud rotary

Type of Rig Failing CF-15

Aquifer/Geo. Fm. Wenonah-Mt. Laurel

LOG

0-3 fill soil & debris
3-7 yellow silty sand
7-8 peat
8-23 med. yellow & tan sands
23-120 mottled gray & green clays
120-141 gray clay, shell, fine sand
141-170 fine to med. quartz sand, silty with glauconite
170- 175 sand & clay layers mixed
175-180 gray clay (hard) (Wenonah- Mt. Laurel)

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 23608
Atlas Sheet Coordinates 29 : 13 : 638

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 92 SUNNYBANK DRIVE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. 1
Address SAME
County MONMOUTH Municipality SHREWSBURY BORO Lot No. 8 Block No. 66

WELL USE Domestic Status

WATER USE Drinking Average 500 gals. daily Maximum 700 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 11 / 29 / 89
Depths: Total 197 ft. Finished 197 ft.
Diameter: Top 8 in. Bottom 8 in.
Land Surface Elevation at well 40 ft. Elevation was determined using Map
Casing Height (stick-up) above land surface 1 1/2 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		191	4	PVC - SCHEDULE #40
Casing 2		+		
Casing 3		-		
Screen 1	191	6	4	STAINLESS STEEL # 14 SLOT
Screen 2	—			JOHNSON
Tail Piece		—		
Gravel Pack	186	11	8	# 2 WASHED SAND
Grout	0	186		BENSEAL
Grouting Method		PRESSURE		

WELL FLOWS NATURALLY — gals. per min. at — ft. above the land surface.
Water rises to — ft. above the land surface.

RECORD OF TEST Test Date 11 / 29 / 89
Static water-level before pumping 7 ft. below land surface. Water level 55 ft. below land surface after 4 hrs. of pumping.
Water level was measured using Electric Tester Drawdown 48 ft.
Discharge rate measured using Pail Discharge Rate 15 gals. per min.
Well was pumped using Air Compressor Specific Capacity — gals. per min. per ft. of drawdown
Observed effects on nearby wells NONE
Water Quality (taste, odor, color, etc.) Clear

PERMANENT PUMPING EQUIPMENT Installed by Driller Pump Type Submersible
Mfrs. Name Red Jacket Model 8 C C
CAPACITY: Pump delivers 12 GPM at 50 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source Electric
DEPTHS: Pump 120 ft. Footpiece — ft. Airline — ft.
FLOW METER: Model — installed on 1" in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor RAY'S WELL DRILLING Rd 2 Box 39 Marlon Southard Rd
Address
City Howell State N.J. Zip Code 07731
Name of Driller Raymond Peters License No. #699

Signature of Contractor Ray Peters Date 1 / 20 / 90

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 23608
29 / 36038

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Rotary Mud

Type of Rig Mayhew

Aquifer/Geo. Fm. WENONAH

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

	Thick.	Lith.	Fm.
0-10 Brown Clay & Big Gravels			
10-18 Hard Rock Layers, Reddish Brown Clay Sand			
18-25 Green Clay			
25-35 Soft Green Marl			
35-41 Green Black Pepper Clay Hard Take Water			
41-53 Very Hard Green Black Rock			
53-100 Gray Clay			
100-90 Gray Pepper Clay			
90-128 Hard Gray Black Clay			
128-145 Light Gray Pepper Clay & Shells			
145-154 Hard Ledge, Fossils Shells & Gravels			
154-191 - BLACK MACIOUS CLAY			
191-197 - MEDIUM GRAIN MACIOUS SAND			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 23677
Atlas Sheet Coordinates 29 : 13 : 665

OWNER IDENTIFICATION - Owner US ARMY
Address 167 RIVERSIDE DR.
City FORT MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 1
County Monmouth Municipality ~~OCEANPORT BORO~~ Lot No. ~~TAXEXEMP~~ Block No. ~~TAX~~
Address Bldg C99, Saltzman Ave, Fort Monmouth NJ 07703

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 11/2/89
Regulatory Program Requiring Well — Case I.D. # —
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater & Environ Svcs Tele. # 201-530-4787

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Sch 40 PVC FJT Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	15	4	Sch 40 PVC FJT .02
Tail Piece	—	—		
Gravel Pack	2	15		#2 Morie Gravel
Annular Seal/Grout	.5	1.5		Bentonite Pellets
Method of Grouting	0 - .5 Slurry			

Static water level after drilling ____ ft.
Water level was measured using interface probe
Well was developed for 1 hours at 2-3 gpm
Method of development purged with Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: ~~Centrifugal pump~~ NA
Drilling Method Auger
Drilling Fluid None Type of Rig TH-10
Name of Driller Gregg Myers
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J 1472
Name of Drilling Company B.L. MYERS BROS., INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Theresa DeFino for Gregg Myers Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0728

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coor. 29-13-665

Sketch Map

29.13.665
2923677-1

Project Fort Monmouth Owner E- Systems, Inc.

Location Fort Monmouth Eatontown Permit No 2923677-1

Well Number 1 Total Depth 15' Diameter 10"

Casing Elevation Water Level: Initial 4' Static

Screen Diameter 4" Length 13' Slot Size .020"

Casing Diameter 4" Length 2' Type Sch .40 PVC

Drilling Method Auger Sample Method Continuous Split Spoon

Completion Details Flush mount, cement collar, Inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 11/2/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description		Comments
1			ASPHALT & BALLAST		
2			SAND	Dark green medium (-) to fine SAND trace silt. Orange-tan-brown medium to fine SAND, little clay.	PHC odor, slightly moist
3					
4					
5				Dark green fine SAND, trace silt alternating with orange brown medium to fine SAND.	PHC odor, saturated
6					
7					
8			CLAY	Gray-orange: CLAY, trace fine sand	
9			SAND	Orange-brown medium to fine SAND some clay, trace silt. Changing to Dark green-orange-medium to fine sand, little clay at 11.0'	
10					
11					
12					PHC odor, saturated
13		10			
14					
15			END HOLE		
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

4

MONITORING WELL RECORD

Well Permit No. 29 - 23678
Atlas Sheet Coordinates 29 : 13 : 665

OWNER IDENTIFICATION - Owner DS ARMY
Address 167 RIVERSIDE DR.
City FORT MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 2
County Monmouth Municipality ~~OCEANPORT BORO~~ Lot No. ~~TAXEXEMP~~ Block No. ~~TAX~~
Address Bldg 699, Saltzman Ave, Fort Monmouth NJ 07703

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 11/2/89
Regulatory Program Requiring Well _____ Case I.D. # _____
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater Environ Svcs, Inc Tele. # 201-530-4787

WELL CONSTRUCTION
Total depth drilled 17 ft.
Well finished to 17 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface _____ ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Sch40 PVC FST Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	1.5	17	4	Sch40 PVC FST 10Z
Tail Piece	—	—		
Gravel Pack	1.5	17		#2 Morie Gravel
Annular Seal/Grout	.5	1.5		Bentonite Pellets
Method of Grouting	0 — .5 Slurry			

Static water level after drilling _____ ft.
Water level was measured using interfaceprobe
Well was developed for 1 hours at 2-3 gpm
Method of development purged with pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid None Type of Rig TH-10
Name of Driller Greg Myers
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J1472
Name of Drilling Company B.L. MYERS BROS., INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Theresa Delfino for Greg Myers Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coordinates - 29 13 665

Sketch Map

29.13.665
29236778-9

Project Fort Monmouth Owner E-Systems, Inc

Location Fort Monmouth Eatontown Permit No 2923678-9

Well Number 2 Total Depth 17' Diameter 10"

Casing Elevation Water Level: Initial 5' Static

Screen Diameter 4" Length 15.5' Slot Size .020"

Casing Diameter 4" Length 1.5' Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon everY 5'

Completion Details Flush mount, cement collar, Inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 11/2/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description		Comments
1			SAND	Dark brown to black SAND trace clay and silt	
2					
3					
4					
5		0	SAND	Dark green to black fine SAND, little silt, trace clay.	Slightly moist, no odor.
6					
7					
8				Dark green-fine SAND, some clay	Saturated
9					
10		0			
11					
12			CLAY	Black CLAY, little silt, trace fine sand	Saturated
13					
14		0			
15					
16					
17			END HOLE		
18					
19					
20					
21					
22					
23					
24					
25					

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 23679
Atlas Sheet Coordinates 29 : 13 : 665

OWNER IDENTIFICATION - Owner US ARMY
Address 167 RIVERSIDE DR.
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 3
County Monmouth Municipality OCEANPORT BORO Lot No. TAXEXEMP Block No. TAX
Address Bldg 699 Saltzman Ave, Fort Monmouth NJ 07703

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 11/21/89
Regulatory Program Requiring Well — Case I.D. # —
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater & Environ Svcs, Inc Tele. # 201-530-4787

WELL CONSTRUCTION
Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface _____ ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	1.5	4	Sch 40 PVC FJT
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	15	4	Sch 40 PVC FJT .020
Tail Piece	—			
Gravel Pack	1.5	15		#Morie Gravel
Annular Seal/Grout	.5	1.5		Bentonite Pellets
Method of Grouting	0-.5 Slurry			

Static water level after drilling _____ ft.
Water level was measured using interface probe
Well was developed for 1 hours at 2-3 gpm
Method of development purged with pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: ~~Centrifugal pump~~ NA
Drilling Method Auger
Drilling Fluid None Type of Rig TH-10
Name of Driller Greg Myers
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J 1472
Name of Drilling Company B.L. MYERS BROS., INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Theresa Delfino for Greg Myers Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coor. 29-13-665

Sketch Map

29.13.665
2923679-1

Project Fort Monmouth Owner E-Systems, Inc.

Location Fort Monmouth Eatontown Permit No 2923679-1

Well Number 3 Total Depth 15' Diameter 10"

Casing Elevation Water Level: Initial 4' Static

Screen Diameter 4" Length 13' Slot Size .020"

Casing Diameter 4" Length 2' Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon every 5'

Completion Details Flush mount, with manhole cover, Inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 11/2/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description		Comments
1			ASPHALT, BALLAST STONE		
2			SAND	Dark green SAND, some clay.	PHC odor
3			SAND	Dark green-gray medium to fine SAND, little clay	
4					Water encountered @ 4'
5					
6					
7					
8					
9					
10					
11					
12					
13			SAND	Dark green-orange med to fine SAND, some clay.	
14					
15					
16			END HOLE		
17					
18					
19					
20					
21					
22					
23					
24					
25					

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 23680
Atlas Sheet Coordinates 29 : 13 : 665

OWNER IDENTIFICATION - Owner US ARMY
Address 167 RIVERSIDE DR.
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 4
County Monmouth Municipality ~~OCEANPORT BORO~~ Lot No. ~~TAXEXEMP~~ Block No. ~~TAX~~
Address Bldg 699, Saltzman Ave, Fort Monmouth NJ 07703

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 11 / 2 / 89
Regulatory Program Requiring Well — Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater Environ Svcs, Inc Tele. # 201-531-4787

WELL CONSTRUCTION
Total depth drilled 20 ft.
Well finished to 20 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Sch 40 PVC FJT Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	20	4	Sch 40 PVC FJT .02
Tail Piece	—	—		
Gravel Pack	1.5	20		#2 Morie Gravel
Annular Seal/Grout	.5	1.5		Bentonite Pellets
Method of Grouting	0 - .5 slurry			

Static water level after drilling ____ ft.
Water level was measured using Interface probe
Well was developed for 1 hours at 2-3 gpm
Method of development purged with pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: ~~Centrifugal Pump~~ NA
Drilling Method Auger
Drilling Fluid None Type of Rig TH-10
Name of Driller Greg Myers
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 51472
Name of Drilling Company B.L. MYERS BROS., INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Theresa Delfino for Greg Myers Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coor. 29-13-665.

Sketch Map

29.13.665
29 23680-7

Project Fort Monmouth Owner E-System, Inc.

Location Fort Monmouth Eatontown Permit No 2923680-7

Well Number 4 Total Depth 20' Diameter 10"

Casing Elevation Water Level: Initial 3' Static

Screen Diameter 4" Length 18' Slot Size .020"

Casing Diameter 4" Length 2' Type Sch .40 PVC

Drilling Method Auger Sample Method Continuous Split Spoon

Completion Details Flush mount, with manhole, inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 11/2/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description		Comments
1			ASPHALT, BALLAST		
2			SAND	Dark green SAND, some clay, odor	PHC odor
3			SAND	Dark green fine SAND, little clay	Saturated PHC odor
4					
5		185			
6					
7					
8					
9					
10					
11		170	SAND	Dark green to orange medium to fine SAND little clay	Saturated PHC odor
12					
13					
14					
15					
16			CLAY	Black CLAY, little fine sand	Saturated, PHC odor
17					
18					
19					
20			END HOLE		
21					
22					
23					
24					
25					

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 24557
Atlas Sheet Coordinates 29 : 14 : 453

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 540 SHREWSBURY AVE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Shrewsbury Ave. @ Iroquis Ave.
County Monmouth Municipality OCEANPORT BORO Lot No. 6-7 Block No. 67

WELL USE Domestic Status

WATER USE Potable Average 500 gals. daily Maximum 3000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 4 / 18 / 90
Depths: Total 80 ft. Finished 80 ft.
Diameter: Top 8 1/2 in. Bottom 8 1/2 in.
Land Surface Elevation at well 50 ft. Elevation was determined using TOPO MAP #29
Casing Height (stick-up) above land surface 1 1/2 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		50	4	sch 40 pvc
Casing 2				
Casing 3				
Screen 1	50	25	4	.015" sch 40 pvc
Screen 2				
Tail Piece		5	4	
Gravel Pack	40	35	8 1/2	1200# of #1 sand
Grout	5	35		holeplug/bentonite
Grouting Method	Drop			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date 4 / 18 / 90
Static water-level before pumping 8 ft. below land surface. Water level 50 ft. below land surface after 1 hrs. of pumping.
Water level was measured using dropline/M-scope Drawdown 42 ft.
Discharge rate measured using bucket+watch Discharge Rate 35 gals. per min.
Well was pumped using air Specific Capacity .83 gals. per min. per ft. of drawdown
Observed effects on nearby wells none
Water Quality (taste, odor, color, etc.) good

PERMANENT PUMPING EQUIPMENT Installed by David Van Brunt Jr. Pump Type Submersible
Mfrs. Name RED JACKET Model 12BC
CAPACITY: Pump delivers 10 GPM at 40 PSI pressure.
POWER: 3/4 HP at 3450RPM Power Source electricity
DEPTHS: Pump 45 ft. Footpiece ft. Airline ft.
FLOW METER: Model Installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor [illegible] CONSTRUCTION CORP. 394
Address Spring Lake Heights
City State N.J. Zip Code 07762
Name of Driller Dennis B. Davis License No. M987

Signature of Contractor Date 5 / 8 / 90

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 24557

29.14.453

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☐ No XX

Drilling Method Mud Rotary

Type of Rig Failing CF-15

Aquifer/Geo. Fm. Vincentown

LOG

0-7 Brown silty sand
7-25 Dark gray glauconitic sand
25-45 Green glauconitic sand with hardpan lenses (2-3" thick) interbedded
45-77 Fine slightly clayey glauconitic sand (VINCENTOWN)
77-80 Green Clay

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date 11 ____ / ____

330

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 24639
Atlas Sheet Coordinates 29 : 13 : 665

OWNER IDENTIFICATION - Owner US ARMY
Address 167 RIVERSIDE DRIVE
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5 / 1 / 90
Regulatory Program Requiring Well UST Case I.D. # —
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) G.E.S. - Tony Kull Tele. # (201) 530-4787

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2	4	PVC Sch40 FJT
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2	15	4	PVC Sch40 FJT, .02
Tail Piece				
Gravel Pack	2	15		#2 Morie
Annular Seal/Grout	1	2		BENTONITE
Method of Grouting	0	1		PorHANDI Slurry

Static water level after drilling 3 ft.
Water level was measured using Meter
Well was developed for hours at gpm
Method of development
Was permanent pumping equipment installed? ☐ Yes ☐ No
Pump capacity gpm
Pump type:
Drilling Method AUGER
Drilling Fluid NONE Type of Rig TH-10
Name of Driller Gregg Myers
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J 1472
Name of Drilling Company B.L. MYERS BROS., INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.) N.A.

0 - 15' Brown to Green Sand
15' Black Clay.

Driller used this form.

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Gregg Myers Date 5/3/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 24640
Atlas Sheet Coordinates 29 : 13 : 665

OWNER IDENTIFICATION - Owner US ARMY
Address 167 RIVERSIDE DRIVE
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 5/1/90
Regulatory Program Requiring Well MONITORING UST Case I.D. # -
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) G.E.S. Tony Kull Tele. # (201) 530-4787

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	1	4	PVC Sch40 FJT
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	1	14	4	PVC Sch40 FJT.02
Tail Piece				
Gravel Pack	1	14		#2 Morie
Annular Seal/Grout	.5'	1		BENTONITE
Method of Grouting	0	.5		PORTLAND + SACRETE (Manhole) Slurry.

Static water level after drilling 2 ft.
Water level was measured using METER
Well was developed for hours at gpm
Method of development
Was permanent pumping equipment installed? ☐ Yes ☐ No
Pump capacity gpm
Pump type:
Drilling Method AUGER
Drilling Fluid NONE Type of Rig TH-10
Name of Driller Gregg Myers
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J 1472
Name of Drilling Company B.L. MYERS BROS., INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.) NA.

0 - 14' BROWN to GREEN SAND
14' BLACK CLAY.
WELL SEALED 10/14/92
DRILLER USED THIS FORM.

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Gregg Myers Date 5/3/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0737

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 24953
Atlas Sheet Coordinates 29 : 14 : 447

OWNER IDENTIFICATION - Owner SHELL OIL CORP.
Address PO BOX 1703
City ATLANTA State GA Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. GT01
County Municipality OCEANPORT BORO Lot No. 25 Block No. 110
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/12/90
Regulatory Program Requiring Well UST Case I.D. # 90 03 16 1328
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTI Tele. # 587-0300

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 12' ft.
Borehole diameter:
Top 8 3/4 in.
Bottom 8 3/4 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface 0 ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	pvc sch 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12'	4"	pvc sch 40 .020
Tail Piece				
Gravel Pack	1'	12'		#2
Annular Seal/Grout	0'	1'		cement + Ben
Method of Grouting	Tremie			

Static water level after drilling 4' ft.
Water level was measured using M-Scope
Well was developed for 1 hours at 3 gpm
Method of development Bailed
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Augers
Drilling Fluid None Type of Rig B57
Name of Driller Michael J Kavlunas
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. MO1328 GT DRILLING
Name of Drilling Company

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'-6' Black coarse to Med. Sand some gravel
6'-14' Dark green + Black Clay

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kavlunas Date 9/21/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

4

MONITORING WELL RECORD

Well Permit No. 29 - 24954
Atlas Sheet Coordinates 29 : 14 : 447

OWNER IDENTIFICATION - Owner SHELL OIL CORP.
Address P.O. BOX 1703
City ATLANTA State GA Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. GT02
County Municipality OCEANPORT BORO Lot No. 25 Block No. 110
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/12/90
Regulatory Program Requiring Well UST Case I.D. # 90-03-16-1328
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTI Tele. # 387-0300

WELL CONSTRUCTION

Total depth drilled 13' ft.
Well finished to 12' ft.
Borehole diameter:
Top 8 3/4 in.
Bottom 8 3/4 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface 0 ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	pvc sch 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12'	4"	pvc sch 40 .020
Tail Piece				
Gravel Pack	1'	12'		#2
Annular Seal/Grout	0'	1'		cement + Ben
Method of Grouting	Tremie			

Static water level after drilling 3' ft.
Water level was measured using M-Scope
Well was developed for 1 hours at 2 gpm
Method of development Bailed
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid none Type of Rig B57
Name of Driller Michael Kavlunas
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. MD1328
Name of Drilling Company GT DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0"-6" Fill
6"-10' Green Course + Fine Sand
10'-13' Black clay

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kavlunas Date 9/20/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 24955
Atlas Sheet Coordinates 29 : 14 : 44'

OWNER IDENTIFICATION - Owner [illegible]
Address [illegible]
City _____ State _____ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. GT03
County _____ Municipality _____ Lot No. _____ Block No. _____
Address _____

TYPE OF WELL (as per Well Permit Categories) _____ Date well completed 7/12/90
Regulatory Program Requiring Well MONITORING Case I.D. # [illegible]
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTI Tele. # 587-0200

WELL CONSTRUCTION
Total depth drilled 13' ft.
Well finished to 12' ft.
Borehole diameter:
Top 8 3/4 in.
Bottom 8 3/4 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface 0 ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	pvc sch 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12'	4"	pvc sch 40 .020
Tail Piece				
Gravel Pack	1'	12'		#2
Annular Seal/Grout	0'	1'		cement+Ben
Method of Grouting	Tremie			

Static water level after drilling 3' ft.
Water level was measured using M-Scope
Well was developed for 1 hours at 3 gpm
Method of development Bailing
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity _____ gpm
Pump type: _____
Drilling Method Auger
Drilling Fluid none Type of Rig BST
Name of Driller Michael Karlunas
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. MO1328
Name of Drilling Company GT DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Asphalt + Fill
6"-8' Dark Green Med sand
8'-12 Black Silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Karlunas Date 9/20/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

6

MONITORING WELL RECORD

Well Permit No. 29 - 24956
Atlas Sheet Coordinates 29 : 14 : 441

OWNER IDENTIFICATION - Owner SHELL OIL CORP.
Address PO BOX 1703
City ATLANTA State GA Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. GT04
County Municipality OCEANPORT Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/12/90
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTI Tele. # 587-0300

WELL CONSTRUCTION

Total depth drilled 12' ft.
Well finished to 11' ft.
Borehole diameter:
Top 8 3/4 in.
Bottom 8 3/4 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface 0 ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	pvc sch 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	11'		pvc sch 40 .020
Tail Piece				
Gravel Pack	1'	11'		#2
Annular Seal/Grout	0'	1'		#Cement+Ben.
Method of Grouting	Tremie			

Static water level after drilling 3' ft.
Water level was measured using m-scope
Well was developed for 1 hours at 2 gpm
Method of development Bailed
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Augers
Drilling Fluid None Type of Rig B57
Name of Driller Michael Karlunas
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. MD1328
Name of Drilling Company GT DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0"-6" Asphalt + Fill
6"-12' Green moist Coarse + Fine sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Karlunas Date 9/21/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 25357
Atlas Sheet Coordinates 29 : 13 : 693

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 9 MONMOUTH PARK PLACE
City OCEAN PORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Mw #1
County Monmouth Municipality ~~OCEANPORT BORO~~ Lot No. ~~9-18B~~ Block No. ~~68~~
Address High Tec- Turf Same

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 10 / 15 / 90
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Matrix Tele. # 957-0108

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	15	4	Sch. PVC 40
Outer Casing (Not Protective Casing)	none			
Screen (Note slot size)	15	19	4	Sch. 40PVC.20slot
Tail Piece	none			
Gravel Pack	14.5	19		#2 well gravel
Annular Seal/Grout	0	14.5		Bent./Cement
Method of Grouting	Gravity placement			

Static water level after drilling 4 4 ft.
Water level was measured using Steel tape
Well was developed for 1 hours at 2 gpm
Method of development Centrifugal pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity n/a gpm
Pump type: n/a
Drilling Method Hollow Stem Auger
Drilling Fluid none Type of Rig Diedrich D-50
Name of Driller Ray Ecculston
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1088
Name of Drilling Company WILSON DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-3' sand and gravel
3'-19' sand
Water level at 4 ft

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature _____ Date 10/16/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

WELL SEALED 1.1.1.1.91

Well Permit No. 29 - 25453
Atlas Sheet Coordinates 29 : 14 : 454

OWNER IDENTIFICATION - Owner CONCURRENT COMPUTER CORP.
Address 2 CRESCENT PLACE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. 4 Block No. 127
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 11/14/90
Regulatory Program Requiring Well MONITORING Case I.D. #
ECRA
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) MIKE HALTER @ BCM ENGINEERS Tele. # (609) 386-8800

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface 0 ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	.5'	2'	4"	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	2'	12'	4"	.20 SLOT PVC
Tail Piece	—	—	—	
Gravel Pack	1'6"	12'	—	#2 WELL SAND
Annular Seal/Grout	.5'	1'6"	—	BENTONITE/CEMENT
Method of Grouting	TREMMIE			

Static water level after drilling 2.2 ft.
Water level was measured using PROBE
Well was developed for 1 hours at 1 gpm
Method of development TRASHPUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method HOLLOW STEM AUGERS
Drilling Fluid — Type of Rig CME-45
Name of Driller Michael Kuzyniewski
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1276
Name of Drilling Company EMPIRE SOILS INVESTIGATIONS

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

LOG
ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kuzyniewski Date 11/24/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DATE	TIME	DRILLED FROM	DRILLED TO	WEATHER	TEMP
11-14	1215	0'			

EMPIRE SOILS INVESTIGATIONS INC.

FIELD LOG

HOLE NO. MW 1
GRD. ELEV. _____
Permit # 2925453
Casing 29:14:54

PROJECT _____
LOCATION Concrete Company Sheet _____ of _____

DEPTH OF SAMPLE	SAMPLE NO	BLOWS ON SAMPLER 0/6	6/12	12/18	N	BLOWS ON CASING C	MOISTURE	COLOR	SAMPLE RECOVERY	CLASSIFICATION OF MATERIALS DRILLED	OTHER DATA	WELL DETAILS
										BLACK TO RED STONE		
3-4	1	6	5							Brown med to fine sand		
			6	7						TAN MED TO FINE SAND		
4-6	2	1	3							PEAT		
			3		6							
6-8	3	4	3		4					Green med to fine sand	- Green Med to Fine SAND	
			1		2							
8-10	4	6	4							Brown med to fine sand 12'	Brown Med to Fine SAND	
			4		4							
10-12	5	4	3		5							
					4							

Bot 12'
H_2O At 3.0

NOTATION: SIZE AUGERS / CASING _____ SIZE SPOON _____
SIZE THIN-WALLED TUBE _____ SIZE CORE _____

N = NO. OF BLOWS TO DRIVE "SPOON "WITH lb. WEIGHT FALLING PER BLOW
C = NO. OF BLOWS TO DRIVE "CASING "WITH lb. WEIGHT FALLING PER BLOW

FILL OUT BACK OF LOG AND SIGN YOUR NAME

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

WELL SEALED 1/1/1991

Well Permit No. 29 - 25454
Atlas Sheet Coordinates 29 : 14 : 454

OWNER IDENTIFICATION - Owner CONCURRENT COMPUTER CORP.
Address 2 CRESCENT PLACE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. 4 Block No. 127
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 11/14/90
Regulatory Program Requiring Well MONITORING ECRA Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) MIKE HALTER @ BCM ENGINEERS Tele. # (609) 386-8800

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 11.5 ft.
Borehole diameter:
Top 8 in.
Bottom in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	.5	1.5	4"	PVC
Outer Casing (Not Protective Casing)	—			
Screen (Note slot size)	1.5	11.5	4"	.20 SLOT PVC
Tail Piece	—			
Gravel Pack	1'	11'6"		#2 WELL SAND
Annular Seal/Grout	.5	1'		BENTONITE CEMENT
Method of Grouting	TREMMIE			

Static water level after drilling 2.2 ft.
Water level was measured using PROBE
Well was developed for 1 hours at 1 gpm
Method of development TRASHPUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Hollow Stem Auger
Drilling Fluid — Type of Rig CME-45
Name of Driller MIKE KURZYNOWSKI
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 12776
Name of Drilling Company EMPIRE SOILS INVESTIGATIONS

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

LOG
ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Mike Kurzynowski Date 11/16/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DATE	TIME	DRILLED FROM	DRILLED TO	WEATHER	TEMP
11-14	8:45				

EMPIRE SOILS INVESTIGATIONS INC

FIELD LOG

HOLE NO. MW B-2

GRD. ELEV.

PERMIT # 2925434

COORDINATES 29: 14: 454

PROJECT

LOCATION Concurrent Computer Sheet ____ of ____

DEPTH OF SAMPLE	SAMPLE NO	BLOWS ON SAMPLER 0/6	6/12	12/18	N	BLOWS ON CASING C	MOISTURE	COLOR	SAMPLE RECOVERY	CLASSIFICATION OF MATERIALS DRILLED	OTHER DATA	WELL DETAILS
										Black top & stone	BLACK TOP + STONE	
0'-4'	1	5	5	3						Green med to fine sand PEAT	GREEN MED TO FINE SAND	
4'-6'	2	1	1	2						SAME	PEAT	
6'-8'	3	1	2	2						SAME	SAME	
8'-10'	4	2	4	3						Tan med to fine sand	TAN MED TO FINE SAND	
10'-12'	5	3	3	4						Brown med to fine	BROWN MED TO FINE SAND	
12'-14'	6	2	4	2						Same	SAME	
										EOB 14'		

NOTATION: SIZE AUGERS / CASING ____ SIZE SPOON ____

SIZE THIN-WALLED TUBE ____ SIZE CORE ____

N = NO. OF BLOWS TO DRIVE "SPOON "WITH lb. WEIGHT FALLING PER BLOW

C = NO. OF BLOWS TO DRIVE "CASING " WITH lb. WEIGHT FALLING PER BLOW

FILL OUT BACK OF LOG AND SIGN YOUR NAME

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

WELL SEALED 11.1.91

Well Permit No. 29 - 25455
Atlas Sheet Coordinates 29 : 14 : 454

OWNER IDENTIFICATION - Owner CONCURRENT COMPUTER CORP.
Address 2 CRESCENT PLACE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County MONMOUTH Municipality OCEANPORT BORO Lot No. 4 Block No. 127
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 11/13/90
Regulatory Program Requiring Well MONITORING Case I.D. # ECRA
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) MIKE HALTER @ CDM ENGINEERS Tele. # (609) 386-8800

WELL CONSTRUCTION

Total depth drilled 11.5 ft.
Well finished to 11.5 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	1 Ft	1.5 A	4	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	1.5'	11.5'	4	.20 SLOT PVC
Tail Piece	—	—	—	
Gravel Pack	1'	11.5'		#2 WELL SAND
Annular Seal/Grout	6"	1'		BENTONITE/CEMENT
Method of Grouting	TREMMIE			

Static water level after drilling 2.8 ft.
Water level was measured using PROBE
Well was developed for 1 hours at 1 gpm
Method of development TRASHPUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method HOLLOW STEM AUGERS
Drilling Fluid — Type of Rig CME-45
Name of Driller MIKE KURCZYNOWSKI
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1276
Name of Drilling Company EMPIRE SOILS INVESTIGATIONS

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

LOG ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kurczynowski Date 11/21/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1959

DATE	TIME	DRILLED FROM	DRILLED TO	WEATHER	TEMP
11-13	1:30				

EMPIRE SOILS INVESTIGATIONS INC

FIELD LOG

HOLE NO. MW-3

GRD. ELEV.

Permit # 2925455

Coordinates 29:14:454

PROJECT

LOCATION Concurrent Computer Sheet of

DEPTH OF SAMPLE	SAMPLE NO	BLOWS ON SAMPLER 0/6	6/12	12/18	N	BLOWS ON CASING C	MOISTURE	COLOR	SAMPLE RECOVERY	CLASSIFICATION OF MATERIALS DRILLED	OTHER DATA	WELL DETAILS
0'-2'	1	1	4							Top soil to fine and some sand	TAN MED TO FINE SAND + SILT	
			6	6								
2'-4'	2	2	4							some	SAME	
			1	3						some	SAME	
4'-6'	3	1	1							Brn silty clay	SAME W/ GRAY SILTY LENSES	
			2	3								
6'-8'	4	3	3							Brn fine to med sand	GRAY FINE TO MED SAND	
			3	4								
8-10	5	2	1									
			1	3								

BOH 11.5

H_2O at 3.0

NOTATION: SIZE AUGERS / CASING _____ SIZE SPOON _____

SIZE THIN-WALLED TUBE _____ SIZE CORE _____

N = NO. OF BLOWS TO DRIVE "SPOON "WITH lb. WEIGHT FALLING PER BLOW

C = NO. OF BLOWS TO DRIVE "CASING " WITH lb. WEIGHT FALLING PER BLOW

FILL OUT BACK OF LOG AND SIGN YOUR NAME

DWR-138 M
6/80

New Jersey Department of Environmental Protection
Division of Water Resources

WELL SEALED 11/1/91

MONITORING WELL RECORD

Well Permit No. 29 - 25456
Atlas Sheet Coordinates 29 : 14 : 454

OWNER IDENTIFICATION - Owner CONCURRENT COMPUTER CORP.
Address 2 CRESCENT PLACE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County Monmouth Municipality OCEANPORT BORO Lot No. 4 Block No. 127
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 11/15/90
Regulatory Program Requiring Well ECRA Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) MIKE HALTER @ LCM ENGINEERS Tele. # (609) 386-8800

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 11.5 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	.5	1.5	4"	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	1.5	11.5	4"	120 SLOT PVC
Tail Piece	—	—	—	
Gravel Pack	1'	11.5		# WELL SAND
Annular Seal/Grout	6"	1		BENTONITE/CEMENT
Method of Grouting	TREMMIE			

Static water level after drilling 2.2 ft.
Water level was measured using PROBE
Well was developed for 1 hours at 3/4 gpm
Method of development TRASHPUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Hollow Stem Augers
Drilling Fluid — Type of Rig CME-45
Name of Driller MIKE KUCZYNOWSKI
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 12716
Name of Drilling Company EMPIRE SOILS INVESTIGATIONS

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

LOG ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kuczynowski Date 11/21/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1961

DATE	TIME	DRILLED FROM	DRILLED TO	WEATHER	TEMP
11-1-94	1030	0	12		

EMPIRE SOILS INVESTIGATIONS INC

FIELD LOG

HOLE NO. B-4

GRD. ELEV.

PERMIT # 29255456

COORDINATES 29: M: 454

PROJECT

LOCATION Concord Computer Sheet of

DEPTH OF SAMPLE	SAMPLE NO	BLOWS ON SAMPLER 0/6	6/12	12/18	N	BLOWS ON CASING C	MOISTURE	COLOR	SAMPLE RECOVERY	CLASSIFICATION OF MATERIALS DRILLED	OTHER DATA	WELL DETAILS
										Black top + stone	BLACKTOP + STONE	
2'-4'	1	5	11	8	19					fine med to fine sand	TAN MED TO FINE SAND	
4-6	2	1	1							same	same	
6-8	3	1	1	1	2					same	same	
8-10	4	1	3	3	6					Black silty clay w/ some peat	BLCK. SILTY CLAY W/ TRACE OF PEAT	
10-12	5	WOR	WOR	1	2					fine med to fine sand	TAN MED TO FINE SAND	
										EOB 12'		

NOTATION: SIZE AUGERS / CASING _____ SIZE SPOON _____

SIZE THIN-WALLED TUBE _____ SIZE CORE _____

N = NO. OF BLOWS TO DRIVE "SPOON "WITH lb. WEIGHT FALLING PER BLOW

C = NO. OF BLOWS TO DRIVE "CASING " WITH lb. WEIGHT FALLING PER BLOW

FILL OUT BACK OF LOG AND SIGN YOUR NAME

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

WELL SEALED 1/1/91

Well Permit No. 29 - 25457
Atlas Sheet Coordinates 29 : 14 : 454

OWNER IDENTIFICATION - Owner CONCURRENT COMPUTER CORP.
Address 2 CRESCENT PLACE
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-5
County Monmouth Municipality OCEANPORT BORO Lot No. 4 Block No. 127
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 11/13/90
Regulatory Program Requiring Well ECRA Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) MIKE HALTER @ ACM ENGINEERS Tele. # (609) 386-8800

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 15 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	5	4	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	5	15	4	.020 SLOT PVC
Tail Piece	—	—	—	
Gravel Pack	4	15		#2 WELL SAND
Annular Seal/Grout	0	4		BENTONITE/CEMENT
Method of Grouting	TREMMIE			

Static water level after drilling 9.2 ft.
Water level was measured using PROBE
Well was developed for 1 1/2 hours at 1 gpm
Method of development TRASH PUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method HOLLOW STEM AUGERS
Drilling Fluid — Type of Rig CME 45
Name of Driller MIKE KURZYNOWSKI
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1276
Name of Drilling Company EMPIRE SOILS INVESTIGATIONS

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

LOG ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kurzynowski Date 11/21/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1963

DATE	TIME	DRILLED FROM	DRILLED TO	WEATHER	TEMP
11-13	10:45	0'			

EMPIRE SOILS INVESTIGATIONS INC

FIELD LOG

HOLE NO. B-1

GRD. ELEV.

Permit # 2A25457

Coords 2A:14:454

PROJECT

LOCATION Concurrent Computer Sheet ____ of ____

DEPTH OF SAMPLE	SAMPLE NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	BLOWS ON CASING C	MOISTURE	COLOR	SAMPLE RECOVERY	CLASSIFICATION OF MATERIALS DRILLED	OTHER DATA	WELL DETAILS
0-2	1	2	1							dk Brown med to fine sand	RED BROWN MED TO FINE SAND	
			3	3								
2-4	2	10	6							same	SAME	
			6	10							SAME	
4-6	3	8	7							SAME		
			6	6								
6-8	4	13	10							SAME	SAME	
			9	9								
8-10	5	20	6							Tan med to fine sand	TAN MED TO FINE SAND	
			5	10								
10-12	6	2	6									
			8	9								
12-14	7	5	10							SAME	SAME	
			15	14						SAME		
14-16	8	12	15								SAME	
			14	14						EOB 16'		

NOTATION: SIZE AUGERS / CASING ____ SIZE SPOON ____

SIZE THIN-WALLED TUBE ____ SIZE CORE ____

N = NO. OF BLOWS TO DRIVE "SPOON "WITH lb. WEIGHT FALLING PER BLOW

C = NO. OF BLOWS TO DRIVE "CASING " WITH lb. WEIGHT FALLING PER BLOW

FILL OUT BACK OF LOG AND SIGN YOUR NAME

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 25506
Atlas Sheet Coordinates 29 : 14 : 464

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 497 BRANCH PORT AVE.
City OCEAN PORT State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Branch Port Ave
County Monmouth Municipality OCEANPORT BORO Lot No. 19 Block No. 2

WELL USE Withdrawal Status In Use

WATER USE Domestic Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 11 / 27 / 90
Depths: Total 100 ft. Finished 100 ft.
Diameter: Top 8 in. Bottom 4 in.
Land Surface Elevation at well 40 ft. Elevation was determined using Atlas Sheet
Casing Height (stick-up) above land surface 1 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		70	4	Black Steel
Casing 2				
Casing 3				
Screen 1	None			
Screen 2				
Tail Piece				
Gravel Pack				
Grout	70			Bon Seal
Grouting Method	pressure			

WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.
Water rises to ft. above the land surface.

RECORD OF TEST Test Date 11 / 27 / 90
Static water-level before pumping 20 ft. below land surface. Water level ft. below land surface after hrs. of pumping.
Water level was measured using Calibrated Pail Drawdown ft.
Discharge rate measured using Calibrated Pail Discharge Rate 10 gals. per min.
Well was pumped using Air Compressor Specific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells None
Water Quality (taste, odor, color, etc.) Good

PERMANENT PUMPING EQUIPMENT Installed by Kaye Well Drilling Inc. Pump Type Sub.
Mfrs. Name - Model -
CAPACITY: Pump delivers 10 GPM at 50 PSI pressure.
POWER: 1/2 HP at - RPM Power Source Electric
DEPTHS: Pump - ft. Footpiece - ft. Airline - ft.
FLOW METER: Model - installed on - in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor KAYE WELL DRILLING
Address R.D.1 Box 73
City Jackson State N.J. Zip Code
Name of Driller License No.

Signature of Contractor Mary Lehner, Sec.-Treas. Date 12 / 11 / 90

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 25506
29 14 464

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☑ No

Drilling Method Rotary

Type of Rig Rotary

Aquifer/Geo. Fm. Navesink

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG	Thick.	Lith.	Fm.
0 - 20' - Yellow			
20' - 58' - Grey Clay			
58' - 70' - Grey Clay & Black Sand			
70' - 100' - Green Clay & Black Sand			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26778
Atlas Sheet Coordinates 29 : 14 : 414

OWNER IDENTIFICATION - Owner U S ARMY
Address EVANS AREA, BLDG. 9049
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/3/91
Regulatory Program Requiring Well Case I.D. #

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 31 ft.
Well finished to 31 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2 ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	21	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	21	31	4	PVC .010
Tail Piece				
Gravel Pack	19	31		Morie #2
Annular Seal/Grout	17	19		Pellets
Method of Grouting	Tremie grout			Portland Cement+Bent.

Static water level after drilling 23.3 ft.
Water level was measured using tape measure
Well was developed for 1 hours at 1 gpm
Method of development submersable
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity N/A gpm
Pump type. N/A
Drilling Method HSA
Drilling Fluid none Type of Rig D-120
Name of Driller Karl Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☑ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1530
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0 orange fill sand
5' grey to black sands and silts
20' gravel sand and silts
31' grey to white

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Karl D Hitzelberger Date 9-6-91

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26925
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 9/31/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

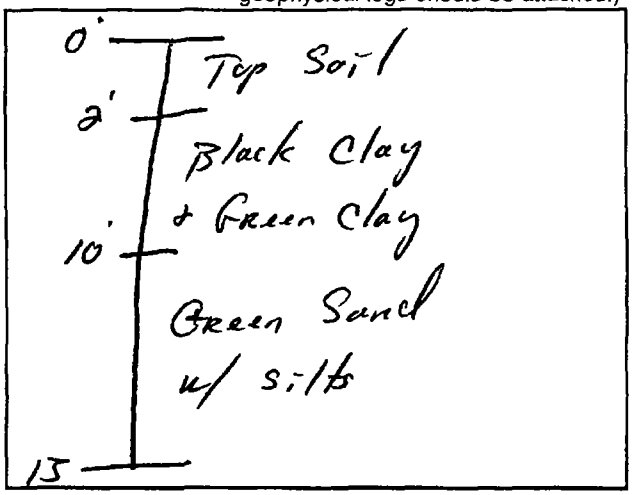
WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	3	4"	Flush Th. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	3	13	4"	.10 Sch 40
Tail Piece				
Gravel Pack	2	13	#2	Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 4 ft.
Water level was measured using Tape
Well was developed for 1 hours at .5 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type. N/A
Drilling Method Auger
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hilzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hilzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26926
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/1/91
Regulatory Program Requiring Well DEP Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

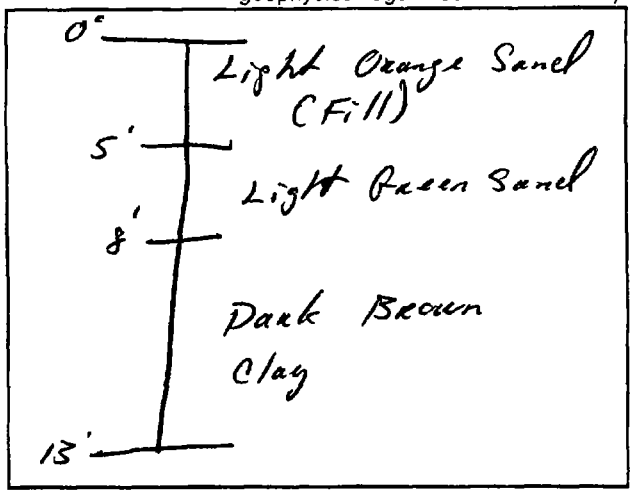
WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	3	4"	Flush Thr. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	3	13	4"	.10 Sch 40
Tail Piece				
Gravel Pack	2	13		#2 Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 5.5 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at .6 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Hygen
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelberger Date 10/9/91

COPIES. White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26927
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/1/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

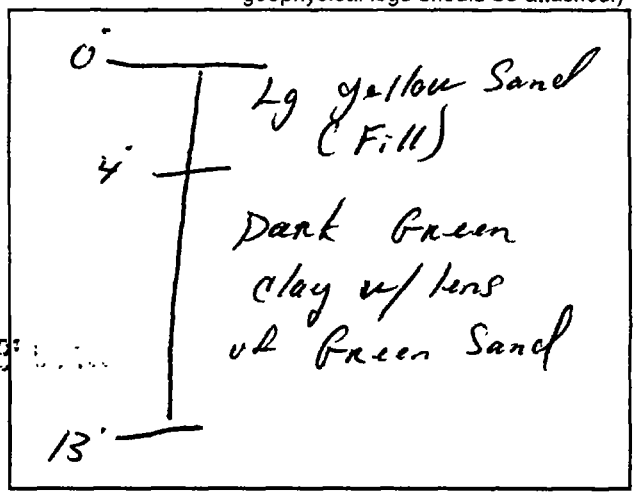
WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	3	4"	Flush Thd. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	3	13	4"	.10 Sch. 40
Tail Piece				
Gravel Pack	2	13		#1 Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 4 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at 2 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Auger
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1903

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

4

Well Permit No. 29 26928
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 9/31/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

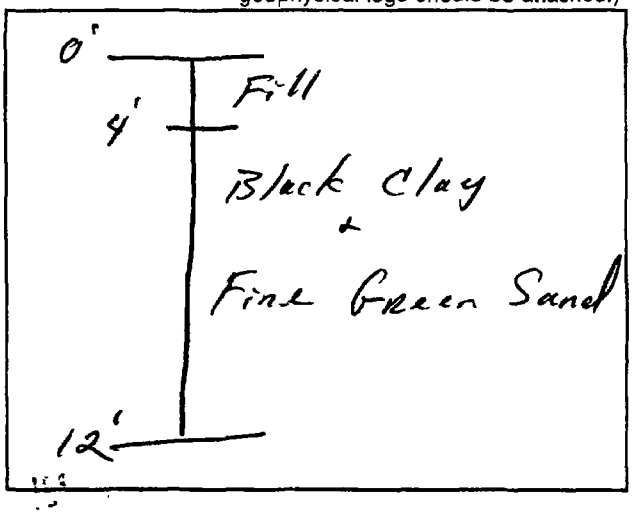
WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Flush Thd. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2	12	4	.10 Sch. 40
Tail Piece				
Gravel Pack	2	12		#2 Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 3 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at 3 gpm
Method of development Centr. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type. N/A
Drilling Method Augers
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 -26929
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/3/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

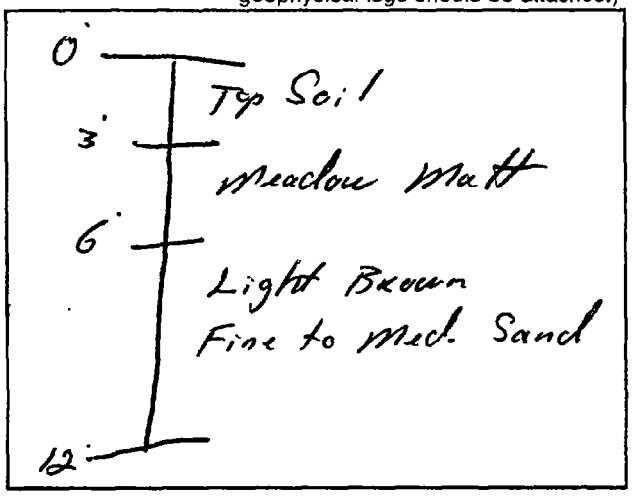
WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Flush Thd. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2	12	4	.10 Sch. 40
Tail Piece				
Gravel Pack	1	12		#2 Morie
Annular Seal/Grout				
Method of Grouting	Concrete			

Static water level after drilling 2.5 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at 1 gpm
Method of development Cork Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Augen
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelbuger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelbuger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1905

DWR-138 M
6/89

Let's protect our earth

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26930
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/2/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

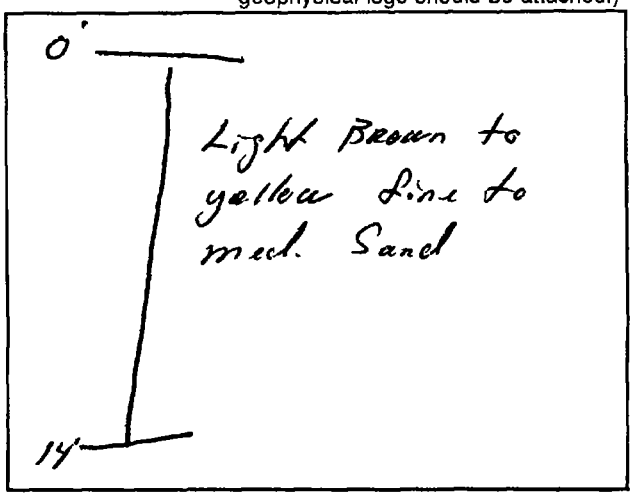
WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 12 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	2	4"	Flush Thd. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2	12	4"	.10 Sch. 40
Tail Piece				
Gravel Pack	2	14		#2 Monic
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 3.5 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at 2 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type. N/A
Drilling Method Auger
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26931
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 10/2/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

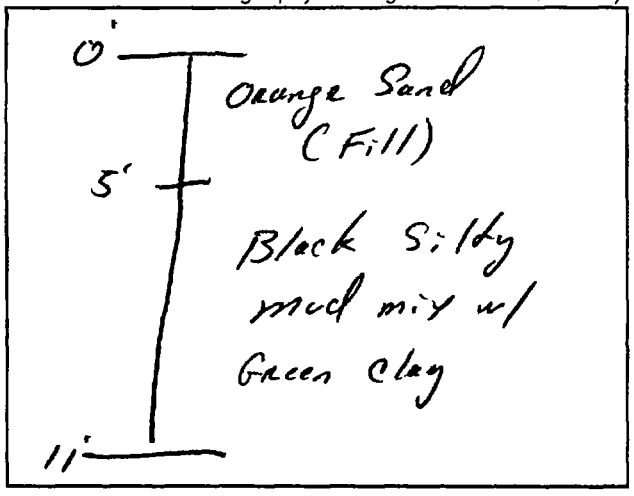
WELL CONSTRUCTION

Total depth drilled 11 ft
Well finished to 11 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	1	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	1	11	4	.10 Flush Thread
Tail Piece				
Gravel Pack	1	11		#2 Morie
Annular Seal/Grout	.5	1		Bentonite
Method of Grouting	Placement			

Static water level after drilling 3 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at .2 gpm
Method of development Sub. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Augers
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelbergen
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J License No. M1066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations

Driller's Signature Charles Hitzelbergen Date 9/10/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1907

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26938
Atlas Sheet Coordinates 29 : 14 : 441

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/8/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	2	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2	12	4	PVC .020
Tail Piece				
Gravel Pack	1.5	12		MORIE #2
Annular Seal/Grout	1	1.5		Pellets
Method of Grouting				

Static water level after drilling 4.0 ft.
Water level was measured using Electric tape
Well was developed for 1 hours at 4 gpm
Method of development Centrifugal
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type. N/A
Drilling Method HSA
Drilling Fluid NONE Type of Rig B-61
Name of Driller KARL D. Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N J License No. 1530
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0 Asphalt
sands
gravels grey in color with green sands.
12'

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Karl D. Hitzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1889

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26939
Atlas Sheet Coordinates 29 : 14 : 441

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 10/4/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

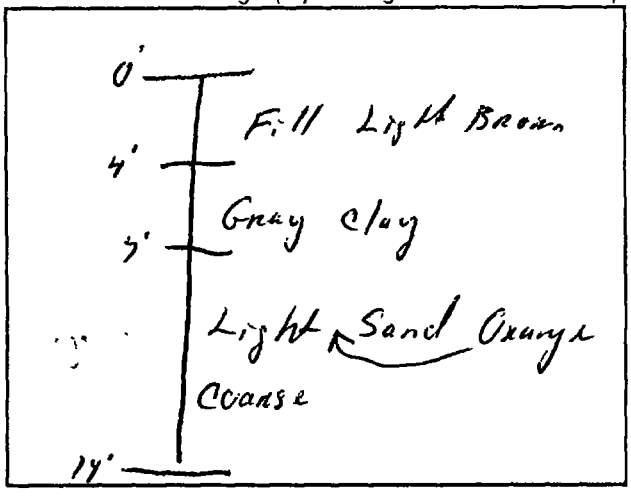
WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.
Borehole diameter.
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	4	4	Flush Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4	14	4	.10 PVC
Tail Piece				
Gravel Pack	2	14		#2 Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 4 ft.
Water level was measured using Tape
Well was developed for 1 hours at 2 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity gpm
Pump type:
Drilling Method Augers
Drilling Fluid N/A Type of Rig B-61
Name of Driller Chanki Kitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Chanki Kitzelberger Date 10/7/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

4.

Well Permit No. 29 - 26940
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/7/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

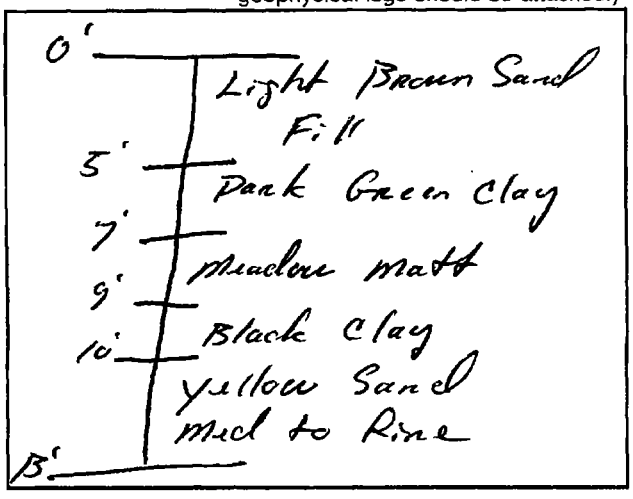
WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	3	4"	Flush Thru PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	3	13	4"	.10 Sch. 40
Tail Piece				
Gravel Pack	2	13		#2 Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Place mesh			

Static water level after drilling 5.5 ft.
Water level was measured using Tape
Well was developed for 1 hours at .9 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Augers
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelberger Date 10/9/91

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

4

Well Permit No. 29 26941
Atlas Sheet Coordinates 29 :14 :444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/7/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

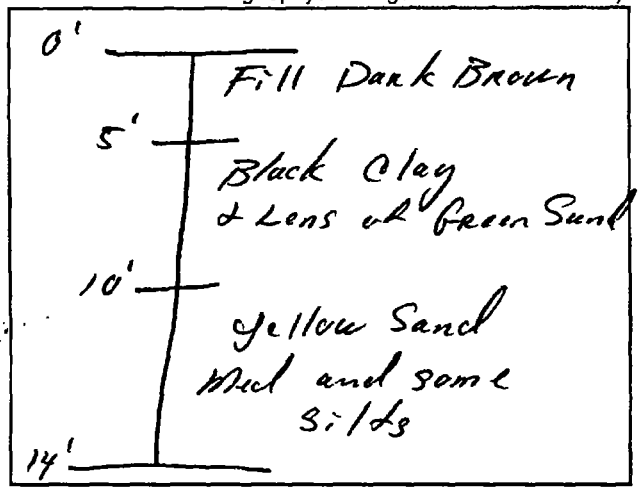
WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	4	4"	Flush Thr. PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4	14	4"	.10 Sch. 40
Tail Piece				
Gravel Pack	2	14		#2 Morie
Annular Seal/Grout	1	2		Bentonite
Method of Grouting	Placement			

Static water level after drilling 5 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at .7 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Augen
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelbergen
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 21066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles Hitzelbergen Date 10/9/91

COPIES. White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

6

Well Permit No. 29 28942
Atlas Sheet Coordinates 29 14 444

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. mw-3
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 10/4/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

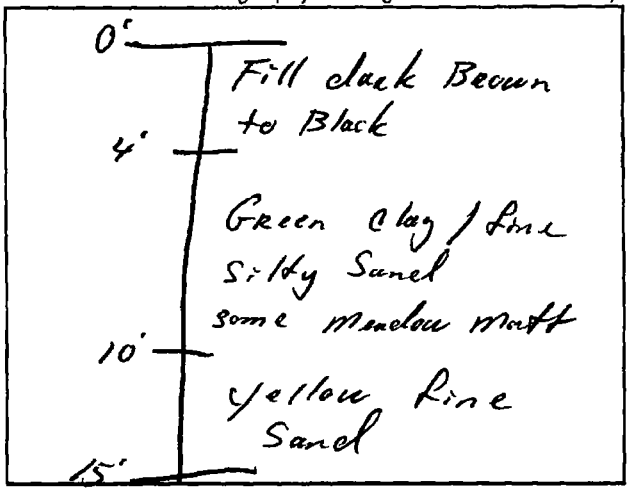
WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	5	4"	Flush thr PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	15	4"	.10 Sch 40
Tail Piece				
Gravel Pack	3	15		#2 Morie
Annular Seal/Grout	1	3		Bentonite
Method of Grouting	Placement			

Static water level after drilling 6 ft.
Water level was measured using Tape
Well was developed for 1.5 hours at 2 gpm
Method of development Cent. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Augers
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 10066
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Charles H Zellberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1910

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 28031
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U S ARMY
Address EVANS AREA BLDG. 699
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. R-1 (BLDG 699)
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 5/20/92
Regulatory Program Requiring Well recovery Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) U.S. Army / CHUCK APPLEBY Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.
Borehole diameter:
Top 16 in.
Bottom 16 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	5	10	PVC. SCH. 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	20	10	PVC. SCH 40 .20 SLOT
Tail Piece				
Gravel Pack	4	20	16	RICCI BROS #2
Annular Seal/Grout	0	4	16	BENT/CEMENT-BENT
Method of Grouting	TREMIE			

Static water level after drilling 6 ft.
Water level was measured using LINE POPPER
Well was developed for — hours at — gpm
Method of development N/A
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity N/A gpm
Pump type:
Drilling Method HSA
Drilling Fluid Type of Rig DEDRICH D-120
Name of Driller WILLIAM SHAW
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 12897
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0
BRN F-C SAND, LITTLE F. GRAVEL, M SILT.
4

BLK. F-SAND, SOME SILT.

20 BLK CLAY/SILT (MOIST)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Date 5-20-92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 28907
Atlas Sheet Coordinates ~~29~~ : ~~14~~ : ~~444~~

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Category MONITORING Date well completed 10, 14, 92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) E-Systems Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	5	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	15	4	PVC .020
Tail Piece				
Gravel Pack	3	5		Pure #2
Annular Seal/Grout	1	2		Pellets
Method of Grouting				

Static water level after drilling 7.1 ft.
Water level was measured using Electric Tape
Well was developed for 1 hours at 2 gpm
Method of development Submersible
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid None Type of Rig Auger
Name of Driller Karl D. Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. J-4530
Name of Drilling Company ~~TABASCO DRILLING CORP.~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'
Tight sands & silts Tan to Brown.
Almost clay like as deeper
Green to Black in color
15'

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature K.D. Hitz Date 10/16/92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 28907
Atlas Sheet Coordinates ~~29~~ : ~~14~~ : ~~444~~

OWNER IDENTIFICATION - Owner U.S. ARMY FORT MONMOUTH
Address BLDG. 167 D & H ENVIRONMENTAL
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-
County Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Category MONITORING Date well completed 10/14/92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) E-Systems Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 10 in.
Bottom 10 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	5	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	15	4	PVC .020
Tail Piece				
Gravel Pack	3	5		Pack #2
Annular Seal/Grout	1	2		Pellets
Method of Grouting				

Static water level after drilling 7.1 ft.
Water level was measured using Electric Tape
Well was developed for 1 hours at 2 gpm
Method of development Submersible
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid NONE Type of Rig AUGER
Name of Driller Karl D. Hitzelberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. J-533
Name of Drilling Company ~~TABASCO DRILLING CORP.~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'
Tight Sands & Silts Tan to Brown
Almost Clay like as deeper
Green To Black in color
15'

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature K.D. Hitz Date 10/16/92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1911

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 28992
Atlas Sheet Coordinates ~~29~~ : ~~14~~ : ~~441~~

OWNER IDENTIFICATION - Owner U.S. ARMY
Address 513 MOTOR POOL, BLDG. 75C
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County Municipality OCEANPORT BORO Lot No. 1 Block No. 3
Address

TYPE OF WELL (as per Well Permit Category) MONITORING Date well completed 10/30/92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) U.S. Army Tele. # 908-532-6224

WELL CONSTRUCTION

Total depth drilled 15' ft.
Well finished to 15' ft.
Borehole diameter:
Top 12" in.
Bottom 12" in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing				
Outer Casing (Not Protective Casing)	6"	5'	4"	PVC. F. J.
Screen (Note slot size)	5'	15'	4"	P.V.C. F. J.
Tail Piece				
Gravel Pack	3'6"	15'	12"	SAND
Annular Seal/Grout	6"	3'6"	12"	BENSEAL
Method of Grouting				

Static water level after drilling 7'6" ft.
Water level was measured using WATER TAPE
Well was developed for 20 min. hours at 5 gpm
Method of development GAS PUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity gpm
Pump type:
Drilling Method
Drilling Fluid Type of Rig B61 AUGER
Name of Driller CLAUDE BRITTON
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1098
Name of Drilling Company ~~GARDEN STATE DRILLING COMPANY~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0"-8' - GW
8'-13' - SW
13'-15' - CL GREEN
WATER AT 7'6"

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Claude Britton Date 10-31-92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 28993
Atlas Sheet Coordinates ~~29~~ : ~~14~~ : ~~441~~

OWNER IDENTIFICATION - Owner U.S. ARMY
Address 513 MOTOR POOL, BLDG. 75C
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County Municipality OCEANPORT BORO Lot No. 1 Block No. 3
Address

TYPE OF WELL (as per Well Permit Category) MONITORING Date well completed 10/30/92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) US ARMY Tele. # 908-532-6224

WELL CONSTRUCTION

Total depth drilled 15' ft.
Well finished to 15' ft.
Borehole diameter:
Top 12" in.
Bottom 12" in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing				
Outer Casing (Not Protective Casing)	6"	5'	4"	PVC. F.J
Screen (Note slot size)	5'	15'	4"	PVC F.J.
Tail Piece				
Gravel Pack	3'6"	15'	12"	SAND
Annular Seal/Grout	6"	3'6"	12"	BENSEAL
Method of Grouting				

Static water level after drilling 7'6" ft.
Water level was measured using WATER TAPE
Well was developed for 20 min hours at 5 gpm
Method of development GAS PUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity gpm
Pump type:
Drilling Method
Drilling Fluid Type of Rig B61 AUGER
Name of Driller CLAUDE BRITTON
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1098
Name of Drilling Company ~~GARDEN STATE DRILLING COMPANY~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0"-8' GW
8'-13' SW
13'-15' CL GREEN
WATER AT 7'6"

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Claude Britton Date 10-31-92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 28994
Atlas Sheet Coordinates 29 : 14 : 441

OWNER IDENTIFICATION - Owner U.S. ARMY
Address 513 MOTOR POOL, BLDG. 75C
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County Municipality OCEANPORT BORO Lot No. 1 Block No. 3
Address

TYPE OF WELL (as per Well Permit Category) MONITORING Date well completed 11 / 2 / 92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) US ARMY Tele. # 908-532-6224

WELL CONSTRUCTION

Total depth drilled 15' ft.
Well finished to 15' ft.
Borehole diameter:
Top 12" in.
Bottom 12" in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing				
Outer Casing (Not Protective Casing)	6"	5'	4"	PVC. F. J
Screen (Note slot size)	5'	15'	4"	PVC. F. J.
Tail Piece				
Gravel Pack	3'6"	15'	12"	SAND
Annular Seal/Grout	6"	3'6"	12"	BENSEAL
Method of Grouting				

Static water level after drilling 7'6" ft.
Water level was measured using WATER TAPE
Well was developed for 20 ~~min~~ hours at 5 gpm
Method of development GAS PUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity gpm
Pump type:
Drilling Method
Drilling Fluid Type of Rig BG1 MOBILE
Name of Driller CLAUDE BRITTON
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) ~~none~~ D C B A
N.J. License No. 1098
Name of Drilling Company GARDEN STATE DRILLING COMPANY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0"-3' - GW
3'-7' - CL
7'-13' - SM-
13'-15' CL GREEN
WATER AT 7'6"

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Claude B Britton Date 11-4-92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 28995
Atlas Sheet Coordinates ~~29~~ : ~~14~~ : ~~441~~

OWNER IDENTIFICATION - Owner U.S. ARMY
Address 513 MOTOR POOL, BLDG. 75C
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County Municipality OCEANPORT BORO Lot No. 1 Block No. 3
Address

TYPE OF WELL (as per Well Permit Category) MONITORING Date well completed 11/3/92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) U.S. ARMY Tele. # 908-532-6224

WELL CONSTRUCTION

Total depth drilled 15' ft.
Well finished to 15' ft.
Borehole diameter:
Top 12" in.
Bottom 12" in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing				
Outer Casing (Not Protective Casing)	6"	5'	4"	P.V.C. F.J
Screen (Note slot size)	5'	15'	4"	P.V.C F.J.
Tail Piece				
Gravel Pack	3'6"	15'	12"	SAND
Annular Seal/Grout	6"	3'6"	12"	BENSEAL
Method of Grouting				

Static water level after drilling 7'6" ft.
Water level was measured using WATER TAPE
Well was developed for 20 ~~min~~ ~~hours~~ at 5 gpm
Method of development GAS pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity gpm
Pump type:
Drilling Method AUGER
Drilling Fluid Type of Rig 1361 MOBILE
Name of Driller
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) ~~None~~ D C B A
N.J. License No. 1098
Name of Drilling Company ~~GARDEN STATE DRILLING COMPANY~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'-3' GW
3'-7' CL
7'-13' SM
13'-15' CL
WATER AT 7'6"

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Date 11-4-92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

L

MONITORING WELL RECORD

106

Well Permit No. 29 - 29739
Atlas Sheet Coordinates 29 : 14 : 442

OWNER IDENTIFICATION - Owner US ARMY - FT. MONMOUTH
Address BLDG. 167 - DEH ENVIR.
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address Bldg. 108

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 6/13/93
Regulatory Program Requiring Well UST Case I.D. # C 91 2844
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed? ☐ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0'	3'	4"	Sch 40 PVC
Outer Casing (Not Protective Casing)				
.010 Screen (Note slot size)	3	13	4"	" " "
Tail Piece	Thd	Cap	4"	PVC
Gravel Pack	1'	13'	12"	#1 Morie
Annular Seal/Grout	0'	1'	12"	Neat Cement
Method of Grouting	Gravity			

Static water level after drilling 4 ft.
Water level was measured using WSCope
Well was developed for .5 hours at 3 gpm
Method of development Submersible
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity — gpm
Pump type: —
Drilling Method HSA
Drilling Fluid — Type of Rig Mobil B57
Name of Driller Robert M Hesse
Health and Safety Plan submitted? ☐ Yes ☐ No
Level of Protection used on site (circle one) ~~None~~ D C B A
N.J. License No. 10511
Name of Drilling Company DIRECT ENVIRONMENTAL INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6' - fine sand, well sorted (backfill material in excavation)

6-13' - gray clay mixed with sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Robert M Hesse Jr. Date 7-26-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1895

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 29740
Atlas Sheet Coordinates 29 : 14 : 442

OWNER IDENTIFICATION - Owner US ARMY - FT. MONMOUTH
Address BLDG. 167 - DEH ENVIR.
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address Bldg 108

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5/13/93
Regulatory Program Requiring Well UST Case I.D. # C-91-2844
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 3 ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0'	3'	4"	PVC Sched 40
Outer Casing (Not Protective Casing)				
.010 Screen (Note slot size)	3	13	4"	" " "
Tail Piece	THD	CAP	4"	PVC
Gravel Pack	1'	13'	12"	#1 Morie
Annular Seal/Grout	0'	1'	12"	Neat Cement
Method of Grouting	GRAVITY			

Static water level after drilling 4 ft.
Water level was measured using M-Scope
Well was developed for .5 hours at 3 gpm
Method of development SUBMERSIBK
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity — gpm
Pump type:
Drilling Method HSA
Drilling Fluid — Type of Rig Mobil B-57
Name of Driller Robert M. Hesse
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1051
Name of Drilling Company DIRECT ENVIRONMENTAL INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5' - fine, well mixed sand (backfill in excavation)

5-13' - grey clay & sand mixed

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Robert M. Hesse Date 7-26-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1896

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 29741
Atlas Sheet Coordinates 29 : 14 : 442

OWNER IDENTIFICATION - Owner US ARMY - FT. MONMOUTH
Address BLDG. 167 - DEH ENVIR.
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address Bldg. 108

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 3/13/93
Regulatory Program Requiring Well UST Case I.D. # C-91-2844
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: [✓] above grade [ ] flush mounted
If finished above grade, casing height (stick up) above land surface 3 ft.
Was steel protective casing installed? [ ] Yes [X] No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0'	3'	4"	Sched 40 PVC
Outer Casing (Not Protective Casing)				
Screen .010 (Note slot size)	3	13	4"	" " "
Tail Piece	Thd	Cap	4"	PVC
Gravel Pack	1'	13'	12"	#1 Morie
Annular Seal/Grout	0'	1'	12"	Neat Cement
Method of Grouting	Gravity			

Static water level after drilling 4 ft.
Water level was measured using M Scope
Well was developed for .5 hours at 3 gpm
Method of development Submersible
Was permanent pumping equipment installed? [ ] Yes [✓] No
Pump capacity — gpm
Pump type: —
Drilling Method HSA
Drilling Fluid — Type of Rig Mobil B-57
Name of Driller Robert M. Hesse
Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 10514
Name of Driller Company DIRECT ENVIRONMENTAL INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5' - well sorted sand w/ fines (backfill material)

5-13' - grey clay mixed w/sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature [signature] Date 1-26-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1897

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

PAGE 1 OF 2

WELL RECORD

Well Permit No. 29 - 30322
Atlas Sheet Coordinates 29 : 14 : 464

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 3 MAPLE PLACE
City OCEAN PORT State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. —
Address 3 MAPLE PLACE, OCEAN PORT, NJ
County MONMOUTH Municipality OCEANPORT BORO Lot No. 28 Block No. 2

WELL USE DOMESTIC Status EXCELLENT

WATER USE DOMESTIC Average 300 gals. daily Maximum 350 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 11 / 18 / 93
Depths: Total 197 ft. Finished 197 ft.
Diameter: Top 8½ in. Bottom 8½ in.
Land Surface Elevation at well 10 ft. Elevation was determined using topographic Series
Casing Height (stick-up) above land surface 1'6" ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		178'6"	4	PVC, SCH40
Casing 2				
Casing 3				
Screen 1	177	20	4	PVC, SCH40, .015" slot
Screen 2				
Tail Piece				
Gravel Pack	175	22	7/8"	#2 MORIE
Grout	3'6"	171'6"		Baroid Bentonite clay
Grouting Method		pressure Trammie pipe		

WELL FLOWS NATURALLY — gals. per min. at — ft. above the land surface.
Water rises to — ft. above the land surface.

RECORD OF TEST Test Date 11 / 18 / 93
Static water-level before pumping 12 ft. below land surface. Water level 32 ft. below land surface after 4 hrs. of pumping.
Water level was measured using TAPE Drawdown 20 ft.
Discharge rate measured using 5 gal pail Discharge Rate 50 gals. per min.
Well was pumped using AIR Specific Capacity 2.5 gals. per min. per ft. of drawdown
Observed effects on nearby wells NONE
Water Quality (taste, odor, color, etc.) NO TASTE, NO ODOR, CLEAR COLOR

PERMANENT PUMPING EQUIPMENT Installed by STEVE WHITE Pump Type Submersible
Mfrs. Name SIA-RITE Model Signature 2000
CAPACITY: Pump delivers 20 GPM at 40 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source electric
DEPTHS: Pump 100 ft. Footpiece — ft. Airline — ft.
FLOW METER: Model — installed on — in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor TED GILES
Address 228 Chestnut ST
City Toms River State NJ Zip Code 08753
Name of Driller TED GILES License No. M1121

Signature of Contractor Ted Giles Date 11 / 22 / 93

COPIES: White - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29 - 30322
29.14.464

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method ROTARY

Type of Rig MOBILE B40L (Top Head Drive)

Aquifer/Geo. Fm. Wenonah - Mt. Laurel

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

Depth	Soil Texture	Thick.	Lith.	Fm.
0-6"	grass & Top Soil			
6"-18'	SP, ML			
18'-31'	CL (Black & Soft)			
31'-32'	SW, shell			
32'-38'	CL (Black & Soft)			
38'-39'	SW, shell			
39'-85'	CL, ML (gray), SP			
85'-92'	CL (green), ML			
92'-102'	SP, ML, CL (Black), shells			
102'-167'	CL, ML (BLACK), SP, shells			
167'-183'	shells, SP			
183'-197'	SW			

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30957
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 207 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/6/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-2-1004-28
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	6"	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	15'	4"	20SLOT PVC
Tail Piece				
Gravel Pack	1'	15'		#2
Annular Seal/Grout	6"	1'		BENONITE
Method of Grouting	Pour			

Static water level after drilling 4 ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☑ Yes ☐ No
Pump capacity ____ gpm
Pump type:
Drilling Method Auger
Drilling Fluid ____ Type of Rig B-80
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0 - 10' Brown Clay + Sand
10' 12' Green Clay + Sand
12' - 15' Brown med To Fine Sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-11-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1912

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30961
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 667

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg 290 MW-1
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 7/15/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-30-124627

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12½ ft.
Well finished to 12½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 3' ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12½'	4"	20SLOT PVC
Tail Piece				
Gravel Pack	1'	12½'		#2
Annular Seal/Grout	0	1'		Bevonite
Method of Grouting	Power			

Static water level after drilling 3' ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B-80
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'-4' GRAY + BROWN CLAY + SILT
4'-9' BROWN SAND + SILT
9'-12½ GREEN CLAY + SILT

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-18-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30862
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 282 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/8/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-29-173837
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	6"	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	15'	4"	20 SLOT PVC
Tail Piece				
Gravel Pack	1'	15'		#2
Annular Seal/Grout	6"	1'		Gevonite
Method of Grouting	Pour			

Static water level after drilling 4 ft.
Water level was measured using TAPE
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity ____ gpm
Pump type:
Drilling Method AUGER
Drilling Fluid ____ Type of Rig B-50
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 14211
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Concrete
1'-6' Brown Sand + Silt
6'-8' Green Clay + Sand
8'-15 Brown Sand Clay + Silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-11-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30963
Atlas Sheet Coordinates 29 : 14 : E4

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/7/94
Regulatory Program Requiring Well UST Case I.D. # 93-10-21-191344
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	6"	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	15'	4"	20slot PVC
Tail Piece				
Gravel Pack	1'	15'		#2
Annular Seal/Grout	6"	1'		Gemsite
Method of Grouting	Pour			

Static water level after drilling 3½ ft.
Water level was measured using
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B50
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☑ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6' Brown Sand + Silt
6'-8' Green Clay + Sand
8'-15' Brown Sand med To Fine

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-11-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

727

MONITORING WELL RECORD

Well Permit No. 29 - 30964
Atlas Sheet Coordinates 29 : 14 : 444

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 287 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/6/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-29-174501
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	6"	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	15'	4"	20 SLOT PVC
Tail Piece				
Gravel Pack	1'	15'		#2
Annular Seal/Grout	6"	1'		BENONITE
Method of Grouting	POUR			

Static water level after drilling 3 ft.
Water level was measured using TAPE
Well was developed for 1 hours at 10 gpm
Method of development
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method AUGER
Drilling Fluid Type of Rig B-80
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' ASPHALT
1'-10' REA STONE CONCRETE
10'-15' MED TO FINE SAND

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-11-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1915

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30973
Atlas Sheet Coordinates 29 : 13 : 664

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg 296 MW-7
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/12/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-2-1200-13
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 12½ ft.
Well finished to 12½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	6"	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12½'	4"	20 SLOT PVC
Tail Piece				
Gravel Pack	1'	12½'		#2
Annular Seal/Grout	6"	1'		Bentonite
Method of Grouting	Pour			

Static water level after drilling 3 ft.
Water level was measured using TAPE
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B-50
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' ASPHALT
1-3' med SAND + SILT
3'-10' GREEN CLAY + SAND
10'-12½' DARK GRAY CLAY SILT + SAND

(294 MW1)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 4-18-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0720

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32974
Atlas Sheet Coordinates 29 : 13 : 664

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg 296 MW-8
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/12/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-2-1200-13

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12½ ft.
Well finished to 12½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	6"	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12½'	4"	20 SLOT PVC
Tail Piece				
Gravel Pack	1' 6"	12½'		#2
Annular Seal/Grout	6"	1'		Bevonite
Method of Grouting	Pour			

Static water level after drilling 8' ft.
Water level was measured using TAPE
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B-80
Name of Driller Michael Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' ASPHALT
1'-3' BROWN SAND + CLAY
3'-8' WATER BEARING SAND med
8'-12½' DARK BROWN CLAY + SILT MED SAND

(293 mw1)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Beck Date 7-18-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

7 29

MONITORING WELL RECORD

Well Permit No. 29 - 30975
Atlas Sheet Coordinates 29 : 13 : 661

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg 296 MW-3
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/11/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-2-1200-13

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12½ ft.
Well finished to 12½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 3' ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12½'	4"	20 SLOT PVC
Tail Piece				
Gravel Pack	1'	12½'		#2
Annular Seal/Grout	0	1'		Grout
Method of Grouting	Pour			

Static water level after drilling 2½ ft.
Water level was measured using TAPE
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B-80
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 14211
Name of Drilling Company TYRRELL ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-3' Yellow Sand med To Coarse
3'-10' Black Sand + Silt Traces of Clay
10'-12½' Clay + Silt

(296 MW 3)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-18-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0717

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32976
Atlas Sheet Coordinates 29 : 13 : 661

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 296 MW-6
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/14/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-2-1200-13
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12½' ft.
Well finished to 12½' ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 3' ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12½'	4"	.010 SLOT PVC
Tail Piece				
Gravel Pack	1'	12½'		#2
Annular Seal/Grout	0'	1'		GENOVITE
Method of Grouting	POUR			

Static water level after drilling 1½' ft.
Water level was measured using TAPE
Well was developed for 1 hours at 10 gpm
Method of development PUMP
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B-80
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1421
Name of Drilling Company TIERRA ENVIRONMENTAL TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-3' Yellow Sand med
3'-9' ¾ Stone Fill
9'-12½' Black Clay + Silt
Traces of Sand med

(296 MW III)

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-18-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

-727

MONITORING WELL RECORD

Well Permit No. 29 - 30080
Atlas Sheet Coordinates 29 : 13 : 664

OWNER IDENTIFICATION - Owner U S ARMY FORT MONMOUTH
Address
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg 296 MW-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/13/94
Regulatory Program Requiring Well DEP Case I.D. # 93-11-2-1200-13
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12½ ft.
Well finished to 12½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ____ ft.
Was steel protective casing installed? ☐ Yes ☑ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0'	2'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12½'	4"	20 SLOT PVC
Tail Piece				
Gravel Pack	1'	12½'		#2
Annular Seal/Grout	0	1'		Bentonite
Method of Grouting	Pour			

Static water level after drilling 3 ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity ____ gpm
Pump type:
Drilling Method Auger
Drilling Fluid ____ Type of Rig B80
Name of Driller Michael E Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Asphalt
1'-8' Green Clay Sand + Silt
8'-12½' Clay + Silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E Beck Date 7-18-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

629

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31158
Atlas Sheet Coordinates 29 - 14 - 147

OWNER IDENTIFICATION - Owner SHELL OIL COMPANY
Address 11921 FREEDOM DRIVE SUITE 900
City RESTON State VA Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. GT102
County MONMOUTH Municipality OCEANPORT BORO Lot No. 25 Block No. 110
Address 1 Main St.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 6/1/94
Regulatory Program Requiring Well UST Case I.D. # 90-03-06-1328
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTI Tele. # 587-0300

WELL CONSTRUCTION

Total depth drilled 13' ft.
Well finished to 12' ft.
Borehole diameter:
Top 11" in.
Bottom 11" in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2 1/2' ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2'	4"	PVC sch 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12'	4"	PVC sch. 40 .020
Tail Piece				
Gravel Pack	1'	13'	# 2 Morie	
Annular Seal/Grout	0'	1'	Cement/Bentonite Grout	
Method of Grouting	Gravity			

Static water level after drilling 4 1/2' ft.
Water level was measured using M-Scope
Well was developed for 1 hours at 2 gpm
Method of development HAND Bailing
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity ____ gpm
Pump type: ____
Drilling Method HSA
Drilling Fluid ____ Type of Rig B57
Name of Driller Michael Kavlunas
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. MD1328
Name of Drilling Company GT DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5' Grey Fine SAND
5'-9' organic PEAT.
9'-13' Black clay

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kavlunas Date 6/29/94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1931

629

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31159
Atlas Sheet Coordinates 29 : 14 : [illegible]

OWNER IDENTIFICATION - Owner SHELL OIL COMPANY
Address 11921 FREEDOM DRIVE SUITE 900
City RESTON State VA Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. GT 101
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. ~~25~~ Block No. ~~110~~
Address 1 Main St.

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 6/1/94
Regulatory Program Requiring Well ~~UST~~ Case I.D. # ~~90-03-06-1328~~
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTI Tele. # 587-0300

WELL CONSTRUCTION
Total depth drilled 13' ft.
Well finished to 12' ft.
Borehole diameter: Top 11" in. Bottom 11" in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2 1/2 ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	2'	4"	pvc sch. 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12'	4"	pvc sch. 40. 020
Tail Piece				
Gravel Pack	1'	13'	#2	Morie
Annular Seal/Grout	0'	1'	Cement + Bentonite	
Method of Grouting	Gravity			Grout

Static water level after drilling 4' ft.
Water level was measured using M-Slope
Well was developed for 1 hours at 2 gpm
Method of development HAND Bailing
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity ____ gpm
Pump type: ____
Drilling Method H.S.A
Drilling Fluid ____ Type of Rig B57
Name of Driller Michael Kavlunas
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 40328
Name of Drilling Company GT DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5' Grey Fine SAND
5'-9' organic PEAT
9'-13' Black Clay

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael Kavlunas Date 6/29/94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1932

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

8-10

WELL RECORD

Well Permit No. 29 – 31440
Atlas Sheet Coordinates 29 : 14 : 420

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address P.O. BOX 74
City SPRING LAKE State NJ Zip Code 07762

WELL LOCATION - If not the same owner please give address. Owner's Well No. 1
Address 548 SEAVANCA DR OCEANPORT
County MONMOUTH Municipality OCEANPORT BORO Lot No. 5 Block No. 35

WELL USE Irrigation Status Productive

WATER USE Same Average 1500 gals. daily Maximum 3000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 6/30/94
Depths: Total 198 ft. Finished 195 ft.
Diameter: Top 8½ in. Bottom 8½ in.
Land Surface Elevation at well +10 ft. Elevation was determined using Topo
Casing Height (stick-up) above land surface ____ ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		178'	4"	SCH 40 PVC
Casing 2				
Casing 3				
Screen 1	178	20'	4"	015 4" PVC SCH 40
Screen 2				
Tail Piece				
Gravel Pack	178	20		#1 SAND
Grout	0	176'		BENTENITE
Grouting Method		TREMIE Pipe		

WELL FLOWS NATURALLY ____ gals. per min. at ____ ft. above the land surface.
Water rises to ____ ft. above the land surface.

RECORD OF TEST Test Date 7/1/94
Static water-level before pumping 18 ft. below land surface. Water level 24 ft. below land surface after 1 hrs. of pumping.
Water level was measured using Probe Drawdown 14 ft.
Discharge rate measured using Container Discharge Rate 30 gals. per min.
Well was pumped using Sub Specific Capacity 1 gals. per min. per ft. of drawdown
Observed effects on nearby wells None
Water Quality (taste, odor, color, etc.) Good None CLEAR

PERMANENT PUMPING EQUIPMENT Installed by Driller Pump Type Sub
Mfrs. Name Gorlps Model 25GS10422
CAPACITY: Pump delivers 20 GPM at 50 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source 220 AC
DEPTHS: Pump ____ ft. Footpiece ____ ft. Airline ____ ft.
FLOW METER: Model ____ installed on ____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor BRIAN FUNKHOUSER
Address 27 SERPENTINE DR E
City Bayville State NJ Zip Code 08721
Name of Driller B. Funkhouser License No. J-1450

Signature of Contractor [signature] Date 8/4/94

COPIES: White - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29 - 31440
29 14428

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method Rotary

Type of Rig F-1500

Aquifer/Geo. Fm. Engl. shtone

LOG

0-4' Orange fine Sands Sandy Clay

4-32' Gray Sandy Clay

32-58 RED MED SANDS

58-95 GREAU MC SANDS

95-125 GREEN Salts & Gravike

125180 GRAY & GREEN MARLS

180-198 GRAY MED to COARSE SANDS

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

Thick.	Lith.	Fm.

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

829

WELL RECORD

Well Permit No. 29 - 31542
Atlas Sheet Coordinates 29 : 14 149

Redacted - Privacy Act

OWNER IDENTIFICATION - Owner
Address 34 WOLFHILL AVE.
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No. 1
Address 34 Wolf Hill Ave
County MONMOUTH Municipality OCEANPORT BORO Lot No. 5 Block No. 139

WELL USE Irrigation (lawn sprinkling) Status running

WATER USE Average 50 gals. daily Maximum 250 gals. daily

WELL CONSTRUCTION Date well completed 7 / 13 / 94
BOREHOLE DIMENSIONS Depths: Total 35 ft. Finished 35 ft.
Diameter: Top 12 in. Bottom 12 in.
Land Surface Elevation at well 19 ft. Elevation was determined using Topo map
Casing Height (stick-up) above land surface 1 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		20	4	Sched 40 PVC
Casing 2				
Casing 3				
Screen 1	20	15	4	.020 slot sched. 40 PVC
Screen 2	na			
Tail Piece	na			
Gravel Pack	18	17	12	#2 well gravel
Grout	0	18	12	Neat cement
Grouting Method	pumped in through tremie pipe			

WELL FLOWS NATURALLY na gals. per min. at _____ ft. above the land surface.
Water rises to _____ ft. above the land surface.

RECORD OF TEST Test Date 7 / 13 / 94
Static water-level before pumping 17 ft. below land surface. Water level 20 ft. below land surface after 2 hrs. of pumping.
Water level was measured using Tape Drawdown 3 ft.
Discharge rate measured using 5 gallon bucket Discharge Rate 8 gals. per min.
Well was pumped using Hayns pump Specific Capacity 6 gals. per min. per ft. of drawdown
Observed effects on nearby wells none
Water Quality (taste, odor, color, etc.) slight iron odor

PERMANENT PUMPING EQUIPMENT Installed by Gary Parent Pump Type Goulds Submersible
Mfrs. Name Goulds Model 10ES5
CAPACITY: Pump delivers 8 GPM at 20 PSI pressure.
POWER: 1/2 HP at 1200 RPM Power Source 110 V
DEPTHS: Pump 33 ft. Footpiece na ft. Airline na ft.
FLOW METER: Model na installed on _____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor GARY PARENT/SHORE DRILLING, INC
Address 23 Branch Ave.
City Oceanport State NJ Zip Code 07757
Name of Driller Gary Parent License No. J1540

Signature of Contractor Gary Parent Date 8 / 23 / 94

COPIES: White - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29 - 31552
29 | 4449

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☒ No

Drilling Method HSA

Type of Rig Ingersol-Rand A300

Aquifer/Geo. Fm. _____

DEP USE ONLY

Storet Hydrogeo Code _____
USGS Hydrogeo Code _____
Depth to Bedrock _____ ft.
Bedrock Lith. Code _____
Bedrock Fm. Code _____

Completed by _____
Date ____ / ____ / ____

LOG

Thick.	Lith.	Fm.	
			0-4" Topsoil
			4"-5' Yellow - cs SAND + Fine gravel
			5'-12' brown - Fn - md sand tr clay
			12-28' Lt brown Fn - Md sand
			28'-35' As above

GWPI No. ____ - _____ NJPDES No. _____ - ____

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Lat-Long Accuracy ☐ 1" ☐ 5" ☐ 10" ☐ 20"

USGS Quadrangle _____

Drainage Basin Code _____ County/Municipality Code _____

OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry ☐ Pollution Case

Checked by _____ Date ____ / ____ / ____

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31772
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 864

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address ~~SELFM-PW-EV~~ FORT MONMOUTH
City _____ State NJ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 117 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. _____ Block No. _____
Address _____

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/14/94
Regulatory Program Requiring Well UST Case I.D. # 94-4-28-1944-21

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) _____ Tele. # _____

WELL CONSTRUCTION

Total depth drilled 12½ ft.
Well finished to 12½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface _____ ft.
Was steel protective casing installed? ☐ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	6"	2½'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	12½'	4	20 slot PVC
Tail Piece				
Gravel Pack	1½'	12½'		#2 Morie Sand
Annular Seal/Grout	6"	1½'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 7 ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity _____ gpm
Pump type: _____
Drilling Method Auger
Drilling Fluid _____ Type of Rig B80
Name of Driller Michael E. Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1421
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Asphalt / Subbase
6"-1' Dark brown, med. sand
1'-2' Med. brown, med. sand w/ fines
2'-3' Dark gray, med. stiff clay
3'-5' Brown silts
5'-6' Light brown, med. sand
6'-8' Brown silts + clays
8'-12½' Light brown, med. sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E. Beck Date 10-10-94 LP

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0723

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31773
Atlas Sheet Coordinates 29 : 13 : 664

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address SELFM-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 166 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/14/94
Regulatory Program Requiring Well UST Case I.D. # 94-6-16-1545-09
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 13 ft.
Well finished to 10 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing				
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	6"	10'	4	20 slot PVC
Tail Piece				
Gravel Pack	1'	10'		#2 Morie sand
Annular Seal/Grout	6"	1'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 3 ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B80
Name of Driller Michael E. Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 142
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Asphalt / Subbase
6"-1' Black fine sand
1'-3' Med. brown, silts + fine sand
3'-10' Med. brown, fine-medium sand
10'-11' Med. brown, fine-med. sand
11'-13' Pea gravel; rounded

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E. Beck Date 10-10-94

LP

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31774
Atlas Sheet Coordinates 29 : 13 : 664

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address SELFM-FW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. T-80 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/15/94
Regulatory Program Requiring Well UST Case I.D. # 94-6-16-1127-25
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface ft.
Was steel protective casing installed? ☐ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	6"	3'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	3'	13'	4	20 slot PVC
Tail Piece				
Gravel Pack	2½'	13'		#2 Morie Sand
Annular Seal/Grout	6"	2½'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 3 ft.
Water level was measured using Tape
Well was developed for 1.7 hours at 10 gpm
Method of development pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B80
Name of Driller Michael E. Beck
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 421
Name of Driller Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0"-6" Asphalt/Subbase
6"-1' Black fine sand.
1'-3' Black silts + fine sands.
3'-4' Olive grey silts + fine sands.
4'-9' Olive grey soft clay w/ black soft clay
9'-10' Olive grey soft clay w/ pebbles.
10'-13' Yellowish-orange, fine-medium sand.

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

LP

Driller's Signature Michael E. Beck Date 10-10-94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31775
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 664

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address ~~SELFM-PW-EV~~
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 161 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9,22,94
Regulatory Program Requiring Well UST Case I.D. # 93-3-12-2158-30
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 3 ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	12'	4	20 slot PVC
Tail Piece				
Gravel Pack	1'	12'		#2 Marie sand
Annular Seal/Grout	6"	1'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 7 ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B80
Name of Driller Michael E. Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 142
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Grassy area, top soil
6"-2' Dark brown, sand-silt mixtures
2-6' Olive gray, med. stiff clays & silts
6-7' Brown, fine sand & very soft clay
7-12' Light brown, fine sand & very soft clay

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Michael E. Beck Date 10-10-94

LP

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E CL

MONITORING WELL RECORD

Well Permit No. 29 - 32576
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW16
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address same as above

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/4/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14.5 ft.
Well finished to 14.5 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	4.5	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4.5	14.5	4	f.j. .010 slot pvc
Tail Piece				
Gravel Pack	2.5	14.5		#1 morie
Annular Seal/Grout	0	2.5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 2 ft.
Water level was measured using m-scope
Well was developed for 2.0 hours at 1.5 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig Mobile B-57
Name of Driller Steve Burger
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. JD1624
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-4'	olive brown silty sand
4'-5.5'	brown sand
5.5'-8'	green sand with silt
8'-10'	green/brown sand
10'-12'	orange/dark brown sand
12'-14.5'	Dark brown sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Steve Burger (SD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E
CL

MONITORING WELL RECORD

Well Permit No. 29 - 32577
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-FW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 17
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address same as above

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/11/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14.5 ft.
Well finished to 14.5 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	4.5	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4.5	14.5	4	f.j. .010 slot pvc
Tail Piece				
Gravel Pack	2.5	14.5		#1 Morie
Annular Seal/Grout	0	2.5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 3 ft.
Water level was measured using M-scope
Well was developed for 2.0 hours at 1.0 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig Mobile B57
Name of Driller Steve Burger
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. JD1624
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-6'	Dark brown silty sand
6'-8'	Green brown sand
8'-14.5'	Gray silty sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Steve Burger SD Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32578
Atlas Sheet Coordinates 29 : 13 . 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW18
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address Same as above

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/11/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14.5 ft.
Well finished to 14.5 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	4.5	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4.5	14.5	4	f.j. .010 slot pvc
Tail Piece				
Gravel Pack	2.5	14.5		#1 Morie
Annular Seal/Grout	0	2.5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 2.5 ft.
Water level was measured using M-Scope
Well was developed for 2.0 hours at 1.0 gpm
Method of development Pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig Mobile B-57
Name of Driller Steve Burger
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. JD 16624
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0 - 4'	Brown/gray topsoil Sandy silt.
4' - 7'	Olive green silty sand
7' - 14.5'	Brown/gray silty sand w/clay pockets

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Steve Burger (JD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E
CL

MONITORING WELL RECORD

Well Permit No. 29 - 32579
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U S ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 19
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address same as above

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/4/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	5	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	15	4	fj. .010 slot pvc
Tail Piece				
Gravel Pack	3	15		#1 Morie
Annular Seal/Grout	0	3		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 5.5 ft.
Water level was measured using m-scope
Well was developed for 2.0 hours at 1.5 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid None Type of Rig Mobile B-57
Name of Driller Steve Burger
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. JD1624
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-2'	Olive brown silty sand
2'-6'	Gray sand
6'-10'	Gray white sand
10'-15'	Gray sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Steve Burger (JD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E
CL

MONITORING WELL RECORD

Well Permit No. 29 - 32580
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MP14 MW20
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address same as above

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/4/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15.5 ft.
Well finished to 14.5 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	4.5	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4.5	14.5	4	flushjoint pvc
Tail Piece				
Gravel Pack	3.5	15.5		#1 Morie
Annular Seal/Grout	0	3.5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 4.5 ft.
Water level was measured using m-scope
Well was developed for 2 hours at .5 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig CME 55
Name of Driller Wellington Reeve
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J1455
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-2'	Dark brown sandy silt
2'-6'	Black silty sand
6'-12'	Green silt with sand
12'-15.5'	Dark green black silt w/ sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Wellington Reeve (D) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32581
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW21
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address Same as above

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/4/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	6	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	6	16	4	f.j. .010 slot pvc
Tail Piece				
Gravel Pack	4	16		#1 Morie
Annular Seal/Grout	0	4		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 6 ft.
Water level was measured using M-scope
Well was developed for 2.0 hours at 1.0 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig mobile B-57
Name of Driller S. Burger
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. JD 1624
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-10'	Brown silty sand
10'-16'	Gray sand

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Steve Burger (JD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E
CL

MONITORING WELL RECORD

Well Permit No. 29 - 32582
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MP16 MW22
County ~~MONMOUTH~~ Municipality ~~EATONTOWN BORO~~ Lot No. ~~1,1,8.01~~ Block No. ~~3,53,54~~
Address Same as above

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 12/15/94
Regulatory Program Requiring Well ~~OWNER INVESTIGATION~~ Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15.5 ft.
Well finished to 14.5 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	4.5		flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4.5	14.5		f.j. .010 slot pvc
Tail Piece				
Gravel Pack	3.5	15.5		#1 Morie
Annular Seal/Grout	0	3.5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 7.0 ft.
Water level was measured using M-scope
Well was developed for 2 hours at 1.0 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig CME 55
Name of Driller Wellington Reeve
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 51455
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-.5'	Brown topsoil
.5'-2'	Black asphalt, gravel
2'-6'	Dark green gray sand
6'-11.5'	Greenish brown sand
11.5'-13'	Greenish white clay
13'-15.5'	Dark brown clay

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Wellington Reeve (JD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0754

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E
CL

MONITORING WELL RECORD

Well Permit No. 29 - 32583
Atlas Sheet Coordinates 29 : 13 : 668

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELFM-PW-EV
City FT. MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B5 MW05B
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1,1,8.01 Block No. 3,53,54
Address same as above

TYPE OF WELL (as per Well Permit Categories) _____ Date well completed 1/11/95
Regulatory Program Requiring Well MONITORING OTHER INVESTIGATION Case I.D. # _____
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) _____ Tele. # _____

WELL CONSTRUCTION

Total depth drilled 15.5 ft.
Well finished to 14.5 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2.0 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	4.5	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4.5	14.5	4	f.j. .010slotpvc
Tail Piece				
Gravel Pack	3.5	15.5		#1 Morie
Annular Seal/Grout	0	3.5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 4 ft.
Water level was measured using m-scope
Well was developed for 2 hours at .5 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig CME 55
Name of Driller Wellington Reeve
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1455
Name of Drilling Company JAMES C. ANDERSON ASSOC. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Depth	Description
0-2'	Brown silty sand
2'-10'	Olive brown sand
10'-12'	Dark brown to black sand
12'-15.5'	Black Sand w/ silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Wellington Reeve Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

MONITORING WELL RECORD

Well Permit No. 29 - 33754
Atlas Sheet Coordinates 29: 14: 444

OWNER IDENTIFICATION - Owner US ARMY - FORT MONMOUTH
Address BLDG 167 DEH ENVIR
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 1122 mw 2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address BLDG 1122 DEH ENVIRONMENT FT. MONMOUTH

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/12/95
Regulatory Program Requiring Well UST Case I.D. # 95-1-11-1429-00
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: [X] above grade [ ] flush mounted
If finished above grade, casing height (stick up) above land surface 3 ft.
Was steel protective casing installed? [X] Yes [ ] No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	+3	3	4	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	3	15	4	PVC 020
Tail Piece	—	—	—	
Gravel Pack	2	15	12	#2 Sand
Annular Seal/Grout	0	2	12	Bent Slurry
Method of Grouting	Tremie Pipe			

Static water level after drilling 6 ft.
Water level was measured using a Tape
Well was developed for 15 hours at 3 gpm
Method of development Moyno
Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NA Type of Rig A300
Name of Driller Gary Parent
Health and Safety Plan submitted? [ ] Yes [X] No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1275
Name of Drilling Company GARY PARENT/SHORE DRILL INC

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0 - 6' Dark Tan silt w/ Sand
6' - 10' modeled green Tan silty clay
10' - 15' dark green clay with silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Gary Parent Date 9/13/95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

, DWR-138 M
11/94 *

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

MONITORING WELL RECORD

Well Permit No. 29- 33755
Atlas Sheet Coordinates 29 14 444 ☐

OWNER IDENTIFICATION - Owner US ARMY - FORT MONMOUTH
Address BLDG 167 DEH ENVIR
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 1122 mw1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address Ft Monmouth Eatontown NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/12/95
Regulatory Program Requiring Well UST Case I.D. # 95-1-11-1429-00
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 18 ft.
Well finished to 18 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface 0 ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	5	4	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	5	18	4	PVC 020
Tail Piece	—	—	—	
Gravel Pack	4	18	12	#2 Sand
Annular Seal/Grout	0	4	12	Bent Slury
Method of Grouting	Tremie Pipe			

Static water level after drilling 7 ft.
Water level was measured using a Tape
Well was developed for .5 hours at 3 gpm
Method of development Mayno
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NA Type of Rig A300
Name of Driller Gary Parent
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1275
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-4" asphalt
4"-8' Dark Tan Silt w/sand
8'-12' Mottled green/tan Silty clay
12'-18' dark green clay with silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Gary Parent Date 9/13/95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1706

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E
DMR

MONITORING WELL RECORD

Well Permit No. 29- 33989
Atlas Sheet Coordinates 29 13 661

OWNER IDENTIFICATION - Owner US ARMY - FT. MONMOUTH
Address BLDG. 167 DEH ENV.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 296-4
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address BLDG. 167 DEH ENV.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/12/95
Regulatory Program Requiring Well UST Case I.D. # 93-11-2-1200-13

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 10 ft.
Well finished to 10 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☒ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 3 ft.
Was steel protective casing installed? ☒ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	+3	.5	4	PVC
Outer Casing (Not Protective Casing)	—	—	—	
Screen (Note slot size)	.5	10	4	PVC 020
Tail Piece	—	—	—	
Gravel Pack	.5	10	12	#2 Sand
Annular Seal/Grout	0	.5	12	Bent. Slurry
Method of Grouting	Tremie Pipe			

Static water level after drilling .5 ft.
Water level was measured using a tape
Well was developed for .5 hours at 3 gpm
Method of development Mayno
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NA Type of Rig A300
Name of Driller Gary Parent
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1275
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6' Black organic silt w/ sand
6'-10' green clay w/silt

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Gary Parent Date 9/13/95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E
DMR

MONITORING WELL RECORD

Well Permit No. 29 34702
Atlas Sheet Coordinates 29 14 442

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address BLDG 286 ROOM Ø12 AMSEL
City FORT MONMOUTH State NJ Zip Code 07703

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality EATONTOWN BORO Lot No. 55 Block No. 240
Address BLDG 286 ROOM Ø12 AMSEL

TYPE OF WELL (as per Well Permit Categories) BORING Date well completed 12 / 18 / 95
Regulatory Program Requiring Well B. R. A. C. Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (If applicable) EARTH TECHNOLOGY CHRIS PRAETLY Tele. # 703-706-0545

WELL CONSTRUCTION

Total depth drilled 36 ft.
Well finished to — ft.
Borehole diameter:
Top 2 in.
Bottom 2 in.
Well was finished: ☐ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	NO		WELL	
Outer Casing (Not Protective Casing)	COMPLETED			
Screen (Note slot size)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout	0	36	2	BENTONITE
Method of Grouting	TREMIE			

Static water level after drilling 30.5 ft.
Water level was measured using M-SCOPE
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method PROBE - PUSH
Drilling Fluid — Type of Rig GEO PROBE TYPE
Name of Driller CALVIN KIRK
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 000 1292 JD1556
Name of Drilling Company TRACER RESEARCH CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

SOILS NOT LOGGED
PROBING FOR WATER
SAMPLE ONLY

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature Calvin Kirk Date 1/9/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1703

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

E
DMR

MONITORING WELL RECORD

Well Permit No. 29 34857
Atlas Sheet Coordinates 29 : 14 442

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address BLDG 286, RM Ø12, AMSEL, PE BR
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality EATONTOWN BORO Lot No. 55 Block No. 240
Address BLDG 286, RM Ø12, AMSEL, PE BR Date well started 2/29/96
TYPE OF WELL (as per Well Permit Categories) BORING Date well completed 3/1/96
Regulatory Program Requiring Well B.R.A.C. Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) CHRIS PRATELY EARTH TECHNOLOGY Tele. # 703 549 8728

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to N/A ft.
Borehole diameter:
Top 2 in.
Bottom 2 in.
Well was finished: ☐ above grade N/A ☐ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed? ☐ Yes ☒ No

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.) (From land surface)	Diameter (inches)	Type and Material
Inner Casing				
Outer Casing (Not Protective Casing)				
Screen (Note slot size)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout	0	50	2	GRANULATED BENTONITE
Method of Grouting	TREMIE			

Static water level after drilling 49 ft.
Water level was measured using M SCOPE
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method PROBE
Drilling Fluid — Type of Rig
Name of Driller CALVIN KIRK
Health and Safety Plan submitted? ☐ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. CALVIN KIRK
Name of Drilling Company TRACER RESEARCH CORP

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

SOILS NOT LOGGED
PROBING FOR
WATER SAMPLE
ONLY

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Driller's Signature Calvin Kirk Date 3/6/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

6/5/96

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 35504

Atlas Sheet Coordinates 29 14 : 464

OWNER [redacted] Redacted - Privacy Act

Address [redacted] Redacted - Privacy Act

City [redacted] State [redacted] Zip Code [redacted]

WELL LOCATION ADDRESS 532 SHREWSBURY AVE Owner's Well No. [redacted]

County MONMOUTH Municipality OCEANPORT BORO Lot No. 11.01 Block No. 66

WELL USE DOMESTIC

DATE WELL STARTED 6 / 24 / 96

DATE WELL COMPLETED 6 / 24 / 96

WELL CONSTRUCTION

Total Depth Drilled 70 ft.

Finished Well Depth 70 ft.

Borehole Diameter:
Top 8.5 in.
Bottom 8.5 in.

Well Casing Begins:
1.0 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1.0	45	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	45	65	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece	65	70	4	PVC	Sched. 40
Gravel Pack	35	70	8.5	Blended	.025
Grout	3.5	35	8.5	Neat Cement	0 lbs
				Bentonite	150 lbs

RECORD OF TEST

Test Date 6 / 24 / 96

Static Water Level 11 ft. below land surface

Water Level Measured Using Measured Tape

Pumping Water Level 36 ft. below land surface

Well Was Pumped Using Air lift

Well Yield 20 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method Pressure through tremie pipe

Drilling Method Mud rotary

PERMANENT PUMPING EQUIPMENT

Installed by D. Ulbricht Reg. No. 0523

Pump Type Submersible

Depth of Pump below land surface 55 ft.

Capacity 12 gpm Horsepower 3/4

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0- 40 Clayey med black sand

40- 70 Med black sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PICKWICK WELL DRILLING

Well Driller (Print) Benjamin Primost

Driller's Signature [signature]

Registration No. 613762 Date 7 / 8 /96

COPIES: White - DEP 7/10/96 Canary - Driller 7/10/96 Pink - Owner Goldenrod - Health Dept. 7/10/96

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 35731
Atlas Sheet Coordinates 29 : 14 : 484

OWNER IDENTIFICATION - Owner OAKHURST SERVICE CENTER
Address 225 MONMOUTH RD.
City OCEAN TWP. State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW #5
County MONMOUTH Municipality OCEAN TWP. Lot No. N/A Block No. N/A
Address ROOSEVELT AVE. Date well started 08/08/96
TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 08/08/96
Regulatory Program Requiring Well UST Case I.D. # 96-03-28-1420
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) G.E.S. Tele. # (908) 919-0100

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☐ above grade
☒ flush mounted
If finished above grade, casing height (stick up) above land surface N/A ft.
Was steel protective casing installed?
☒ Yes ☐ No STEEL MANHOLE SET IN CONCRETE PAD

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	GRADE	5'	4"	PVC, BEDROCK FLUSHMOUNT
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5'	20'	4"	PVC, SLOT .020 BEDROCK FLUSHMOUNT
Tail Piece				
Gravel Pack	3'	20'	ANNULUS	#1 MORIE WELL GRAVEL
Annular Seal/Grout	GRADE	3'	ANNULUS	CEMENT
Method of Grouting	TREMMY			

Static water level after drilling APRX. 7 ft.
Water level was measured using STEEL M TAPE
Well was developed for 1 hours at 35 gpm
Method of development Sub Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method H.S.A.
Drilling Fluid N/A Type of Rig STAR 200
Name of Driller RICHARD TABOR
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. J1598
Name of Drilling Company LUTZ ENVIRONMENTAL INC.

GEOLOGIC LOG

(Copies of other geologic logs and/or geophysical logs should be attached.)

SEE ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Driller's Signature Richard M. Tabor Date 8/13/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

ING LOG:

L NO. MW-5 COORDINATE NO. 29.14.484 PERMIT NO. 2935-731

E DRILLED 8-8-96 COUNTY Monmouth USE Monitor

ATION Township of Ocean Roosevelt Ave Oakhurst NJ

IER OAKHURST Service Ctr. ADDRESS 205 Monmouth Rd. Oakhurst NJ

LING METHOD HSA SAMPLING METHOD Composite

E DIA. 12" TOTAL DEPTH 20'

NG:

E Redrock Sch 40 PVC SLOT — DIA. 4" LENGTH 5'

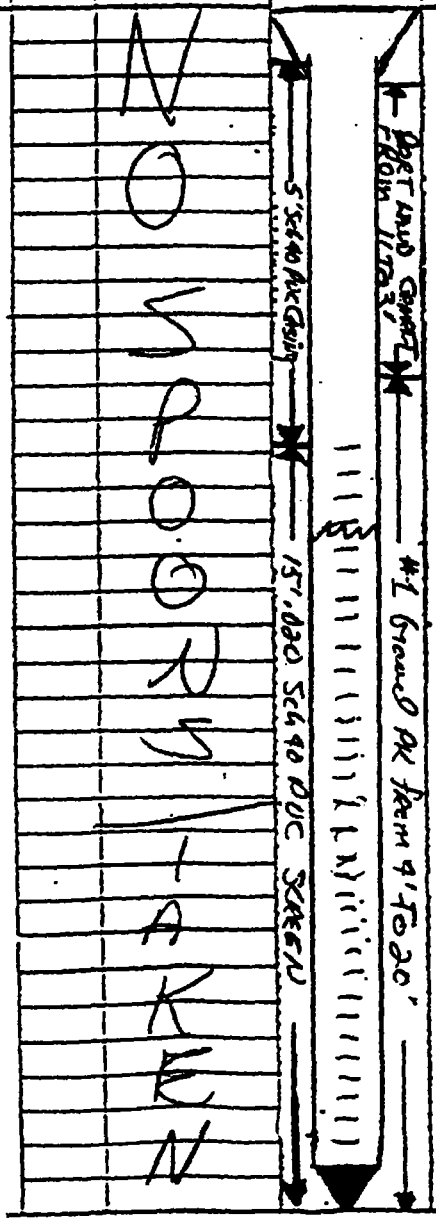
EEN:

E Redrock Sch 40 PVC SLOT .020 DIA. 4" LENGTH 15'

VEL PACK SIZE #1 BAGGED CASING SEAL Portland NEAT

TIC WATER LEVEL Approx 7' GEOLOGIC FORMATION Unconsolidated

PTH OW FACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
			2x2 Concrete PAD w/STEEL manhole	
				0-3' : Asphalt & Roadstone
				3'-13' : DK Brn Silty Mf Sand Little Clay
				13'-20' : DK Green silty Clay w/f Sand



End Drilling @ 20'.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 35732
Atlas Sheet Coordinates 29 : 14 : 484

OWNER IDENTIFICATION - Owner OAKHURST SERVICE CENTER
Address 205 MONMOUTH RD.
City OCEAN TWP. State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW #566
County MONMOUTH Municipality OCEAN TWP. Lot No. N/A Block No. N/A
Address ROOSEVELT AVE. Date well started 8/08/96
TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 08/08X/96
Regulatory Program Requiring Well UST Case I.D. # 90-03-28-1400
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) G.E.S. Tele. # (908) 919-0100

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☐ above grade ☒ flush mounted
If finished above grade, casing height (stick up) above land surface N/A ft.
Was steel protective casing installed? ☒ Yes ☐ No STEEL MANHOLE SET IN CONCRETE PAD

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	GRADE	5'	4"	PVC, BEDROCK FLUSHMOUNT
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5'	20'	4"	PVC, SLOT .020 BEDROCK FLUSHMOUNT
Tail Piece				
Gravel Pack	3'	20'	ANNULUS	#1 MORIE WELL GRAVEL
Annular Seal/Grout	GRADE	3'	ANNULUS	CEMENT
Method of Grouting	TREMMY			

Static water level after drilling APRX. 7 ft.
Water level was measured using STEEL TAPE
Well was developed for 1 hours at >5 gpm
Method of development Sub Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method H.S.A.
Drilling Fluid N/A Type of Rig STAR 200
Name of Driller RICHARD TABOR
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. J1598
Name of Drilling Company LUTZ ENVIRONMENTAL INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

SEE ATTACHED

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Driller's Signature Richard M. Tabor Date 8/13/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1716

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:
WELL NO. MW-6 COORDINATE NO. 29.14.484 PERMIT NO. 2935732
DATE DRILLED 8-8-96 COUNTY Monmouth USE Monitor
LOCATION Township of Ocean Roosevelt Ave OAKHURST NJ
OWNER OAKHURST Service Ctr. ADDRESS 206 Monmouth Rd. OAKHURST NJ
DRILLING METHOD HSA SAMPLING METHOD Composite
HOLE DIA. 12" TOTAL DEPTH 20'
CASING:
TYPE Bedrock Sch 40 PVC SLOT — DIA 4" LENGTH 5'
SCREEN:
TYPE Bedrock Sch 40 PVC SLOT .020 DIA 4" LENGTH 15'
GRAVEL PACK SIZE #1 BAGGED CASING SEAL Portland NEAT
STATIC WATER LEVEL Approx 7' GEOLOGIC FORMATION Unconsolidated

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		N	2x2 Concrete Pad w/ Steel Manhole	
		O		0-3' : Asphalt & Roadstone
				3'-8' : Lt To DK Brn M Sand w/ Silt & Tr. Clay
				8'-15' : Brn silty Clay & f Sand
				H2O 7' 15'-20' : Brn f Sand & silt
				End Drilling @ 20'

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

E
DMR

MONITORING WELL RECORD

Well Permit No. 29 35833
Atlas Sheet Coordinates 29 : 14 : 452

Redacted - Privacy Act

OWNER IDENTIFICATION - Owner _____
Address 42 HIAWATHA AVE.
City OCEANPORT State NJ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. W-1
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. 5 Block No. 13
Address ~~42 HIAWATHA AVE.~~ Date well started 8 / 26 / 96
TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 8 / 26 / 96
Regulatory Program Requiring Well UST Case I.D. # —
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) WASTE CONCEPTS Tele. # 800-278-6902

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: ☐ above grade
☒ flush mounted
If finished above grade, casing height (stick up) above land surface — ft.
Was steel protective casing installed?
☐ Yes ☒ No

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	0.5	6	SCH. 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	0.5	13.0	6	SCH. 40 PVC (.010")
Tail Piece				
Gravel Pack	0.5	13.0		MORIE #3 SAND
Annular Seal/~~Grout~~	SURFACE	.05		BENTONITE PELLETS
Method of Grouting	GRAVITY (0 — 0.5')			

Static water level after drilling ± 10' ft.
Water level was measured using TAPE
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method AUGERS
Drilling Fluid — Type of Rig MOBILE B-47
Name of Driller K. HAMILTON
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) (None) D C B A
N.J. Registration No. 5-1247
Name of Drilling Company M & R SOIL INVESTIGATIONS, INC

GEOLOGIC LOG

(Copies of other geologic logs and/or geophysical logs should be attached.)

CMF SAND, TR. F-GRAVEL
0 - 13'

I certify that I have drilled the above-referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Driller's Signature _____ Date 8 / 27 / 96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1709

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 36864

Atlas Sheet Coordinates 29 : 14 : 451

OWNER Redacted - Privacy Act
Address Redacted - Privacy Act
City [redacted] State [redacted] Zip Code [redacted]

WELL LOCATION ADDRESS 431 of 4.29.97 ~~445~~ DRIVEWAY
County MONMOUTH Municipality OCEANPORT BORO Lot No. ~~20~~ Block No. ~~76~~ Owner's Well No.

WELL USE DOMESTIC

DATE WELL STARTED 5/21/97
DATE WELL COMPLETED 8/20/97

WELL CONSTRUCTION

Total Depth Drilled 165 ft.
Finished Well Depth 165 ft.
Borehole Diameter: Top 8 1/2 in. Bottom 8 1/2 in.
Well Casing Begins: 1 ft. above grade or _____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1	155	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .015)	155	165	4	PVC	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	153	165	1/8	GRIT	#2 MORIE
Grout	3'6"	153	30 MESH	Neat Cement / Bentonite	____ lbs / 55 lbs

RECORD OF TEST

Test Date 5/21/97
Static Water Level 4 ft. below land surface
Water Level Measured Using TAPE
Pumping Water Level 35 ft. below land surface
Well Was Pumped Using AIR
Well Yield 30 gpm
If Pump Tested: Discharge Rate 20 gpm
Duration of Test 4 hours

Grouting Method PRESSURE TREMMIE PIPE
Drilling Method ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by TED GILES Reg. No. MD 1121
Pump Type SUBMERSIBLE
Depth of Pump below land surface 125 ft.
Capacity 20 gpm Horsepower 1

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company TED GILES
Well Driller (Print) TED GILES
Driller's Signature Ted Giles
Registration No. MD1121 Date 8/25/97

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

DEPTH	SOIL TEXTURE
0-20	CL, SP, ML
20-40	SM
40-60	CL, SM
60-75	CL, ML
75-90	CL, ML
90-105	CL, ML, SP (trace)
105-120	CL, ML, SP
120-150	CL, SP, ML
150-155	CL, SP
155-165	SP, Shells
END OF DRILLING	

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 36995

LSL. Ref# 9023

Atlas Sheet Coordinates 29 : 14 : 484

OWNER IDENTIFICATION - Owner AMERCOM ENG CORP
Address 1259 RT 46 EAST
City PARSIPPANY State NJ Zip Code 07054

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B/THRU 7
County MONMOUTH Municipality LONG BRANCH CIT Lot No. N/A Block No. N/A
Address RT 36

DATE WELL STARTED 7/11/97
DATE WELL COMPETED 7/18/97

TYPE OF WELL (as per Well Permit Categories) BORING
Regulatory Program Requiring Well _____ Case I.D.# _____

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) _____ Tele. # _____

WELL CONSTRUCTION

Total depth drilled 40 ft.
Well finished to 40 ft.

Borehole diameter:
Top 6 in.
Bottom 6 in.

Well was finished: ☐ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed? ☐ Yes ☐ No

Static water level after drilling 91 ft.

Water level was measured using TAPE

Well was developed for _____ hours at _____ gpm

Method of development _____

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing					
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)					
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	0	40	6	Neat Cement Bentonite	940 lbs. [redacted] lbs.

Grouting Method PRESSURE THRU PIPE
Drilling Method H.SA.

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid NONE Type of Rig DIEDRICH D50

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LIPPINCOTT ENGINEERING

Well Driller (Print) BARRIE WOODINGTON

Driller's Signature [signature]

Registration No. M 1292 Date 9/5/97

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-30' BROWN SAND FINE
30'-40' GREEN SAND MEDIUM

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

E
ML

WELL RECORD

Well Permit Number 29 37878

Atlas Sheet Coordinates 29 :14 :447

OWNER WATERS EDGE TOWN HOMES
Address 4 OCEANPORT AVE.
City OCEANPORT State NJ Zip Code

WELL LOCATION ADDRESS 4 OCEANPORT AVE.
County MONMOUTH Municipality OCEANPORT BORO Lot No. 2.00 Owner's Well No. 113 Block No.

WELL USE IRRIGATION

DATE WELL STARTED 2/3/98
DATE WELL COMPLETED 2/13/98

WELL CONSTRUCTION

Total Depth Drilled 280 ft.
Finished Well Depth 280 ft.
Borehole Diameter:
Top 8 in.
Bottom 8 in.
Well Casing Begins:
1 ft. above grade or
ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	260	4	PVC	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 8)	260	280	4	PVC	40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	250	280		#2 Gravel	
Grout	3	250		Neat Cement / Bentonite	lbs / 1550 lbs

RECORD OF TEST

Test Date 2/17/98
Static Water Level 5 ft. below land surface
Water Level Measured Using bailer
Pumping Water Level 80 ft. below land surface
Well Was Pumped Using air compressor
Well Yield 40 gpm
If Pump Tested: Discharge Rate gpm
Duration of Test hours

Grouting Method Pressure grout w/tremie pipe
Drilling Method mud Rotary

PERMANENT PUMPING EQUIPMENT

Installed by Allen Van Dusen Reg. No. J1602
Pump Type submersible
Depth of Pump below land surface 150 ft.
Capacity 25 gpm Horsepower 3

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company MCCURDY WELL DRILLING, INC.
Well Driller (Print) Allen Van Dusen
Driller's Signature
Registration No. J1602 Date 4/14/98

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-30 Fine coarse yellow sand
30-40 Fine black/green sands + grey clay
40-60 Fine coarse black sand
60-140 Fine black sand + grey clay traces
140-253 grey clay
253-260 Fine coarse grey sand + wood
260-280 Fine coarse H grey sand + WOOD

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1707

DWR-138 M
11/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 38172

Atlas Sheet Coordinates 29: 13 695

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 1281 EATONTOWN BLVD.
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. OW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. 41 Block No. 139
Address 1281 EATONTOWN BLVD.

DATE WELL STARTED 8/8/98
DATE WELL COMPETED 8/8/98

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 15 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 12 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	10	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	10	30	4	PVC	020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	9	30	12	#2 SAND	
Grout	0	9	12	Neat Cement Bentonite	90 lbs. lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A-300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) MIKE GRANESE
Driller's Signature M. Granese
Registration No. 501764 Date 8/11/98

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6" TOPSOIL
6"-4' CONCRETE FILL
4'-11' YELLOW FN-MD SILTY SD
11'-25' MD BRN SD SOME SILT
25'-30' BRN MD SILTY SD OCCASSIONAL FN GRAVEL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

E
MES

Well Permit Number 29 _ 38340

Atlas Sheet Coordinates 29 : 14 : 453

OWNER WRP INC.

Address P.O. BOX 208

City OCEANPORT State NJ Zip Code

WELL LOCATION ADDRESS SHAPEN WAY Owner's Well No. 61

County MONMOUTH Municipality OCEANPORT BORO Lot No. 8.01 Block No.

WELL USE IRRIGATION

DATE WELL STARTED 4/16/98

DATE WELL COMPLETED 4/19/98

WELL CONSTRUCTION

Total Depth Drilled 200 ft.

Finished Well Depth 198 ft.

Borehole Diameter:
Top 8½ in.
Bottom 8½ in.

Well Casing Begins:
_____ ft. above grade or
1 ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	178	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 12 Slot)	178	198	4	PVC	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	175	198	8½	#1 SAND	1200 lbs
Grout	1	175	8½	Neat Cement / Bentonite	____ lbs / 850 lbs

RECORD OF TEST

Test Date 4/18/98

Static Water Level 42 ft. below land surface

Water Level Measured Using Level Ind

Pumping Water Level 60 ft. below land surface

Well Was Pumped Using Air compressor

Well Yield 210 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method Pressure Grout

Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT

Installed by John Robertson Reg. No. 1384

Pump Type Submersible

Depth of Pump below land surface 75 ft.

Capacity 20 gpm Horsepower 1

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PURE PRESSURE WATER SYSTEMS

Well Driller (Print) John Robertson

Driller's Signature John Robertson

Registration No. 1384 Date 4/27/98

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-31 med sand

31-60 Clay

60-123 fine sand + wood

123-157 Clay

157-175 Green sand trace shells

175-200 med Black sand + shells

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

5/14/98

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 38652

Atlas Sheet Coordinates 29 14 : 451

OWNER Redacted - Privacy Act

Address Redacted - Privacy Act

City _____ State _____ Zip Code _____

WELL LOCATION ADDRESS 6 BUNGALOW PLACE Owner's Well No. _____

County MONMOUTH Municipality OCEANPORT BORO Lot No. 16 Block No. 93

WELL USE IRRIGATION

DATE WELL STARTED 5 / 29 / 98

DATE WELL COMPLETED 5 / 29 / 98

WELL CONSTRUCTION

Total Depth Drilled 64 ft.

Finished Well Depth 64 ft.

Borehole Diameter:
Top 8.5 in.
Bottom 8.5 in.

Well Casing Begins:
1.0 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1.0	39	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	39	59	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece	59	64	4	PVC	Sched. 40
Gravel Pack	29	64	8.5	Blended	Medium gray sand
Grout	3.5	29	8.5	Neat Cement Bentonite	100 lbs lbs

RECORD OF TEST

Test Date 5 / 29 / 98

Static Water Level 5 ft. below land surface

Water Level Measured Using Measured Tape

Pumping Water Level 52 ft. below land surface

Well Was Pumped Using Air lift

Well Yield 30 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method Pressure through tremie pipe

Drilling Method Mud rotary

PERMANENT PUMPING EQUIPMENT

Installed by J. Murtha Reg. No. 0017982

Pump Type Submersible

Depth of Pump below land surface 40 ft.

Capacity 12 gpm Horsepower 1/2

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-	5	Medium green-brown sand
5-	10	Med. green-brown sand w/some black sand
10-	15	Med. green-brown sand w/some ochre sand & silty dark gray clay
15-	20	Silty dark gray clay
20-	25	Silty dark gray clay w/black sand
25-	30	Fine & med. black sand
30-	40	Fine & med. black sand w/gray clay
40-	64	Fine & med. black sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PICKWICK WELL DRILLING

Well Driller (Print) Benjamin Primost

Driller's Signature _____

Registration No. M 13762 Date 6 / 16 / 98

COPIES: White - DEP 6/17/98 Canary - Driller 6/17/98 Pink - Owner Goldenrod - Health Dept. 6/17/98

6/15/98

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number
~~29~~ ~~38811~~

Atlas Sheet Coordinates
~~29~~ ~~14~~ : ~~455~~

OWNER Redacted - Privacy Act

Address 62 ASBURY AVE

City OCEANPORT State NJ Zip Code

WELL LOCATION ADDRESS 62 ASBURY AVE **Owner's Well No.**

County MONMOUTH Municipality OCEANPORT BORO Lot No. 1101 Block No. 88

WELL USE IRRIGATION

DATE WELL STARTED 7/8/98
DATE WELL COMPLETED 7/8/98

WELL CONSTRUCTION

Total Depth Drilled 65 ft.

Finished Well Depth 65 ft.

Borehole Diameter: 8.5
Top ~~8.5~~ in.
Bottom in.

Well Casing Begins:
~~1.0~~ ft. above grade or
1.0 ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1.0	42	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	42	62	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece	62	65	4	PVC	Sched. 40
Gravel Pack	32	65	8.5	Blended	.025
Grout	3.5	32	8.5	Neat Cement	lbs
				Bentonite	150 lbs

RECORD OF TEST
Test Date 7/8/98
Static Water Level ~~48~~ ft. below land surface
Water Level Measured Using Measured Tape
Pumping Water Level 25 ft. below land surface
Well Was Pumped Using Air lift
Well Yield 12 gpm
If Pump Tested: Discharge Rate gpm
Duration of Test hours

Grouting Method Pressure through tremie pipe
Drilling Method Mud rotary

PERMANENT PUMPING EQUIPMENT
Installed by J. Murtha Reg. No. 0017982
Pump Type Submersible
Depth of Pump below land surface 45 ft.
Capacity 12 gpm Horsepower 1/2

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-	5	Clayey green-black sand
5-	15	Med. ochre sand
15-	40	Dark gray clay
40-	42	Gray clay
42-	65	Black sand - med.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PICKWICK WELL DRILLING
Well Driller (Print) Benjamin Primost
Driller's Signature
Registration No. MO 13762 Date 7/10/98

COPIES: White - DEP 7/13/98 Canary - Driller 7/13/98 Pink - Owner Goldenrod - Health Dept. 7/13/98

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number
29 - 39550

Atlas Sheet Coordinates
29 : 13 : 695

OWNER US ARMY - FT. MONMOUTH
Address SELSM-FH-MC BLDG. 2700
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION ADDRESS SELSM-FH-MC BLDG. 2700 Owner's Well No.
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A

WELL USE GEOTHERMAL/HEAT PUMP

DATE WELL STARTED 11 / 2 / 98
DATE WELL COMPLETED 11 / 4 / 98

WELL CONSTRUCTION

Total Depth Drilled 305 ft.
Finished Well Depth 305 ft.
Borehole Diameter:
Top 7 in.
Bottom 7 in.
Well Casing Begins:
____ ft. above grade or
____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing					
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	0	305	7	1"GEOTHERMAL LOOP	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	0	305	7	Neat Cement / Bentonite	lbs / 1300 lbs

RECORD OF TEST

Test Date __/__/__
Static Water Level ____ ft. below land surface
Water Level Measured Using ____
Pumping Water Level ____ ft. below land surface
Well Was Pumped Using ____
Well Yield ____ gpm
If Pump Tested: Discharge Rate ____ gpm
Duration of Test ____ hours

Grouting Method TREMIE
Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by ____ Reg. No. ____
Pump Type ____
Depth of Pump below land surface ____ ft.
Capacity ____ gpm Horsepower ____

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company WILLIAM STOTHOFF
Well Driller (Print) GERARD A. MALACK
Driller's Signature Gerard A. Malack
Registration No. 1167 Date 11/9/98

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-50 BROWN/YELLOW SAND & GRAVEL
50-70 MEDIUM-FINE YELLOW SAND/CLAY
70-305 BROWN/BLACK CLAY WITH STREAKS OF SAND

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 39631

Atlas Sheet Coordinates 29 14 : 413

OWNER Redacted - Privacy Act

Address 17 PAAG LANE

City LITTLE SILVER State NJ Zip Code

WELL LOCATION ADDRESS 17 PAAG LANE **Owner's Well No.**

County MONMOUTH Municipality LITTLE SILVER B Lot No. 5 Block No. 66

WELL USE IRRIGATION

DATE WELL STARTED 2/5/99
DATE WELL COMPLETED 2/5/99

WELL CONSTRUCTION

Total Depth Drilled 253 ft.

Finished Well Depth 246 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
ft. above grade or
1 ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-1	226	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	226	246	4	PVC	SCH 40 .012 SLOT
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	223	226		#1 MORIE	
Grout	-1	223		Neat Cement Bentonite	435 lbs lbs

RECORD OF TEST

Test Date 2/5/99
Static Water Level 2 ft. below land surface
Water Level Measured Using ELECT. TAPE
Pumping Water Level 124 ft. below land surface
Well Was Pumped Using AIR LIFT
Well Yield 100 gpm
If Pump Tested: Discharge Rate gpm
Duration of Test hours

Grouting Method PRESSURE THRU TREMMIE
Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by G. COLANGELO Reg. No. JD1395
Pump Type SUB
Depth of Pump below land surface ft.
Capacity gpm Horsepower

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-26 Med Red SND
26-43 GRAY SNDY CLAY
43-69 Med blk SND Shells CLY
69-95 GRAY CLAY
95-178 Med blk SND Shells CLAY
178-219 FINE GRAY SND CLAY
219-253 Med GRAY SND + Wood

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company G. COLANGELO/TILTON WELL & PUMP
Well Driller (Print) DAVID VANBRUNT JR
Driller's Signature David VanBrunt Jr
Registration No. JD1414 Date 2/19/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 39942

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW AVE
City LITTLE SILVER State NJ Zip Code 07739

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW 1
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 71
Address 111 RIVERVIEW AVE

DATE WELL STARTED 3/1/99
DATE WELL COMPLETED 3/1/99

TYPE OF WELL (as per Well Permit Categories) RECOVERY
Regulatory Program Requiring Well UST Case I.D.# 98-4-1-1142-54

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) BROWNERHOFF ENV. Tele. # (732)223-2225

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 3.5 ft.

Water level was measured using TAPE

Well was developed for 0 hours at _____ gpm

Method of development N/A

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid NONE Type of Rig HURRICANE

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	.25	3	4	PVC	Sch.40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC	Sch.40(.01)
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	19	10	MORIE	#1
Grout	0	1	10	Neat Cement	94 lbs.
				Bentonite	2 lbs.

Grouting Method PLACED
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-7' ORANGE TAN FINE TO MED. SAND WITH TRACE SILT
7'-10' BLUE STONE
10'-19' GRAY CLAY WITH TRACE SAND

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company DIAMOND DRILLING CO., INC.

Well Driller (Print) VINCE CIPOLLETTI

Driller's Signature Vince Cipolletti

Registration No. J2417 Date 3/2/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -40120

Atlas Sheet Coordinates 29 :14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M5/MW 15
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 /24 99
DATE WELL COMPLETED 03 /24 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using STL TAPE

Well was developed for 1 hours at <3 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	5'	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	5	18	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	4	18	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	4'	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 2'	TOPSOIL - BROWN SANDS & FINE GRAVEL, SOME ORGANICS
2' - 6'	BROWN SILTY SANDS
6' - 18'	DARK BROWN/GREY GREEN SILTY CLAYS

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) TIMOTHY WESTOVER
Driller's Signature Timothy A. Westover M1444
Registration No. M1444 Date 4/12/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862–8888

BORING LOG:

WELL NO. M5/MW15 COORDINATE NO. 29 40 128 PERMIT NO. 29-40120

DATE DRILLED 3/24/99 COUNTY MONMOUTH USE MONITOR

LOCATION MAIN POST M-5 LANDFILL AREA / WILSON AVE. FORT MONMOUTH, NJ.

OWNER U.S. ARMY / FORT MONMOUTH ADDRESS M-5 LANDFILL AREA FORT MONMOUTH NJ 077(

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 11" TOTAL DEPTH 18'

CASING:

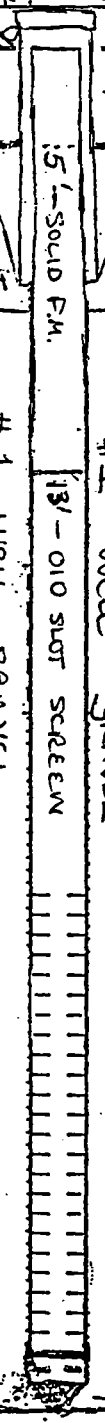
TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 5'

SCREEN:

TYPE MONO FLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 13'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED



DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	IDENTIFICATION OF SOILS/REMARKS
0"-2'	#1	B L O W S	0"-2' → TOPSOIL – BROWN SANDS AND FINE GRAVEL. SOME ORGANICS
2'-4'	#2		2'-4' → BROWN SILTY SANDS.
4'-6'	#3	N O T	4-6 → BROWN SILTY SANDS
6'-8'	#4	R E C O R D E D	6'-8' → DARK BROWN / GREY GREEN SILTY CLAYS.
8'-10'	#5		8'-10' → SAME AS ABOVE.
10-12	#6	B Y D R I L L E R	10'-12' → SAME AS ABOVE
12'-14'	#7		12'-14' → SAME AS ABOVE
14'-16'	#8		14'-16' → SAME AS ABOVE
16'-18'	#9		16'-18' → SAME AS ABOVE.

DWR-138 M
11/98

DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -40121

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M5/MW 16
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 24 / 99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 03 / 24 / 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.
Water level was measured using stl tape

Well was developed for 1 hours
at 3 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3'	16	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	16'	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	2'	ANNULUS	Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity N/A gpm
Pump type: N/A

Drilling Fluid N/a Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) TIMOTHY WESTOVER
Driller's Signature Timothy A Westover M1444
Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 2' TOPSOIL - BROWN SANDS & FINE GRAVEL, SOME ORGANICS
2' - 4' BROWN/TAN SILTY SANDS
4' - 6' BROWN SILTY CLAYS
6' - 16' GREY/GREEN SILTY CLAYS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. M5/MW16 COORDINATE NO. 29-40-128 PERMIT NO. 29-40121

DATE DRILLED 3/24/96 COUNTY MONMOUTH USE MONITOR

LOCATION MAIN POST M-5 LANDFILL AREA/WILSON AVE. FORT MONMOUTH NJ.

OWNER U.S. ARMY / FORT MONMOUTH ADDRESS M-5 LANDFILL AREA FORT MONMOUTH NJ 07703

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOONS.

HOLE DIA. 11" TOTAL DEPTH 16'

CASING:

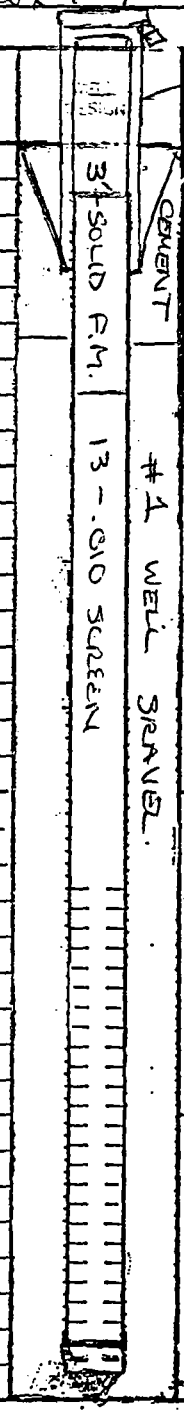
TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 13'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED



DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	IDENTIFICATION OF SOILS/REMARKS
0"-2'		BLOWS NOT RECORDED BY DRILLERS	0"-2' → TOPSOIL - BROWN SANDS AND SILTS, ORGANICS.
2'-4'			2'-4' → BROWN / TAN SILTY SANDS.
4'-6'			4'-6' → BROWN SILTY CLAYS.
6'-8'			6'-8' → GREY / GREEN SILTY CLAYS
8'-10'			8'-10' → SAME AS ABOVE
10'-12'			10'-12' → SAME AS ABOVE
12'-14'			12'-14' → SAME AS ABOVE
14'-16'			14'-16' → SAME AS ABOVE.

DWR-138 M
11/98

E
DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40122

Atlas Sheet Coordinates 29 : 14 : 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address ~~M-5 LANDFILL AREA~~
City ~~FORT MONMOUTH~~ State ~~NJ~~ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. ~~N/A~~ M5/MW 20 ~~N/A~~
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. Block No.
Address ~~M-5 LANDFILL AREA/WILSON~~

TYPE OF WELL (as per Well Permit Categories) MONITORING
DATE WELL STARTED 03 / 25 / 99
DATE WELL COMPLETED 03 / 25 / 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours at ~3 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid n/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	4	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	4'	14'	4"	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3'	14'	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	3'	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 8' TOPSOIL & ORANGE/BROWN SANDS & SILTS
8' - 14' GREY/GREEN SILTY CLAYS

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) TIMOTHY WESTOVER
Driller's Signature Timothy A Westover M1444
Registration No. M1444 Date 4/12/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. M5-/MW20 COORDINATE NO. 29-14-445 PERMIT NO. 29-40122

DATE DRILLED 3-25-99 COUNTY MONMOUTH USE MONITOR

LOCATION MAIN POST M-5 LANDFILL AREA / WILSON AVE. FORT MONMOUTH, NJ. 07703

OWNER U.S. ARMY / FORT MONMOUTH ADDRESS M-5 LANDFILL AREA. FORT MONMOUTH, NJ. 07703

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 11" TOTAL DEPTH 14'

CASING:

TYPE MONO FLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 4'

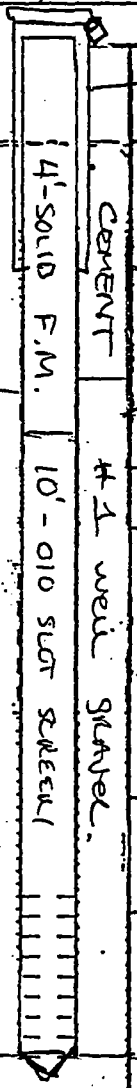
SCREEN:

TYPE MONO FLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 10'

GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0-2	#1	NO
2-4	#2	BLOWS
4-6	#3	RECORDED
6-8	#4	
8-10	#5	BY
10-12	#6	DRILLER
12-14	#7	



→ 6" STEEL RISER SET IN CONCRETE PAD

GRADE

IDENTIFICATION OF SOILS/REMARKS

0-2' → TOPSOIL AND ORANGE / BROWN SANDS AND SILTS.

2'-4' →

4'-6' →

6'-8' →

8'-10' → GREY / GREEN SILTY CLAYS

10'-12' →

12'-14' →

SET well TO 14'

DWR-138 M
11/98

E
DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40123

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M5/MW 18
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 26 99
DATE WELL COMPLETED 03 26 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours
at <3 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3'	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3'	18'	4"	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2'	18'	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	2'	ANNULUS	Neat Cement Bentonite	10 lbs. lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/a

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy E. Westover M1444

Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 8'	TOP SOIL - ORANGE/BROWN SANDY SILTS, SOME CLAYS
8' - 18'	GREY/GREEN, DK BROWN CLAYEY SILTS (MOSTLY CLAY)

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. M5/MW 18 COORDINATE NO. 29-14-445 PERMIT NO. 29-40123

DATE DRILLED 3-26-99 COUNTY MONMOUTH USE MONITOR

LOCATION MAIN POST M5 LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703

OWNER U.S. ARMY / FORT MONMOUTH ADDRESS M5 LANDFILL AREA FORT MONMOUTH NJ 07703

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOONS.

HOLE DIA. 11" TOTAL DEPTH 18'

CASING:

TYPE MONO FLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'

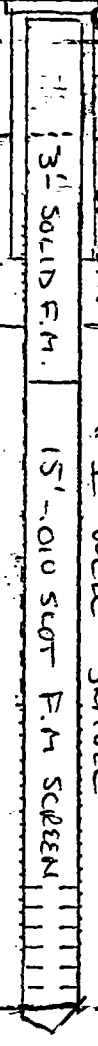
SCREEN:

TYPE MONO FLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 4' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	IDENTIFICATION OF SOILS/REMARKS
			→ 6" STEEL RISER SET IN CONCRETE PAD
			GRADE
0-2	#1	NOT RECORDED	0-2 → TOP SOIL — ORANGE BROWN SANDY SILTS SOME CLAYS.
2-4	#2	NOT RECORDED	2-4 →
4-6	#3	5, 6, 6, 8	4-6 →
6-8	#4	8, 12, 13, 16	6-8 →
8-10	#5	5, 6, 9, 20	8-10 → grey/green, DARK BROWN CLAYEY SILTS. (MOSTLY CLAY)
10-12	#6	3, 3, 5, 9	10-12 →
12-14	#7	2, 5, 8, 13	12-14 →
14-16	#8	23, 6, 12	14-16 →
16-18	#9	3, 9, 14, 19	16-18 →
			SET well @ 18'



DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40124

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M5/MW 19
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 26 / 99
DATE WELL COMPLETED 03 / 26 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours at <3 gpm

Method of development PUMPED

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3'	18	4	PVC slot .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	2'	ANNULUS	Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy R. Westover M1444

Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 7½' TOPSOIL - ORANGE/TAN SILTY SANDS FINE GRAVEL
7½ - 18' CLAYS & SILTS (ORANGE, GREY, GREEN + BLACK)

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. M5/MW 19 COORDINATE NO. 29-14-445 PERMIT NO. 29-40124

DATE DRILLED 3-26-99 COUNTY MONMOUTH. USE MONITOR

LOCATION MAIN POST M5 LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703

OWNER U.S. ARMY / FORT MONMOUTH ADDRESS M5 LANDFILL AREA FORT MONMOUTH NJ 07703

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 11" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

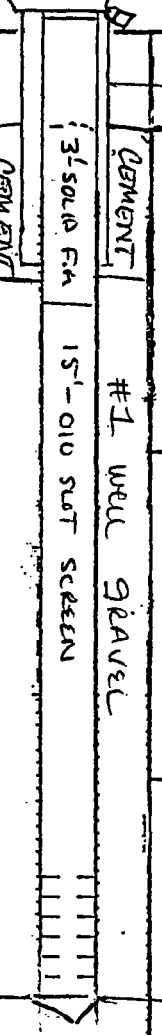
SCREEN:

TYPE MONO FLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0-2	#1	2,8,7,6
2-4	#2	8,9,9,7
4-6	#3	3,4,4,5
6-8	#4	5,5,9,10
8-10	#5	6,8,9,15
10-12	#6	3,4,5,8
12-14	#7	2,3,5,10
14-16	#8	3,7,9,14
16-18	#9	4,9,14,13



6" STEEL RISER SET IN CONCRETE PAD

GRADE

IDENTIFICATION OF SOILS/REMARKS

0"-7.5' → TOPSOIL — ORANGE / TAN SILTY SANDS - FINE GRAVEL

7.5'-18' → CLAYS & SILTS (ORANGE, GREY, GREEN + BLACK)

SET WELL @ 18'

DWR-138 M
11/98

DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40125

Atlas Sheet Coordinates 29 .14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M5/MW 23
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 26 / 99
DATE WELL COMPLETED 03 / 26 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours at 3 gpm

Method of development PUMPED

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL	#1
Grout	grade	2	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: n/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A. Westover M1444

Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 8' TOPSOIL - ORANGE/BROWN SANDY SILTS AND CLAYS
8' - 18' GREY, GREEN, BLACK CLAYS & SILTS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

BORING LOG:

WELL NO. M5 / MW23 COORDINATE NO. 29-14-445 PERMIT NO. 29-40125

DATE DRILLED 3-26-99 COUNTY MONMOUTH USE MONITOR

LOCATION MAIN POST M-5 LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703

OWNER US ARMY / FORT MONMOUTH ADDRESS M5 LANDFILL AREA FORT MONMOUTH NJ 07703

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 11" TOTAL DEPTH 18'

CASING:

TYPE MONO FLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

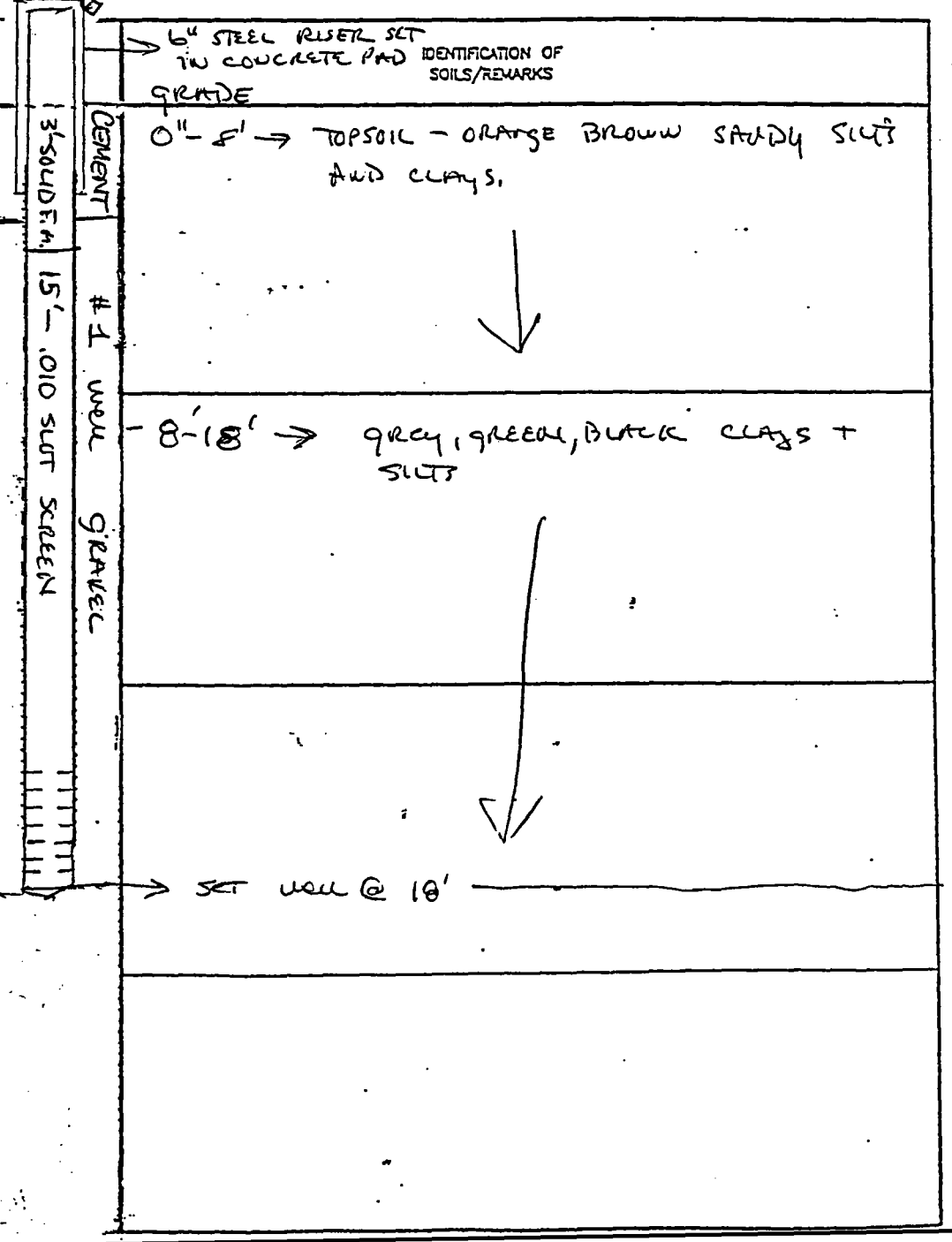
SCREEN:

TYPE MONO FLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0-2	#1	4,6,6,7
2-4	#2	5,6,7,6
4-6	#3	6,8,8,5
6-8	#4	12,11,13,10
8-10	#5	5,8,17,15
10-12	#6	4,7,12,19
12-14	#7	6,13,17,19
14-16	#8	5,12,21,24
16-18	#9	8,14,23,24



DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 40126

Atlas Sheet Coordinates 29 :14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M5/MW 25
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 /29 99
DATE WELL COMPLETED 03 /29 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours
at < 3 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig canterra ct450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3'	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3'	18'	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2'	18	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	2'	ANNULUS	Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 7'	ORANGE/BROWN SANDS & SILTS
7' -18'	CLAYS & SILTS: GREEN/DK BROWN/ GREY

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A. Westover M1444

Registration No. M1444 Date 4 / 12 / 99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. M5/MW25 COORDINATE NO. 29-14-445 PERMIT NO. 29-40126

DATE DRILLED 3-29-99 COUNTY MONMOUTH USE MONITOR

LOCATION MAIN POST M-5 LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703

OWNER U.S ARMY / FORT MONMOUTH ADDRESS M5 LANDFILL AREA FORT MONMOUTH NJ 07703

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 11" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'

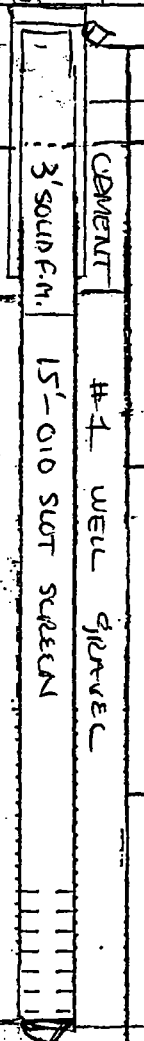
SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0-2	#1	2,2,4,4
2-4	#2	13,12,13,9
4-6	#3	4,2,22,19
6-8	#4	6,5,6,7
8-10	#5	5,4,5,6
10-12	#6	4,5,7,10
12-14	#7	13,4,6,4
14-16	#8	8,4,5,12
16-18	#9	7,8,12,15



IDENTIFICATION OF SOILS/REMARKS

0"-7' → ORANGE BROWN SANDS AND SILTS

7'-18' → CLAYS AND SILTS - GREEN / DARK BROWN / GREY.

SET WELL @ 18'

DWR-138 M
11/98

E
DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40127

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M8/MW 24
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 29 / 99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 03 / 29 / 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to ;18 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours
at 23 gpm

Method of development PUMPED

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3'	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3'	18'	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2'	18	ANNULUS	MORIE GRAVEL	#1
Grout	grade	2'	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method 6¼ I.D. H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity N/A gpm
Pump type: NA

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) TIMOTHY WESTOVER
Driller's Signature Timothy A Westover M1444
Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 10' FILL DEBRIS, WOOD, BLOCKS , ETC
10'-18' BLACK, GREY CLAYS & SILTS

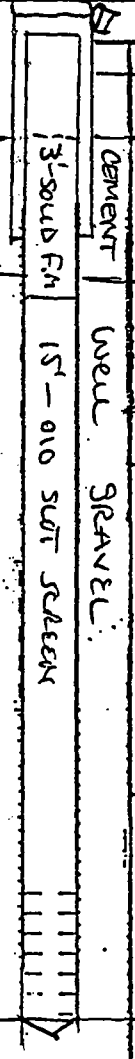
COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:
WELL NO. M8/MW24 COORDINATE NO. 29-14-445 PERMIT NO. 29-40127
DATE DRILLED 3/29/99 COUNTY MONMOUTH. USE MONITOR
LOCATION MAIN POST MS LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703
OWNER U.S ARMY / FORT MONMOUTH. ADDRESS MS LANDFILL AREA FORT MONMOUTH NJ. 07703
DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON
HOLE DIA. 11" TOTAL DEPTH 18'
CASING:
TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'
SCREEN:
TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'
GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT
STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0"-2'	#1	2,6,43
2'-4'	#2	3,5,8,24
4'-6'	#3	5,6,4,3
6'-8'	#4	7,4,5,5
8'-10'	#5	11,12,13,8
10'-12'	#6	5,5,7,5
12'-14'	#7	4,6,8,8
14'-16'	#8	14,15,11,19
16'-18'	#9	41,16,8,9



IDENTIFICATION OF SOILS/REMARKS

0"-10' → FILL DEBRIS, WOOD, BLOCKS, ETC.

10'-18' → BLACK, GREY CLAYS + SILTS

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 40128

Atlas Sheet Coordinates 29 :14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. M8/MW 23
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 30 / 99
DATE WELL COMPLETED 03 / 30 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 11 in.
Bottom 11 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? ☒ Yes ☐ No 6" STEEL RISER

Static water level after drilling 7 ft.

Water level was measured using stl tape

Well was developed for 1 hours at <3 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3'	18	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2'	18	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	2	ANNULUS	Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMY
Drilling Method 6¼" I.D. H.S.A.

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A. Westover M1444

Registration No. M1444 Date 4 / 02 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 12" ORANGE/BROWN SANDY CLAYS & SILTS
12' - 15' DARK BROWN CLAYS

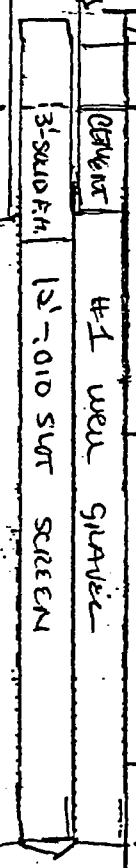
COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:
WELL NO. MS/MW23 COORDINATE NO. 29-14445 PERMIT NO. 29-40128
DATE DRILLED 3-30-99 COUNTY MONMOUTH USE MONITOR
LOCATION MAIN POST MS LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703
OWNER U.S. ARMY / FORT MONMOUTH ADDRESS MS LANDFILL AREA FORT MONMOUTH NJ. 07703
DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPLIT SPOON
HOLE DIA. 11" TOTAL DEPTH 15'
CASING:
TYPE MONOFLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'
SCREEN:
TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 12'
GRAVEL PACK SIZE #1 well GRAVEL CASING SEAL CEMENT
STATIC WATER LEVEL APPROX 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0-2	#1	2,2,6,7
2-4	#2	9,10,10,8
4-6	#3	5,5,3,2
6-8	#4	2,2,3,2
8-10	#5	2,1,2,1
10-12	#6	1,3,7,9
12-14	#7	5,7,7,13
14-15	#8	9,5



IDENTIFICATION OF SOILS/REMARKS

0"-12' → ORANGE BROWN SANDY CLAYS AND SILTS.

12'-15' → DARK BROWN CLAYS.

SET WELL @ 15'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

DMQ

Well Permit No. 29 - 40129

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 /25 /99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 03 /25 /99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION
Total depth drilled 60 42 ft.
Well finished to N/A ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling NONE ft.

Water level was measured using N/A

Well was developed for 0 hours
at 0 gpm

Method of development N/A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	N/A				
Middle Casing (for triple cased wells only)	NOT FINISHED AS WELL;				
Outer Casing (largest diameter)		ABANDONMENT FORM ATTACHED			
Open Hole or Screen (No. Used)					
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	0"	60' 42	ANNULUS	Neat Cement Bentonite	564 lbs. 36 lbs.

Grouting Method TREMMY
Drilling Method 4¼" I.D. H.S.A.

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature M1444

Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 2'	SILTY SAND, ORGANICS, SOME CLA
2' - 4'	REDDISH SAND (WET), BROWN SILTY SAND
4' - 6'	REDDISH BROWN SILTY SAND (mois
6' - 8'	REDDISH BROWN SAND, GREENISH GREY SANDS & SILTS,
8' - 16'	GREENISH GREY SILTY SANDS
16' - 18'	SANDY CLAY
18-20	SANDY CLAY TO 19; 19-10 silty sand
20-22	GREENISH GREY CLAY AND SAND
22'-26	GREENISH GREY SILTY SAND
26-28	DK BROWN, GREEN, GREY CLAYS & SANDS
28-32	DK BROWN & GREENISH GREY CLAYS & SANDS
32'-42	DK BROWN TO BLACK CLAYS & SILTY SANDS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. B-1 COORDINATE NO. 29-14-445 PERMIT NO. 29-40129

DATE DRILLED 3-25-99 COUNTY MONMOUTH USE BORING

LOCATION MAIN POST M-5 LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703

OWNER U.S ARMY / FORT MONMOUTH. ADDRESS M-5 LANDFILL AREA FORT MONMOUTH NJ 07703

DRILLING METHOD 4¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 8" TOTAL DEPTH 42'

CASING:

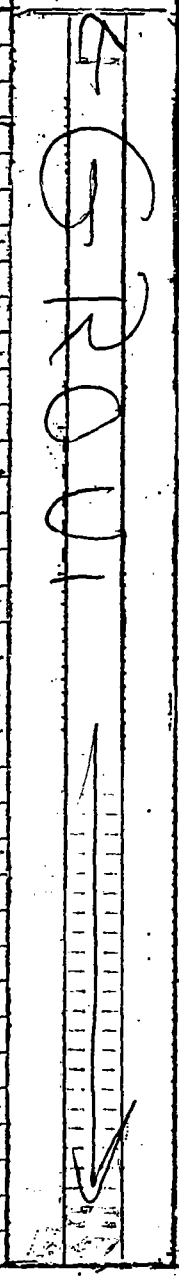
TYPE N/A SLOT N/A DIA N/A LENGTH N/A

SCREEN:

TYPE N/A SLOT N/A DIA N/A LENGTH N/A

GRAVEL PACK SIZE N/A CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
0-2	#1	4,2,4,5		0-2 → SILTY SAND, ORGANICS, SOME CLAY
2-4	#2	5,3,3,3		2-4 → REDDISH SAND (WET) BROWN SILTY SAND
4-6	#3	5,3,4,3		4-6 → REDDISH BROWN SILTY SAND (MOIST)
6-8	#4	1,3,3,5		6-8 → REDDISH BROWN SAND, GREENISH GREY SANDS AND SILTS STARTING @ 7.5'
8-10	#5	4,6,7,12		8-10 → GREENISH GREY SILTY SANDS (MOIST)
10-12	#6	4,12,14,16		10-12 → SAME AS ABOVE
12-14	#7	6,9,11,16		12-14 → SAME AS ABOVE
14-16	#8	5,11,16,15		14-16 → SAME AS ABOVE
16-18	#9	3,5,7,12		16-18 → SANDY CLAY
18-20	#10	6,7,9,11		18-20 → SANDY CLAY TO 19' 19'-20' → SILTY SAND

BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
20-22	#11	4,4,9,14		20-22 → CLAY AND SAND (GREENISH GREY)
22-24	#12	5,8,13,17		22-24 → GREENISH GREY SILTY SAND
24-26	#13	4,7,13,14		24-26 → SAME AS ABOVE
26-28	#14	9,14,18,19		26-28 → DARK BROWN, GREEN, GREY CLAYS AND SANDS
28-30	#15	4,10,9,11		28-30 → DARK BROWN AND GREENISH GREY CLAYS AND SANDS
30-32	#16	5,5,8,12		30-32 → SAME AS ABOVE
32-34	#17	3,5,8,9		32-34 → DARK BROWN TO BLACK CLAYS AND SILTY SANDS.
34-36	#18	7,8,8,9		34-36 → SAME AS ABOVE
36-38	#19	7,9,11,10		36-38 → SAME AS ABOVE
38-40	#20	5,7,12,12		38-40 → SAME AS ABOVE
40-42	#21	5,6,8,9		40-42 → SAME AS ABOVE
				TERMINATE BOREHOLE AT 42'

DWR-138 M
11/98

E
DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40130

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 30 / 99
DATE WELL COMPLETED 03 / 30 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 60 ft.
Well finished to 60 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling NONE ft.

Water level was measured using N/A

Well was developed for 0 hours
at 0 gpm

Method of development N/a

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	N/A	N/A	N/A	N/A
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)		NOT FINISHED AS WELL:			
Open Hole or Screen (No. Used)		ABANDONMENT FORM ATTACHED			
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	0"	60'	ANNULUS	Neat Cement Bentonite	752 lbs. 48 lbs.

Grouting Method TREMMY
Drilling Method 4¼" I.D. H.S.A.

Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) TIMOTHY WESTOVER
Driller's Signature M1444
Registration No. M1444 Date 4 / 12 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 10' BROWN/RED-BROWN SILTS & SANDS
10' - 60' DARK BROWN TO GREY/GREEN SILTS & CLAYS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. B-2 COORDINATE NO. 29-14-445 PERMIT NO. 29-40130

DATE DRILLED 3-30-99 COUNTY MONMOUTH USE BORING

LOCATION MAIN POST M-5 LANDFILL AREA (WILSON AVE.) FORT MONMOUTH NJ.

OWNER U.S. ARMY / FORT MONMOUTH. ADDRESS M-5 LANDFILL AREA FORT MONMOUTH NJ. 07703

DRILLING METHOD 4¼" I.D. HSA SAMPLING METHOD SPLIT SPOON

HOLE DIA. 8" TOTAL DEPTH 60'

CASING:

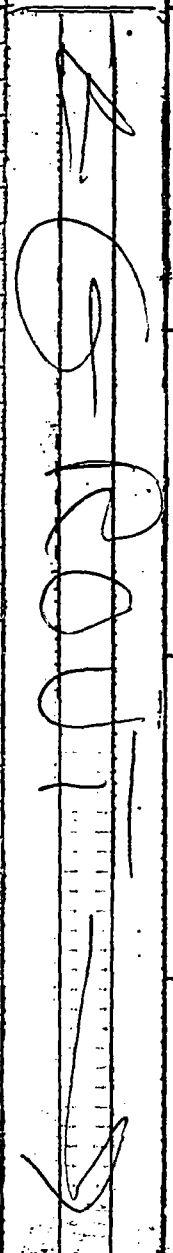
TYPE N/A SLOT N/A DIA N/A LENGTH N/A

SCREEN:

TYPE N/A SLOT N/A DIA N/A LENGTH N/A

GRAVEL PACK SIZE N/A CASING SEAL CEMENT

STATIC WATER LEVEL N/A GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
0-2	#1	2,5,6,5		0"-10' → BROWN / RED-BROWN SILTS AND SANDS.
2-4	#2	4,6,6,8		
4-6	#3	5,5,4,7		
6-8	#4	3,5,7,8		
8-10	#5	4,6,6,7		
10-12	#6	2,2,4,5		10'-60' → DARK BROWN TO GREY/ GREEN SILTS AND CLAYS.
12-14	#7	8,9,14,13		
14-16	#8	6,7,11,10		
16-18	#9	12,10,19,24		
18-20	#10	6,9,15,18		
20-22	#11	4,12,17,19		
22-24	#12	5,12,19,26		
24-26	#13	18,24,31,34		
26-28	#14	6,8,16,19		
28-30	#15	8,14,18,19		
30-32	#16	6,8,14,19		
32-34	#17	7,8,24,31		

SURFACE	NUMBER	ON SAMPLER	DESIGN	IDENTIFICATION OF SOILS/REMARKS
34-36	#18	10,12,15,20		
36-38	#19	8,14,15,18		
38-40	#20	9,11,18,17		
40-42	#21	10,15,20,19		
42-44	#22	11,14,12,15		
44-46	#23	11,13,14,15		
46-48	#24	14,16,17,15		
48-50	#25	10,11,16,14		
50-52	#26	12,16,19,25		
52-54	#27	9,19,25,55		
54-56	#28	11,24,26,52		
56-58	#29	8,19,24,28		
58-60	#30	9,21,46,52		→ TERMINATE BORING @ 60'

DWR-138 M
11/98

E
DMQ

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40131

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner * U S ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B-3
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address M-5 LANDFILL AREA/WILSON

DATE WELL STARTED 03 / 31 / 99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 03 / 31 / 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 60 ft.
Well finished to 60 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling none ft.

Water level was measured using N/A

Well was developed for 0 hours
at 0 gpm

Method of development N/A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	NOT FINISHED AS WELL:				
Middle Casing (for triple cased wells only)	SEE ABANDONMENT REPORT				
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)					
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	GRADE	60	ANNULUS	Neat Cement Bentonite	152 lbs. 48 lbs.

Grouting Method TREMMY
Drilling Method 4¼" I.D. H.S.A.

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450-

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover M1444

Registration No. M1444 Date 4/12/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-12'	TAN/RED/BROWN CLAYEY SILTS & SANDS
12'-60'	GREY, GREEN, BLACK, BROWN CLAYS & SILTS WITH SOME SAND

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:
WELL NO. B-3 COORDINATE NO. 29-14-445 PERMIT NO. 29-40131
DATE DRILLED 3-31-99 COUNTY MONMOUTH USE BORING
LOCATION MAIN POST M-5 LANDFILL AREA (WILSON AVE) FORT MONMOUTH NJ 07703
OWNER U.S. ARMY / FORT MONMOUTH ADDRESS M-5 LANDFILL AREA FORT MONMOUTH NJ 07703
DRILLING METHOD 4¼" I.D. HSA SAMPLING METHOD SPLIT SPOONS.
HOLE DIA. 8" TOTAL DEPTH 60'
CASING:
TYPE N/A SLOT N/A DIA. N/A LENGTH N/A
SCREEN:
TYPE N/A SLOT N/A DIA. N/A LENGTH N/A
GRAVEL PACK SIZE N/A CASING SEAL CEMENT
STATIC WATER LEVEL N/A GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER
0-2	#1	3,5,7,6
2-4	#2	4,5,7,10
4-6	#3	5,5,7,9
6-8	#4	7,6,12,16
8-10	#5	5,6,10,14
10-12	#6	5,9,15,17
12-14	#7	8,13,16,18
14-16	#8	8,17,28,24
16-18	#9	14,31,35,36
18-20	#10	9,10,19,19
20-22	#11	5,9,13,19
22-24	#12	4,7,8,9
24-26	#13	6,11,15,17
26-28	#14	6,12,12,7
28-30	#15	5,7,9,13
30-32	#16	5,11,16,9
32-34	#17	8,13,22,26

WELL DESIGN

IDENTIFICATION OF SOILS/REMARKS

0'-12' → TAN / RED / BROWN CLAYEY SILTS AND SANDS.

12'-60' → GREY, GREEN, BLACK, BROWN CLAYS + SILTS WITH SOME SAND

SURFACE	NUMBER	ON SAMPLER	DESIGN	SOILS/REMARKS
34-36	#18	8,15,26,28		
36-38	#19	6,11,18,21		
38-40	#20	11,19,28,29		
40-42	#21	8,14,27,36		
42-44	#22	19,27,42,40		
44-46	#23	12,29,29,48		
46-48	#24	18,29,36,40		
48-50	#25	14,29,42,50		
50-52	#26	12,17,28,34		
52-54	#27	11,16,22,32		
54-56	#28	9,15,19,36		
56-58	#29	12,21,33,25		
58-60	#30	11,19,31,37		TERMINATE BORING @ 60'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40281

Atlas Sheet Coordinates 29 : 13 677

OWNER IDENTIFICATION - Owner [redacted] Redacted - Privacy Act
Address 84 HIGH ST.
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality EATONTOWN BORO Lot No. 21 Block No. 56
Address 84 HIGH ST.

DATE WELL STARTED 4/21/99
DATE WELL COMPLETED 4/21/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 18 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 5 gpm

Method of development MOYNO

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	4	PVC	SCH.40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	15	30	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	14	30	12	#2 SAND	
Grout	0	14	12	Neat Cement / Bentonite	— lbs. / 105 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6" GRASS/TOPSOIL
6"-10' BRN MD SD.
10'-25' LT BRN MD SD
25'-30' DRK GREY/BLK CLAYEE SILT

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) GARY PARENT
Driller's Signature Gary Parent
Registration No. MD 1540 Date 5/2/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 40340

Atlas Sheet Coordinates 29 : 13 : 695

OWNER S T L

Address 9 WESTERN DR.

City COLTS NECK State NJ Zip Code

WELL LOCATION ADDRESS RIVERS EDGE DR. **Owner's Well No.**

County MONMOUTH Municipality COLTS NECK TWP Lot No. 22.24 Block No. 35

WELL USE DOMESTIC

DATE WELL STARTED 9/28/99

DATE WELL COMPLETED 9/28/99

WELL CONSTRUCTION

Total Depth Drilled 290 ft.

Finished Well Depth 290 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
1/2 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1.5	270	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	270	290	4	PVC	Sch 40 .012 Slot
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	267	290		#1 MORIE	
Grout	4	267		Neat Cement / Bentonite	525 lbs / lbs

RECORD OF TEST

Test Date 9/28/99

Static Water Level 22 ft. below land surface

Water Level Measured Using ELEC. TAPE

Pumping Water Level 156 ft. below land surface

Well Was Pumped Using AIR LIFT

Well Yield 150 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method PRESS. THRU TREMMIE

Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by G. COLANGELO Reg. No. JD1395

Pump Type SUB

Depth of Pump below land surface 130 ft.

Capacity 20 gpm Horsepower 1½

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company G. COLANGELO/TILTON WELL & PUMP

Well Driller (Print) DAVID VanBrunt JR.

Driller's Signature David VanBrunt JR.

Registration No. JD1414 Date 11/9/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-40 Med Red Snd
40-101 Gry Sndy Clay
101-113 Med Blk Snd
113-134 Med Blk Snd Gry Clay
134-153 Gry Clay
153-187 Fine Blk Gry SD
187-251 Fine Blk Gry SD Gry Cly
251-290 Med Gry Snd & wood

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 40367

Atlas Sheet Coordinates 29 :14 446

OWNER IDENTIFICATION - Owner U.S. ARMY
Address
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 01
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address BLDG. 283 / WILSON AVE.

DATE WELL STARTED 3 / 28 / 00
DATE WELL COMPLETED 3 / 28 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 97-08-28-133033

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) TECOM-VINNEL Tele. # 732-532-0989

WELL CONSTRUCTION

Total depth drilled 25 ft.
Well finished to 25 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for 1 hours
at 3.0 gpm

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	SCHED 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 0.0/0	0	25	4	PVC	SCHED 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	25			
Grout	0	3		Neat Cement Bentonite	94 lbs. 6 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-1' ASPHALT + ROAD STONE

1'-3' ORANGE BROWN GRAVEL AND SAND WITH TRACE CLAY AND SILT

3'-25' OLIVE GREEN CLAY, SILT AND SAND

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy Westover

Registration No. M1444 Date 4 / 5 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 01 COORDINATE NO. 29-14-446 PERMIT NO. J9-40367

DATE DRILLED 3-28-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 283 Ft. Monmouth NJ 07703

OWNER U.S. ARMY / Ft. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. Ft. MONMOUTH NJ 0770

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD COMPOSITE / SPOONS.

HOLE DIA. 10" TOTAL DEPTH 25'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 5'

SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 20'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 8' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS NOT RECORDED BY DRILLERS	12" STEEL MANHOLE WITH 2x2 CONCRETE PAD. CEMENT / BENT. 5' SOLID F.M. CASING CEMENT / BENT. #1 WELL GRAVEL. 20'-.010 SLOT SCREEN #1 WELL GRAVEL.	0"-1' → ASPHALT + ROAD STONE 1'-8' → ORANGE BROWN GRAVELS SANDS WITH CLAYS AND SILTS. 8'-25' → OLIVE GREEN CLAYS SILTS AND SANDS. → Set well @ 25'

5/14/99

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 40580 ✓

Redacted - Privacy Act

OWNER _____ Atlas Sheet Coordinates 29 : 14 : 421

Address 40 PAAG CIRCLE

City LITTLE SILVER State NJ Zip Code _____

WELL LOCATION ADDRESS 40 PAAG CIRCLE **Owner's Well No.** _____

County MONMOUTH Municipality LITTLE SILVER B Lot No. 9 Block No. 66

WELL USE IRRIGATION

DATE WELL STARTED 6/04/99 ✓
DATE WELL COMPLETED 6/04/99 ✓

WELL CONSTRUCTION

Total Depth Drilled 168 ft.
Finished Well Depth 168 ft.

Borehole Diameter:
Top 8.5 in.
Bottom 8.5 in.

Well Casing Begins:
_____ ft. above grade or
1.0 ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1.0	155	4	PVC	SCHED.40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	155	165	4	PVC	SCHED.40 ✓
Blank Casings (No. Used)					
Tail Piece	165	168	4	PVC	SCHED.40 ✓
Gravel Pack	145	168	8.5	BLENDED	.025 ✓
Grout	3.5	145	8.5	Neat Cement Bentonite	_____ lbs 600 lbs ✓

RECORD OF TEST

Test Date 6/4/99 ✓
Static Water Level 1-1/2 ft. below land surface
Water Level Measured Using MEASURED TAPE
Pumping Water Level 128 ft. below land surface
Well Was Pumped Using AIR LIFT
Well Yield 75 gpm
If Pump Tested: Discharge Rate _____ gpm
Duration of Test _____ hours

Grouting Method PRESSURE THROUGH TREMIE PIPE ✓
Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by J. MURTHA Reg. No. 50002945
Pump Type SUBMERSIBLE.
Depth of Pump below land surface 75 ft.
Capacity 20 gpm Horsepower 1

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15 CLAYEY MED. BROWN SAND
15-20 SILTY BROWN CLAY W/LIGNITE
20-110 SILTY GRAY CLAY
110-140 FINE & MED. BLACK SAND
140-150 FINE GRAY SAND
150-168 FINE GRAY SAND W/GREEN PEBBLES. ✓

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PICKWICK WELL DRILLING
Well Driller (Print) BENJAMIN PEIMAST IV
Driller's Signature _____
Registration No. M13702 Date 6/24/99

COPIES: White - DEP 7/7/99 Canary - Driller 7/7/99 Pink - Owner Goldenrod - Health Dept. 7/7/99

DWR-138 M
11/98

E
MES

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -40887

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner U.S. ARMY
Address
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Mw 2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address BLDG. 283

DATE WELL STARTED 7/25/99
DATE WELL COMPLETED 7/25/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 97-08-28-133033

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Team-Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 9 ft.

Water level was measured using tape

Well was developed for 1/3 hours
at 10 gpm

Method of development Sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig Simco 2800

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 20)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	20	—	morie #2	450 #
Grout	0	3	—	Neat Cement Bentonite	150 lbs. ___ lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 Clayey silt Fine sand
5-20 Silty clay Fine sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC
Well Driller (Print) Michael A Komosinski
Driller's Signature
Registration No. U2420 Date 7/28/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
MES

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -40888

Atlas Sheet Coordinates 29 :14 418

OWNER IDENTIFICATION - Owner U.S. ARMY
Address
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW1
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address BLDG. 2603, SUBSTATION

DATE WELL STARTED 7/25/99
DATE WELL COMPLETED 7/25/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 98-04-16-160319

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tetra-Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 11'8" ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 1'8" ft.

Water level was measured using tape

Well was developed for 1 hours at 7 gpm

Method of development sub pump

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig Simco 2800

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+3	1'8"	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 20)	1'8"	11'8"	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	1	13	—	Morie #2	250#
Grout	0	1	—	Neat Cement Bentonite	50 lbs. ___ lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 1½" stone med coarse sand
10-13 Silty clay - Fine-med sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC.
Well Driller (Print) Michael A Komasinski
Driller's Signature
Registration No. U2420 Date 7/25/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41644

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-10
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address AVE. OF MEMORIES

DATE WELL STARTED 11 / 23 / 99
DATE WELL COMPLETED 11 / 23 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" RISER STEEL

Static water level after drilling 6 ft.

Water level was measured using STL TAPE

Well was developed for 5 hours at 22 gpm

Method of development Pump Pool

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010 SCH40	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement	10 lbs.
				Bentonite	2 lbs.

Grouting Method TREMMIE
Drilling Method H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A. Westover

Registration No. MW144 Date 12 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-6' TOPSOIL & ROCK (2"-3") FILL DIRT & DEBRIS
6"-18' BLACK/GRAY SILTS & CLAYS WITH ORGANICS. SAND LENSES

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 10 COORDINATE NO. 29-14-446 PERMIT NO. 29 - 41644

DATE DRILLED 11-23-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-4 LANDFILL AVE. OF MEMORIES FT. MONMOUTH NJ

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH, NJ

DRILLING METHOD AUGER SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONO FLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONO FLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	6" STEEL PROTECTIVE SLEEVE W/ 2'x2' CONCRETE PAD; CEMENT; BEN; 3' SOLID P.V.C.; BAL; CEMENT	0'-6' → TOPSOIL + ROCK (2"-3") FILL DIRT + DEBRIS.
		NOT RECORDED	#1 WELL GRAVEL; 15'-.010 SLOT SCREEN; #1 WELL GRAVEL	6"-18' → BLACK / GRAY SILTS + CLAYS WITH ORGANICS. SAND LENSES
		BY DRILLER		
				SET WELL @ 18'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41411

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9/28/99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 9/28/99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed?
☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 1 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	2	PVC	Sch 40 .020 Slot
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	8	#2 SAND	
Grout	0	3	8	Neat Cement ___ lbs. / Bentonite 8 lbs.	

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig B-59

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GRANESE DRILLING INC

Well Driller (Print) MIKE GRANESE

Driller's Signature M. Granese

Registration No. 17764 Date 10/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2" ASPHALT
2"-6" GRAVEL
6"-4' BRN SILTY FN SD SOME GRAVEL
4'-14' GREENISH SILTY CLAY TRACE FN SD

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41412

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9/28/99
DATE WELL COMPLETED 9/28/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed?
☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 1 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	2	PVC	Sch 40 .020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	8	#2 SAND	
Grout	0	3	8	Neat Cement / Bentonite	lbs. / 8 lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig B 59

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GRANESE DRILLING INC

Well Driller (Print) MIKE GRANESE

Driller's Signature M. Granese

Registration No. JD17864 Date 10/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2" ASPHALT
2"-6" GRAVEL
6"-5' BRN SILTY FN SD
5'-14' GREENISH SILTY CLAY TRACE FN SD

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41413

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9/28/99
DATE WELL COMPLETED 9/28/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 1 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	2	PVC	SCH 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	2	PVC	SCH 40 .020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	3 14	8	#2 SAND	
Grout	0	3	8	Neat Cement / Bentonite	lbs. / 8 lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig B-59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GRANESE DRILLING INC

Well Driller (Print) MIKE GRANESE

Driller's Signature M. Granese

Registration No. JD17864 Date 10/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2" ASPHALT
2"-6" GRAVEL
6"-5' BRN SILTY FN SD
5'-14' GREENISH SILTY CLAY TRACE SD

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41414

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9/29/99
DATE WELL COMPLETED 9/29/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 1 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	2	PVC	Sch. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	2	PVC	Sch 40 .020 Slot
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	8	#2 SAND	
Grout	0	3	8	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig B-59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GRANESE DRILLING INC

Well Driller (Print) MIKE GRANESE

Driller's Signature M. Granese

Registration No. ID 17864 Date 10/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2" ASPHALT
2"-6" GRAVEL
6"-5' BRN SILTY SD
5'-14' GREENISH SILTY CLAY
TRACE FN SD

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 41415

Atlas Sheet Coordinates 29 :13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-5
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9 / 29 / 99
DATE WELL COMPLETED 9 / 29 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed?
☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 1 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	2	PVC	Sch 40 .010 slot
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	8	#2 SAND	
Grout	0	3	8	Neat Cement / Bentonite	lbs. / 8 lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA

Drilling Fluid NONE Type of Rig B-59

Health and Safety Plan submitted? ☐ Yes ☑ No
Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GRANESE DRILLING INC
Well Driller (Print) MIKE GRANESE
Driller's Signature M. Granese
Registration No. 50 17864 Date 10 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2" ASPHALT
2"-6" GRAVEL
6"-5' BRN SILTY SD
5'-14' GREENISH SILTY CLAY TRACE FN SD

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41416

Atlas Sheet Coordinates 29 : 13 6.35

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-6
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9/29/99
DATE WELL COMPLETED 9/29/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 6 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed?
☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 1 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	2	PVC	SCH 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	2	PVC	020 SLOT SCH 40
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	8	#2 SAND	
Grout	0	3	8	Neat Cement ____ lbs. Bentonite 8 lbs.	

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig B-59

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GRANESE DRILLING INC

Well Driller (Print) MIKE GRANESE

Driller's Signature M. Granese

Registration No. JD17864 Date 10/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6" GRASS TOP SOIL
6"-14' GREENISH
SILTY CLAY

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41650

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner U.S. ARMY/FT. MONMOUTH
Address C/O 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 3
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 3 / 28 / 00
DATE WELL COMPLETED 3 / 28 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 97-08-28-133033

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) TECOM-VINNELL Tele. # 732-532-0989

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 3 ft.

Water level was measured using TAPE

Well was developed for 1 hours
at 3.0 gpm

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid _____ Type of Rig CANTERRA 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 0.0/0)	5	20	4	PVC	SCHED.40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	4	20			
Grout	0	4		Neat Cement	94 lbs.
				Bentonite	0 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-1' GRASS AND TOPSOIL

1'-20' ORANGE/BROWN TO DARK BROWN CLAY, SILT AND SAND

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy J. Westover

Registration No. M1444 Date 4 / 5 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 3 COORDINATE NO. 29-14-446 PERMIT NO. 29-41650

DATE DRILLED 3-28-2000 COUNTY MONMOUTH USE MONITOR

LOCATION BLDG. 283 FT. MONMOUTH NJ. 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH NJ.

DRILLING METHOD 6¼" I.D. HSA SAMPLING METHOD SPOONS / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 20'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 5'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 8' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOON NO. 1	4" STEEL MANHOLE with 2x2 CONCRETE PAD. CEMENT 5' SOLID F.M. CASING BENT. CEMENT BENT. #1 WELL GRAVEL 15'-.010 SLOT SCREEN #1 WELL GRAVEL.	0"-1' → GRASS + TOPSOIL 1'-20' → ORANGE/BROWN TO DARK BROWN CLAYS, SILTS + SANDS.
		NO RECOVERY		
		SPOON NO. 2 DRILLED THROUGH		
				→ SET well @ 20'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41724

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY/FORT MONMOUTH
Address M-5 LANDFILL AREA
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RM8MW24
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address WILSON AVE/M-5 LANDFILL A

DATE WELL STARTED 11/ 12/ 99
TYPE OF WELL (as per Well Permit Categories) REPLACE MONITOR DATE WELL COMPLETED 11/ 12/ 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 38 ft.
Well finished to 38 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade
[X] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No

Static water level after drilling 7½ ft.

Water level was measured using STL TAPE

Well was developed for 1 hours
at 15 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	13	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	13	38	4	PVC SLOT .010	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	12	38	ANNULUS	MORIE GRAVEL	#1
Grout	grade	12	ANNULUS	Neat Cement Bentonite	376 lbs. -0- lbs.

Grouting Method TREMMY
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 16'	BLACK/BROWN/GRAY SILTS, SANDS CLAYS AND DEBRIS
16' - 18'	BLACK SANDY SILTS & GRAVELS
18' - 20'	BLACK SANDY SILTS & GRAVELS
	BOTTOM 3-4" GREY/GREEN SILTY CLAYS
	SOME ORGANICS (NEUTRAL SOIL)
20' - 35'	BROWN SILTY CLAYS & SANDS
35' - 38'	BLACK CLAYS & SILTS

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover

Registration No. M1444 Date 11/15/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:
WELL NO. RM8MW24 COORDINATE NO. 29-14-446 PERMIT NO. 29-41724
DATE DRILLED 11-12-99 COUNTY MONMOUTH USE REPLACEMENT MONITOR
LOCATION MAIN POST M5 LANDFILL AREA / WILSON AVE FT. MONMOUTH NJ.
OWNER U.S. ARMY / FT. MONMOUTH ADDRESS M-5 LANDFILL AREA FT. MONMOUTH NJ.
DRILLING METHOD H.S.A. SAMPLING METHOD SPLIT SPOON / COMPOSITE
HOLE DIA. 10" TOTAL DEPTH 38'
CASING:
TYPE MINOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 13'
SCREEN:
TYPE MINOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 25'
GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT
STATIC WATER LEVEL APPROX. 7.5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	IDENTIFICATION OF SOILS/REMARKS
		GRADE ✓	6" PROTECTIVE SLEEVE W/ CONCRETE PAD.
0'-16'		NO SPOONS	0'-16' → BLACK / BROWN / GRAY SILTS, SANDS, CLAYS AND DEBRIS.
16'-18'	#2	NOT RECORDED	16'-18' → BLACK SANDY SILTS AND GRAVELS.
18'-20'	#2	NOT RECORDED	18'-20' → BLACK SANDY SILTS AND GRAVELS. BOTTOM 3" GREY/GREEN SILTY CLAYS, SOME ORGANICS. (NATURAL SOIL)
20'-35'		NO SPOONS	20'-35' → BROWN SILTY CLAYS AND SANDS.
35'-38'			35'-38' → BLACK CLAYS AND SILTS.

13' - SOLID F.M. CASING
CEMENT
CEMENT
#1 WELL GRAVEL
#1 WELL GRAVEL
25' - .010 SLOT SCREEN
SET well @ 38'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41779

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW19
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 18 / 99
DATE WELL COMPLETED 11 / 18 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 5 hours at 42 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMIE
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-5' TOPSOIL, FILL DEBRIS, WOOD, ETC.
5'-18' GRAY/BLACK CLAYEY SILTS AND SANDS. SOME ORGANIC MATERIAL

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover

Registration No. M1444 Date 12 / 28 / 99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG;

WELL NO. MW 19 COORDINATE NO. 29-14-446 PERMIT NO. 29-41779

DATE DRILLED 11-18-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFILL FT. MONMOUTH NJ 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH

DRILLING METHOD Augers SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONO FLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONO FLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 well GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX 5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER GRADE	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	6" STEEL PROTECTIVE SLEEVE w/ 2x2 PAD CEMENT BEN 3' SOLID F.M. CEMENT BEN WELL GRAVEL 15'-.010 SLOT SCREEN WELL GRAVEL	0'-5' → TOPSOIL, FILL DEBRIS, WOOD, ETC.
		NOT RECORDED		5'-18' → GRAY / BLACK CLAYEY SILTS AND SANDS. SOME ORGANIC MATERIAL
		BY		
		DRILLER		→ SET well @ 18'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41780

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW20
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 18 /99
DATE WELL COMPLETED 11 / 18 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 5 hours at 21 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement 10 lbs. Bentonite 0 lbs.	

Grouting Method TREMMIE
Drilling Method H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover

Registration No. M1444 Date 12 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-8' GRAY/BLACK SILTS AND CLAYS
8'-18' GRAY/BLACK SANDS AND SILTS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 20 COORDINATE NO. 29-14-44h PERMIT NO. 29-41780

DATE DRILLED 11-18-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFILL FT. MONMOUTH NJ 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE FT. MONMOUTH NJ.

DRILLING METHOD AUGER SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT 4" DIA — LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT 4" DIA .010 LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		NO SPOONS RECORDED BY DRILLER	6" STEEL PROTECTIVE SLEEVE w/ 2x2 CONCRETE PAD; CEMENT; 3'-SOLID P.V.C.; BEN.; #1 WELL GRAVEL	0'-8' → GRAY / BLACK SILTS AND CLAYS
			15'-.010 SLOT SCREEN; #1 WELL GRAVEL	8'-18' → GRAY / BLACK SANDS AND SILTS.
				→ SET WELL @ 18'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41781
Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-21
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 18 / 99
DATE WELL COMPLETED 11 / 18 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 5 hours at 52 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMIE
Drilling Method H.S.A.

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover

Registration No. M1444 Date 12 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-8' GRAY/BLACK CLAYEY SILTS
8'-18' GRAY/BLACK SANDS & SILTS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 21 COORDINATE NO. 29-14-446 PERMIT NO. 29-41781

DATE DRILLED 11-18-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFILL FT MONMOUTH, NJ. 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH, NJ.

DRILLING METHOD Auger SAMPLING METHOD SPLIT SPOONS / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010" DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS NOT RECORDED BY DRILLER	6" STEEL PROTECTIVE SLEEVE W/ 2x2 CONCRETE PAD. CEMENT BEN 3' SOLID P.V.C. CEMENT BEN #1 WELL GRAVEL 15' - .010 SLOT SCREEN #1 WELL GRAVEL	0'-8' → GRAY/BLACK CLAYEY SILTS.
				8'-18' → GRAY/BLACK SANDS & SILTS
				set well @ 18'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -41782

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-22
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 19 / 99
DATE WELL COMPLETED 11 / 19 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 2 hours
at 12 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement 10 lbs. Bentonite 0 lbs.	

Grouting Method TREMMIE
Drilling Method H.S.A

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A. Westover

Registration No. M1444 Date 12 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-8' GRAY/BLACK CLAYEY SILTS
8'-18' GRAY/BLACK SANDS SILTS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 22 COORDINATE NO. 29-14-446 PERMIT NO. 29-41782

DATE DRILLED 11-19-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFILL FT MONMOUTH NJ. 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT MONMOUTH, NJ.

DRILLING METHOD 10" AUGER SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS NOT RECORDED BY DRILLER	6" STEEL PROTECTIVE SLEEVE W/ 2X2 CONCRETE PAD; CEMENT; 3'-SOLID F.S.; BEN.; #1 WELL GRAVEL; 15'-.010 SLOT SCREEN; #1 WELL GRAVEL.	0'-8' → GRAY / BLACK CLAYEY SILTS 8'-18' → GRAY / BLACK SANDS & SILTS. SET WELL @ 18'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41783

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-23
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 19 / 99
DATE WELL COMPLETED 11 / 19 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6"STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 3 hours at 22 gpm

Method of development PUMPED

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL	#1
Grout	GRADE	2	ANNULUS	Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMIE
Drilling Method H.S.A

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature

Registration No. M1444 Date 12/ 28/ 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-8' TAN/BROWN CLAYEY SANDS
8'-18' TAN/BROWN SILTY SANDS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 23 COORDINATE NO. 29-14-446 PERMIT NO. 29-41783

DATE DRILLED 11-19-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFILL FT. MONMOUTH NJ 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH NJ.

DRILLING METHOD AUGER SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5.0' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		↑ SPOONS NOT RECOVERED DUE DRILLERS. ↓	6" STEEL PROTECTIVE SLEEVE W/ 2x2 CONCRETE PAD CEMENT 3'-SOLID P.V. BEN #1 WELL GRAVEL 15'-.010 SLOT SCREEN #1 WELL GRAVEL BEN CEMENT	0'-8' → TAN / BROWN CLAYEY SANDS 8'-18' → TAN / BROWN SILTY SANDS SET well @ 18'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41784

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW24
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 19 / 99
DATE WELL COMPLETED 11 / 19 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 2 hours at 21 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMIE
Drilling Method H.S.A

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-8 RED/BRWON MEDIUM FINE SANDS
8'-18' BROWN/BLACK CLAYEY SILTS ORGANICS

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover

Registration No. M1444 Date 12 / 28 / 99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 24 COORDINATE NO. 29-14-446 PERMIT NO. 29-41784

DATE DRILLED 11/19/99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFILL FT. MONMOUTH, NJ. 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH, NJ.

DRILLING METHOD AUGER SAMPLING METHOD SPLIT SPOONS / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

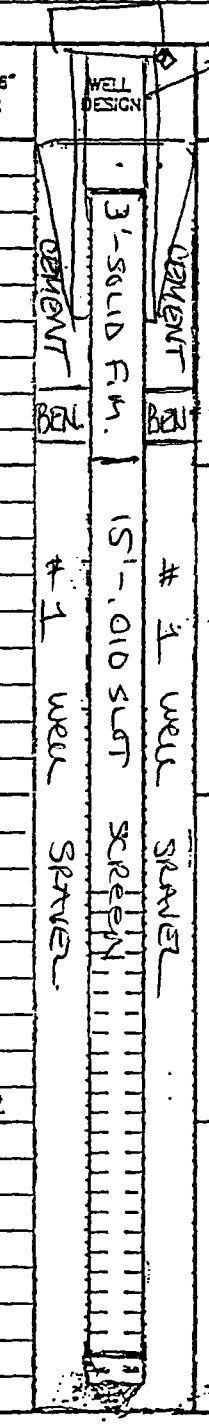
SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		↑ SPOONS NOT RECORDED BY DRILLER ↓	6" STEEL PROTECTIVE SLEEVE W/ 2X2' CONCRETE PAD.	0"-8' → Red / BROWN Medium - FINE SANDS
				8'-18' → BROWN / BLACK CLAYEY SILTS + ORGANICS
				→ SET WELL TO 18'



DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41785

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner U.S. ARMY / FT. MONMOUTH
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-25
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address

DATE WELL STARTED 11 / 22 / 99
DATE WELL COMPLETED 11 / 22 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 5 ft.

Water level was measured using STL TAPE

Well was developed for 5 hours at 2 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement Bentonite	10 lbs. 5 lbs.

Grouting Method TREMMIE
Drilling Method H.S.A

Was permanent pumping equipment installed? [X] Yes [ ] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature Timothy A Westover

Registration No. M1444 Date 12 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-8' OLIVE GREEN CLAYEY SILTS
8'-18' BLACK/GRAY SANDS, SOME CLAY

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 25 COORDINATE NO. 29-14-446 PERMIT NO. 29-41785

DATE DRILLED 11-22-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-12 W. LANDFALL FT. MONMOUTH NJ 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE FT. MONMOUTH NJ.

DRILLING METHOD AUGER SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 5.0' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS NOT RECORDED BY DRILLER	6" STEEL PROTECTIVE SLEEVE W/ 2X2 CONCRETE PAD; CEMENT; 3L SOLID F.M.; BEN; CEMENT; BEN; #1 WELL GRAVEL; 15'-.010 SLOT SCREEN; #1 WELL GRAVEL; SET well @ 18'	0'-8' → OLIVE GREEN CLAYEY SILTS
				8'-18' → BLACK/GRAY SANDS, SOME CLAY.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -41786

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner US ARMY/ FT. MONMOUTH
Address C/O 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-23
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR.

DATE WELL STARTED 11 / 22 / 99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 11 / 22 / 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 6 ft.

Water level was measured using STL TAPE

Well was developed for 5 hours at <2 gpm

Method of development Pumped

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMIE
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-18' GRAY/BLACK CLAYEY SILTS AND SANDS

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature

Registration No. M1444 Date 12 / 28 / 99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 23 COORDINATE NO. 29-14-446 PERMIT NO. 29-41786

DATE DRILLED 11-22-99 COUNTY MONMOUTH USE MONITOR

LOCATION M-14 LANDFILL MURPHY DR. FT. MONMOUTH, NJ. 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE DR. FT. MONMOUTH NJ.

DRILLING METHOD Auger SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA. 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA. 4" LENGTH 15'

GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		NO SPOONS RECORDED	6" STEEL PROTECTIVE sleeve w/ 2x2' CONCRETE PAD; CEMENT; BEN; 3' SOLID P.V.; CEMENT; BEN; #1 well gravel; 15' .010 SLOT SCREEN; #1 well gravel	0'-18' → gray / black clayey silts and sands..
				SET well @ 18'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41787

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner US ARMY/ FT. MONMOUTH
Address C/O 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-22
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR.

DATE WELL STARTED 11 / 22 / 99
DATE WELL COMPLETED 11 / 22 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed?
[X] Yes [ ] No 6" STEEL RISER

Static water level after drilling 6 ft.

Water level was measured using STL TAPE

Well was developed for 2 hours
at 2 gpm

Method of development Pumped

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	GRADE	3	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	3	18	4	PVC SLOT .010	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	18	ANNULUS	MORIE GRAVEL #1	
Grout	GRADE	2	ANNULUS	Neat Cement	15 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMIE
Drilling Method H.S.A

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA CT450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) TIMOTHY WESTOVER

Driller's Signature

Registration No. M1444 Date 12 / 28 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0"-18' GRAY/BLACK SILTS AND SANDS WITH SOME CLAYS

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 22 COORDINATE NO. 29-14-446 PERMIT NO. 29 - 41787

DATE DRILLED 11-22/99 COUNTY MONMOUTH USE MONITOR

LOCATION M-14 LANDFILL MURPHY DR. FT. MONMOUTH NJ 07703

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O RIVERSIDE AVE FT. MONMOUTH NJ.

DRILLING METHOD AUGER SAMPLING METHOD SPLIT SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 3'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	6" STEEL PROTECTIVE SLEEVE W/ 2X2' CONCRETE PAD.	0"-18' → GRAY / BLACK SILTS AND SANDS WITH SOME CLAYS.
		NOT RECORDED	CEMENT, BEN, 3' SOLID P.V.C., CEMENT, BEN, #1 WELL GRAVEL, 15' - .010 SLOT SCREEN, #1 WELL GRAVEL	
				→ SET WELL @ 18'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41788

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner US ARMY/ FT. MONMOUTH
Address C/O 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 24
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR.

DATE WELL STARTED 3 / 27 / 00
DATE WELL COMPLETED 3 / 27 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) TECOM VINELL Tele. # 732-532-0989

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [ ] Yes [X] No

Static water level after drilling 8 ft.

Water level was measured using TAPE

Well was developed for 1 hours at 3 gpm

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	3	4	PVC	SCHED 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 0/0)	3	18	4	PVC	SCHED 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout				Neat Cement	94 lbs.
				Bentonite	8 lbs.

Grouting Method TREMIE
Drilling Method HSA

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CANTERRA 450

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) TIMOTHY WESTOVER
Driller's Signature
Registration No. M1444 Date 4 / 5 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' ORANGE BROWN SAND AND SILT SOME CLAY AND PIECES OF CONCRE

10'-18' ORANGE BROWN CLAY, SILT AND SAND

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 24 COORDINATE NO. 29-14-466 PERMIT NO. 29-41788

DATE DRILLED 3-27-2000 COUNTY MONMOUTH USE MONITOR

LOCATION NH4 LANDFILL AREA, MURPHY DRIVE, FT. MONMOUTH NJ.

OWNER U.S. ARMY / FT. MONMOUTH ADDRESS C/O 173 RIVERSIDE AVE. FT. MONMOUTH NJ 07703

DRILLING METHOD 6¼" I.D. HSA. SAMPLING METHOD SPOONED / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 18'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 3'

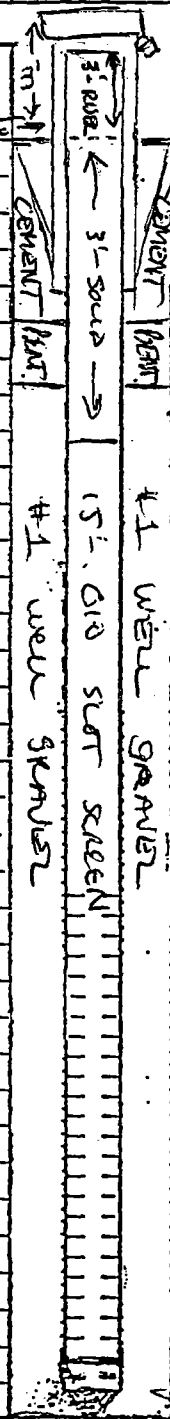
SCREEN:

TYPE MONOFLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'

GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 8' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER GRADE	IDENTIFICATION OF SOILS/REMARKS
		SPOONS NOT RECORDED BY DRILLER	0"–10' → ORANGE BROWN SANDS SILTS + CLAYS WITH CHUNKS of CONCRETE BACK FILL.
			10'–18' → ORANGE BROWN clayey SILTS AND SANDS
			SET well @ 18'



DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41837

Atlas Sheet Coordinates 29 : 14 : 461

OWNER IDENTIFICATION - Owner FOGGIA FLORIST INC
Address 196 MONMOUTH BLVD
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. 38 & 44 Block No. 65
Address 196 MONMOUTH BLVD

DATE WELL STARTED 11/22/99
DATE WELL COMPLETED 11/22/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GEOGRAPHIC Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface +2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 10 ft.

Water level was measured using TAPE

Well was developed for 5 hours at 3 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2	5	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	5	20	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	4	20	12	#2 SAND	
Grout	0	4	12	Neat Cement / Bentonite	— lbs. / 30 lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.

Well Driller (Print) GARY PARENT

Driller's Signature Gary Parent

Registration No. M01540 Date 12/30/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' LOOSE FILL/TRASH
5'-12' BRN MD SD
12'-20' BRN FN SD/TRACE GRAVEL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41838

Atlas Sheet Coordinates 29 : 14 : 461

OWNER IDENTIFICATION - Owner FOGGIA FLORIST INC
Address 196 MONMOUTH BLVD
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. 38 & 44 Block No. 65
Address 196 MONMOUTH BLVD

DATE WELL STARTED 11/22/99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 11/22/99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GEOGRAPHIC Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface +2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 10 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 3 gpm

Method of development MOYNO

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2	5	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	5	20	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	4	20	12	#2 SAND	
Grout	0	4	12	Neat Cement / Bentonite	— lbs. / 30 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' LOOSE FILL/TRASH
5'-12' BRN MD SD
12'-20' BRN FN SD/SM GRAVEL LENSES

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) GARY PARENT
Driller's Signature Gary Parent
Registration No. MD1540 Date 12/30/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41839
29 14 461
Atlas Sheet Coordinates ____ : ____ : ____

OWNER IDENTIFICATION - Owner FOGGIA FLORIST INC
Address 196 MONMOUTH BLVD
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County MONMOUTH Municipality OCEANPORT BORO Lot No. 38 & 44 Block No. 65
Address 196 MONMOUTH BLVD

DATE WELL STARTED 11/22/99
DATE WELL COMPLETED 11/22/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well ____ Case I.D.# ____

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GEOGRAPHIC Tele. # ____

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface +2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 10 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 3 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2	5	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	5	20	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	4	20	12	#2 SAND	
Grout	0	4	12	Neat Cement ___ lbs. / Bentonite 30 lbs.	

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.

Well Driller (Print) GARY PARENT

Driller's Signature Gary Parent

Registration No. MD1540 Date 12/30/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' LOOSE FILL/TRASH
5'-12' BRN MD SD
12'-20' BRN FN SD/TRACE GRAVEL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41840

Atlas Sheet Coordinates 29 : 14 : 461

OWNER IDENTIFICATION - Owner FOGGIA FLORIST INC
Address 196 MONMOUTH BLVD
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County MONMOUTH Municipality OCEANPORT BORO Lot No. 38 & 44 Block No. 65
Address 196 MONMOUTH BLVD

DATE WELL STARTED 11/22/99
DATE WELL COMPLETED 11/22/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GEOGRAPHIC Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface +2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 10 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 3 gpm

Method of development MOYNO

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2	5	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	5	20	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	4	20	12	#2 SAND	
Grout	0	4	12	Neat Cement	lbs.
				Bentonite	30 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' LOOSE FILL/TRASH
5'-12' BRN MD SD
12'-20' BRN FN SD/TRACE GRAVEL LENSES

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) GARY PARENT
Driller's Signature Gary Parent
Registration No. MD1540 Date 12/30/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41841

Atlas Sheet Coordinates 29 : 14 : 461

OWNER IDENTIFICATION - Owner FOGGIA FLORIST INC
Address 196 MONMOUTH BLVD
City OCEANPORT State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-5
County MONMOUTH Municipality OCEANPORT BORO Lot No. 38 & 44 Block No. 65
Address 196 MONMOUTH BLVD

DATE WELL STARTED 11 / 22 / 99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 11 / 22 / 99
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GEOGRAPHIC Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface +2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 10 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 3 gpm

Method of development MOYNO

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2	5	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	5	20	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	4	20	12	#2 SAND	
Grout	0	4	12	Neat Cement — lbs. / Bentonite 30 lbs.	

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NONE Type of Rig A300

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company GARY PARENT/SHORE DRLG. INC.

Well Driller (Print) GARY PARENT

Driller's Signature Gary Parent

Registration No. MD1540 Date 12/30/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' LOOSE FILL/TRASH
5'-12' BRN MD SD
12'-20' BRN FN SD/TRACE GRAVEL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -41856

Atlas Sheet Coordinates 29 : 14 : 443

OWNER IDENTIFICATION - Owner US ARMY
Address M12-W LANDFILL
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW12
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DRIVE

DATE WELL STARTED 12/3/99
DATE WELL COMPLETED 12/3/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using in-scope

Well was developed for 1 hours at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	3	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	3	18	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	2	18	—	morrie #2	500 lbs
Grout	0	2	—	Neat Cement Bentonite	94 lbs. lbs.

Grouting Method Gravity
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig Simco 2800

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Kamasinski

Driller's Signature

Registration No. C 2420 Date 12/3/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 med-fine sand

5-18 silty med sand

RECEIVED NOV 29 1999

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 42091

Atlas Sheet Coordinates 29 13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW #1
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1 Block No. 73
Address 24 CONOVER PLACE

DATE WELL STARTED 6/21/2000
DATE WELL COMPLETED 6/21/2000

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 99-11-18-0935-37

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Aguilar Assoc. Tele. # 732-290-7800

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6'6" ft.

Water level was measured using Watertape

Well was developed for 1/2 hours at 3 gpm

Method of development Bailed

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	3	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 1)	3	13	4	PVC SCH 40	.020 slot
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	13	8	#2 well sand	200 lbs.
Grout	0	2	8	Neat Cement ☒ Bentonite	lbs. 25 lbs.

Grouting Method Pressure Grout
Drilling Method Hollow Stem

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid _____ Type of Rig BSI

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company AQUA WELL DRILLING

Well Driller (Print) Claude Britton

Driller's Signature Claude L Britton

Registration No. JD1098 Date 6/23/2000

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0' - 5' GW, SW
5' - 11' SM
11' - 13' Ft CL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42092

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner JAVIN PARTNERSHIP
Address PO BOX 275
City ADELPHIA State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW # 2
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1 Block No. 73
Address 24 CONOVER PLACE

DATE WELL STARTED 6/21/2000
DATE WELL COMPLETED 6/21/2000

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 9911180935 37

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Aguilar Ass. Tele. # 7322907800

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6'6" ft.

Water level was measured using Water tape

Well was developed for 1/2 hours at 3 gpm

Method of development Bailed

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	3	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 1)	3	13	4	PVC Sch 40	.020 slot
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	13	8	#2 well sand Soil	
Grout	0	2	8	Neat Cement / X Bentonite	lbs. / 25 lbs.

Grouting Method Pressure Grout
Drilling Method Hollow Stem

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid _____ Type of Rig BS1

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company AQUA WELL DRILLING

Well Driller (Print) Claude Britton

Driller's Signature Claude Britton

Registration No. 501098 Date 6/23/2000

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-5' GM SW
5'-11' SM
11'-13' CL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

3/28/00

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number ~~29~~ - ~~42437~~

Atlas Sheet Coordinates ___ : ___ : 428

OWNER ZUSI, KENNETH J. JR.

Address 481 MYRTLE AVENUE

City OCEANPORT State NJ Zip Code

WELL LOCATION ADDRESS 481 MYRTLE AVE. **Owner's Well No.**

County MONMOUTH Municipality OCEANPORT BORO Lot No. 5.04 Block No. 72

WELL USE IRRIGATION

DATE WELL STARTED 05/09/00

DATE WELL COMPLETED 05/09/00

WELL CONSTRUCTION

Total Depth Drilled 170 ft.

Finished Well Depth 170 ft.

Borehole Diameter:
Top 8.0 in.
Bottom 8.0 in.

Well Casing Begins:
___ ft. above grade or
1.0 ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1.0	145	4	PVC	SCHED. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	145	165	4	PVC	SCHED. 40
Blank Casings (No. Used)					
Tail Piece	165	170	4	PVC	SCHED. 40
Gravel Pack	135	170	8.0	BLENDED	.025
Grout	3.5	135	8.0	Neat Cement ___ lbs Bentonite 550 lbs	

RECORD OF TEST

Test Date 05/09/00

Static Water Level 1 ft. below land surface

Water Level Measured Using MEASURED TAPE

Pumping Water Level 116 ft. below land surface

Well Was Pumped Using AIR LIFT

Well Yield 60 gpm

If Pump Tested: Discharge Rate ___ gpm

Duration of Test ___ hours

Grouting Method PRESSURE THROUGH TREMIE PIPE

Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by JOHN MURTHA Reg. No. J021245

Pump Type SUBMERSIBLE

Depth of Pump below land surface 90 ft.

Capacity 12 gpm Horsepower 3/4

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-30 DARK GREEN SILTY CLAY
30-50 BLACK SAND
50-70 SILTY GRAY CLAY W/BLACK SAND
70-125 GRAY CLAY
125-150 BLACK SAND W/SHELLS
150-165 FINE & MED GRAY SAND W/ GREEN PEBBLES
165-170 FINE & MED GRAY SAND W/ GRAY CLAY

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PICKWICK WELL DRILLING

Well Driller (Print) JOHN MURTHA

Driller's Signature John Murtha

Registration No. J021245 Date 05/30/00

COPIES: White - DEP 5/30/00 Canary - Driller 5/30/00 Pink - Owner Goldenrod - Health Dept. 5/30/00

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42458

Atlas Sheet Coordinates 29 : 14 :445

OWNER IDENTIFICATION - Owner U.S. ARMY
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 949 RAZOR AVE.

DATE WELL STARTED 7/25/00
DATE WELL COMPLETED 7/25/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using ____

Well was developed for 2 hours
at 12 gpm

Method of development Submersible Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Carderra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Schad. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	4	PVC	Schad. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	4	15	No. 1 well gravel		
Grout	0	4		Neat Cement	25 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15' Orange/tan sand, silt and clay.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) Timothy Westover
Driller's Signature Timothy A Westover
Registration No. IM1444 Date 7/25/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 1 COORDINATE NO. 29-14-445 PERMIT NO. 29- 42458

DATE DRILLED 7-25-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg 949 949 RAZOR AVE. FT. MONMOUTH NJ 07703

OWNER U.S.O Army ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07703

DRILLING METHOD Auger SAMPLING METHOD COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 15'

CASING:

TYPE MONO FLEX FLUSH MOUNT SLOT ____ DIA. ____ LENGTH 5'

SCREEN:

TYPE MONO FLEX FLUSH MOUNT SLOT ____ DIA. ____ LENGTH 10'

GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. -7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		2 0	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT; 5' SOLID RM. CASING; CEMENT; BENT	0'-15' → ORANGE / TAN SANDS SILTS AND CLAYS.
		2 0 0 0	BENT; #1 well GRAVEL; 10'-.010 SLOT SCREEN; #1 well GRAVEL	
		N S.		
				Set well @ 15'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42459

Atlas Sheet Coordinates 29 : 14 :445

OWNER IDENTIFICATION - Owner U.S. ARMY
Address 173 RIVERSIDE AVE.
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 800 MALTERER AVE.

DATE WELL STARTED 7/25/00
DATE WELL COMPLETED 7/25/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 10" in.
Bottom 10" in.

Well was finished: ☐ above grade
☐ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☑ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using ____

Well was developed for 2 hours
at 22 gpm

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	4	15		No. 1 well gravel.	
Grout	0	4		Neat Cement / Bentonite	25 lbs. / 0 lbs.

Grouting Method TREMMY
Drilling Method AUGER

Method of development Submersible Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Canterra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) Timothy Westover

Driller's Signature Timothy Westover

Registration No. 14444 Date 7/25/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6' Roadstone and block fill.

6'-15' Orange/tan sand, silt + clay.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW-1 COORDINATE NO. 29-14-445 PERMIT NO. 29-42459

DATE DRILLED 7-25-2000 COUNTY MONMOUTH USE MONITOR

LOCATION BUILDING 800 800 MALTERER AVE. FT. MONMOUTH NJ 07703

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07703

DRILLING METHOD AUGER SAMPLING METHOD COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 15'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA. 4" LENGTH 5'

SCREEN:

TYPE MONO FLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT

STATIC WATER LEVEL 7' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		NO SAMPLING	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT; BENT; 5' SOLID CASING; CEMENT; BENT; 10' - .010 SLOT SCREEN; #1 well GRAVEL; #1 well GRAVEL	0"-6' → ROADSTONE + BACKFILL
				6'-15' → ORANGE/TAN SANDS, SILTS & CLAYS.
				EOT well @ 15'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42562

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 14
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 4 / 19 / 00
DATE WELL COMPLETED 4 / 20 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 3 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 12.5 ft.

Water level was measured using measure

Well was developed for .75 hours at 2 gpm

Method of development sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+3	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	20	—	morie #1	600 lbs
Grout	0	3	—	Neat Cement Bentonite	94 lbs. lbs.

Grouting Method Gravity
Drilling Method HSA

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig Simco 2800

Health and Safety Plan submitted? [ ] Yes [X] No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. NJ2420 Date 4 / 20 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 Silty clay w/ gravels

2-18 silty clay

18-20 Silty clay w/ F-M sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42572

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner ~~US ARMY~~
Address ~~173 RIVERSIDE AVE~~
City ~~FT MONMOUTH~~ State ~~NJ~~ Zip Code

812

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 2
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 5/4/00
DATE WELL COMPLETED 5/5/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 50 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 2 ft.

Water level was measured using mSCAPE

Well was developed for 1 hours at 2 gpm

Method of development Sch pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	30	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	30	50	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	28	50	—	morie #1	600 lbs
Grout	0	28	—	Neat Cement Bentonite	25 lbs. lbs.

Grouting Method Pressure
Drilling Method HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC
Well Driller (Print) Michael A Komosinski
Driller's Signature
Registration No. V2420 Date 5/5/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15 F-M Sand
15-24 Fine Sand
24-33 Silt
33-44 Sandy Silt
44 ~~50~~ - Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42573

Atlas Sheet Coordinates 29 : 14 4'46

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 4/25/00
DATE WELL COMPLETED 5/2/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 50 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M-Scope

Well was developed for 1 hours at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	30	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	30	50	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	26	50	—	Morie #1	600 lbs
Grout	0	26	—	Neat Cement Bentonite	~~250~~ lbs. 20 lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael Akmosinski

Driller's Signature

Registration No. 52420 Date 5/2/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-8 Silty clay
8-21.5 Fine silty sand
21.5-45 Silt
45-47.5 clayey Silt
47.5-50 Fine silty sand trace clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42574

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner ~~US ARMY~~
Address ~~173 RIVERSIDE AVE~~
City ~~FT MONMOUTH~~ State ~~NJ~~ Zip Code

812

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW3
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 5 / 5 / 00
DATE WELL COMPLETED 5 / 5 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well ____ Case I.D.# ____

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. # ____

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 50 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 8 ft.

Water level was measured using M-Scope

Well was developed for 1 hours
at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	30	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	30	50	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	28	50	—	Morrie #2	600 lbs
Grout	0	28	—	Neat Cement Bentonite	282 lbs. ____ lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. U2420 Date 5 / 5 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-8 Silty clay
8-22 Silty sand
22-45 Silt
45-50 Silty sand trace clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42575

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 512 MW4
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 4 / 26 / 00
DATE WELL COMPLETED 4 / 26 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 7 ft.
Well finished to 7 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 5.5 ft.

Water level was measured using M-Scope

Well was developed for .5 hours
at 1 gpm

Method of development Sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig Simco 2800

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. 52420 Date 4 / 26 / 00

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	2	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	2	7	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	1	7	—	morrie #1	200 lbs
Grout	0	1	—	Neat Cement Bentonite	50 lbs. ___ lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-7 Clayey Fine sand & Silt some gravel & debris

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42576

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

812

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW5
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 5 / 4 / 00
DATE WELL COMPLETED 5 / 4 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 10 ft.

Water level was measured using measuring tape

Well was developed for 1 hours
at 2 gpm

Method of development submersible pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	8	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	8	18	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	6	18	-	morrie #2	300 lbs
Grout	0	6	—	Neat Cement Bentonite	~~250~~ lbs. ____ lbs.

Grouting Method pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. U2420 Date 5 / 4 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 M-F Sand
2-6 Fine sandy silt
6-18 Fine sand & silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 42577

Atlas Sheet Coordinates 29 :14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW6
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 4/27/00
DATE WELL COMPLETED 4/27/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.

Borehole diameter:
Top 6 in.
Bottom 6 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 8 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid None Type of Rig Simco 2800

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	6	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	6	16	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	16	—	morie #1	300 lbs
Grout	0	3	—	Neat Cement	94 lbs.
				Bentonite	lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-4 Clayey Fine Sand & Silt
4-16 Fine Sandy Silt

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC
Well Driller (Print) Michael Abramowski
Driller's Signature
Registration No. U7420 Date 4/27/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42578

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW7
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 5 / 3 / 00
DATE WELL COMPLETED 5 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) versar Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 11.5 ft.

Water level was measured using m-scope

Well was developed for 1 hours
at 2 gpm

Method of development Sub Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	8	4	PVC	sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	8	18	4	PVC	sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	7	18	—	morie #1	300 lbs
Grout	0	7	—	Neat Cement	376 lbs.
				Bentonite	lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. U2420 Date 5 / 3 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18 F-M Sand & Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42579

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW8
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address ~~W END OF ALEXANDER AVE~~ Murphy Dr

DATE WELL STARTED 5 / 1 / 00
DATE WELL COMPLETED 5 / 2 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 6.5 ft.

Water level was measured using measure

Well was developed for 1 hours at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	6	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	6	16	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	
Gravel Pack	3.5	16	—	morie #1	300 lbs
Grout	0	3.5	—	Neat Cement Bentonite	94 lbs. lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. 52420 Date 5 / 2 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-4 Clayey Fine Sand & Silt
4-16 Fine Sandy Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42580

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW9
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR

DATE WELL STARTED 5/2/00
DATE WELL COMPLETED 5/2/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 5.5 ft.

Water level was measured using m-scope

Well was developed for 1 hours at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	6	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	6	16	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	16	—	Morie #1	300 lbs
Grout	0	3	—	Neat Cement	94 lbs.
				Bentonite	lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. 524 Date 5/2/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-16 Fine sand & silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42581

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW10
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR

DATE WELL STARTED 5 / 3 /00
DATE WELL COMPLETED 5 / 3 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using measuring tape

Well was developed for 1 hours at 2 gpm

Method of development Sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	6	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	6	16	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	
Gravel Pack	4	16	—	morie #1	350 lbs
Grout	0	4	—	Neat Cement Bentonite	185 lbs. lbs.

Grouting Method Pressure
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-16 M-F Sand & Silt

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael Akomosinski

Driller's Signature

Registration No. 37420 Date 5/3/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42582

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 17W11
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR

DATE WELL STARTED 5 / 2 / 00
DATE WELL COMPLETED 5 / 2 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using measure

Well was developed for 1 hours
at 2 gpm

Method of development sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Sch40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	5	15	4	PVC	Sch40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	15	—	morie #1	300lbs
Grout	0	3	—	Neat Cement Bentonite	55 lbs. lbs.

Grouting Method Pressure
Drilling Method HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Kamosinski

Driller's Signature

Registration No. U242C Date 5 / 2 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15 Fine sand & silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42583

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW12
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR

DATE WELL STARTED 5 / 3 / 00
DATE WELL COMPLETED 5 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 16 ft.
Well finished to 16 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 5 ft.

Water level was measured using m-tape

Well was developed for 1 hours
at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	6	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	6	16	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	4.75	16	—	morie #1	300 lbs
Grout	0	4.75	—	Neat Cement Bentonite	158 lbs. ___ lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid none Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. U2420 Date 5 / 3 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 M-F Sand & silt
2-8 Sandy clay
8-16 Fine sand & silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42584

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 812 MW 13
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address MURPHY DR

DATE WELL STARTED 5 / 4 / 00
DATE WELL COMPLETED 5 / 4 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Versar Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 8 in.
Bottom 6 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 10 ft.

Water level was measured using M-scope

Well was developed for 1 hours
at 2 gpm

Method of development Sub pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	9	4	PVC	Sch 80
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	9	19	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	5	19	—	morie #1	30 lbs
Grout	0	5	—	Neat Cement Bentonite	28 lbs. lbs.

Grouting Method Pressure
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature

Registration No. V2420 Date 5 / 4 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 F-M Sand
2-5 Fine Sandy Silt
5-19 Fine sand & Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 42806

Atlas Sheet Coordinates 29 14 446

OWNER CUSTOM LAWN SPRINKLER

Address 264 BRANCH PORT AVE.

City LONG BRANCH State NJ Zip Code

WELL LOCATION ADDRESS 149 AVE. OF THE COMMONS Owner's Well No.

County MONMOUTH Municipality SHREWSBURY TWP Lot No. 8 Block No. 70.01

WELL USE IRRIGATION

DATE WELL STARTED 7/18/00

DATE WELL COMPLETED 7/18/00

WELL CONSTRUCTION

Total Depth Drilled 100 ft.

Finished Well Depth 100 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
+1 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1	90	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	90	100	4	PVC	SCH40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	85	100		#1 sand	500 lbs
Grout	0	85		Neat Cement / (Bentonite)	_____ lbs / 200 lbs

RECORD OF TEST

Test Date 7/18/00

Static Water Level 47 ft. below land surface

Water Level Measured Using tape measure

Pumping Water Level 60 ft. below land surface

Well Was Pumped Using air compressor

Well Yield 30 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method Pressure w/ tremie pipe

Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT

Installed by We didn't install the pump Reg. No.

Pump Type

Depth of Pump below land surface ft.

Capacity gpm Horsepower

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company W B DRILLING CO.

Well Driller (Print) J. Winkowski

Driller's Signature Jeffrey Winkowski

Registration No. 1467 Date 7/20/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-22 Gray clay w/ green clay
22-42 Green clay w/ sand stone
42-85 Black sand fine w/ shells and Black clay
85-100 Gray coarse to fine sand w/ wood

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 42769

Atlas Sheet Coordinates 29 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-11
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5/4/00
DATE WELL COMPLETED 5/4/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 49 ft.
Well finished to 49 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 11 ft.

Water level was measured using MSCOPE

Well was developed for 1 hours at 5 gpm

Method of development Submersible Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	29	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	29	49	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	26	49	10	#1 Sand	1650 lbs
Grout	0	26	10	Neat Cement Bentonite	1649 lbs. 58 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-13' Organic Silt
13-15' Silt
15-49 Glouconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Pettey
Driller's Signature
Registration No. J13761 Date 5/24/00

NJ2993 COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42770

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-12
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 5 / 00
DATE WELL COMPLETED 5 / 5 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 50 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 11.5 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 5 gpm

Method of development Submersible Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	30	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 010)	30	50	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	27	50	10	#1 Sand	1650 lbs
Grout	0	27	10	Neat Cement Bentonite	108 lbs. 60 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-15' Organic Silt
15-50' Glauconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature
Registration No. J13761 Date 5 / 24 / 00

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42771

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-13
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 8 / 00
DATE WELL COMPLETED 5 / 8 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using MScope

Well was developed for 1 hours at 2 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-15' Organic Silt
15-20' Glauconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Driller (Print) William Petley
Signature
Registration No. J13761 Date 5 / 24 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42772

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-14
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 4 / 00
DATE WELL COMPLETED 5 / 4 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 9 ft.

Water level was measured using MSCOPE

Well was developed for 1 hours at 2 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used .010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-13' Organic Silt
13-15' Silty Sand
15-20' Glauconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature William Petley
Registration No. J13761 Date 5 / 24 / 00

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

Revised ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42772

Atlas Sheet Coordinates 29 : 14 : 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 Riverside Ave
City Ft Monmouth State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-24
County Monmouth Municipality Eatontown Boro Lot No. NA Block No. NA
Address W. End of Alexander Ave

DATE WELL STARTED 5 / 4 / 00
DATE WELL COMPLETED 5 / 4 / 00

TYPE OF WELL (as per Well Permit Categories) Monitoring
Regulatory Program Requiring Well Owner investigation Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 9 ft.

Water level was measured using MSCOPE

Well was developed for 1 hours at 2 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME-1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' fill
10-13' organic silts
13-15' silty sand
15-20' glounconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company CT+E Environmental Services Inc.
Well Driller (Print) William Petley
Driller's Signature William Petley (NJ)
Registration No. J13761 Date 6 / 27 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42773

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-15
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 8 / 00
DATE WELL COMPLETED 5 / 8 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 2 gpm

Method of development Centrifugal Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used .010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method TREMIE
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William Petter

Driller's Signature

Registration No. J13761 Date 5 / 24 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-15' Silt
15-20' Glauconite

NJ2993 COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42774

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-16
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 8 / 00
DATE WELL COMPLETED 5 / 8 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 1 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used .010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100165
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-12' Organic Silt
12-20' Glounconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature
Registration No. J13761 Date 5 / 24 / 00

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42775

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-17
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 3 / 00
DATE WELL COMPLETED 5 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used 010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William Pettey

Driller's Signature William Pettey

Registration No. J13761 Date 5 / 24 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-13' Organic Silt
13-17' Silty, Sand trace clay
17-20' Glounconite

NJ 2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42776

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-18
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5/2/00
DATE WELL COMPLETED 5/2/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 1010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature
Registration No. J13761 Date 5/24/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-13' Organic Silt
13-17' Silt
17-20' Glounconite

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42777

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-19
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 3 / 00
DATE WELL COMPLETED 5 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 50 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 12 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 5 gpm

Method of development Submersible pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	30	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	30	50	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	27	50	10	#1 Sand	1650 lbs
Grout	0	27	10	Neat Cement Bentonite	1087 lbs. 60 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-13' Organic silt
13-15' Silt
15-50' [redacted] Glouconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Pettey
Driller's Signature
Registration No. J13761 Date 5 / 24 / 00

NJ 2993 COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42778

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-20
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 2 / 00
DATE WELL COMPLETED 5 / 2 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 50 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 10 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 5 gpm

Method of development Submersible Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	30	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used 010)	30	50	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	27	50	10	#1 Sand	1650 lbs
Grout	0	27	10	Neat Cement Bentonite	1087 lbs. 60 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' FILL
10-13' organic silt
13-50' Glounconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature William Petley
Registration No. J13761 Date 5 / 24 / 00

NJ2993 COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42779

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-21
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 3 / 00
DATE WELL COMPLETED 5 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M SCOPE

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-12' organic silt
12-17' silt
17-20' Glounconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature
Registration No. J13761 Date 5 / 24 / 00

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42780

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-22
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 3 / 00
DATE WELL COMPLETED 5 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using MScope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used 1010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-13' Organic silt
13-17' Silt, trace clay
17-20' Glouconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature
Registration No. J13761 Date 5 / 24 / 00

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

5/3/00

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 42811

E
ML

Redacted - Privacy Act

Atlas Sheet Coordinates 29 14 428

OWNER _____

Address 477 MYRTLE AVE

City OCEANPORT State NJ Zip Code _____

WELL LOCATION ADDRESS 477 MYRTLE AVE **Owner's Well No.** _____

County MONMOUTH Municipality OCEANPORT BORO Lot No. 5.03 Block No. 72

WELL USE IRRIGATION

DATE WELL STARTED 05 / 19 / 00

DATE WELL COMPLETED 05 / 19 / 00

WELL CONSTRUCTION

Total Depth Drilled 171 ft.

Finished Well Depth 171 ft.

Borehole Diameter:
Top 8.0 in.
Bottom 8.0 in.

Well Casing Begins:
_____ ft. above grade or
1.0 ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1.0	146	4	PVC	SCHED.40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	146	166	4	PVC	SCHED.40
Blank Casings (No. Used)					
Tail Piece	166	171	4	PVC	SCHED.40
Gravel Pack	136	171	8.0	BLENDED	.025
Grout	3.5	136	8.0	Neat Cement _____ lbs Bentonite 550 lbs	

RECORD OF TEST

Test Date 05 / 19 / 00

Static Water Level 7 ft. below land surface

Water Level Measured Using MEASURED TAPE

Pumping Water Level 117 ft. below land surface

Well Was Pumped Using AIR LIFT

Well Yield 50 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method PRESSURE THROUGH TREMIE PIPE

Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by JOHN COYLE Reg. No. PI 21863

Pump Type SUBMERSIBLE

Depth of Pump below land surface 100 ft.

Capacity 12 gpm Horsepower 3/4

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-30 DARK GREEN SILTY CLAY
30-50 BLACK SAND
50-70 SILTY GRAY CLAY
70-125 GRAY CLAY
125-150 BLACK SAND W/SHELLS
150-165 FINE & MED GRAY SAND W/GREEN PEBBLES
165-171 FINE & MED GRAY SAND W/ GRAY CLAY

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company PICKWICK WELL DRILLING

Well Driller (Print) JOHN MURTHA

Driller's Signature John Murtha

Registration No. JD 21245 Date 06 / 30 / 00

COPIES: White - DEP 7/13/00 Canary - Driller 7/13/00 Pink - Owner Goldenrod - Health Dept. 7/13/00

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42781

Atlas Sheet Coordinates 29 : 14 443

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-23
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address W END OF ALEXANDER AVE

DATE WELL STARTED 5 / 2 / 00
DATE WELL COMPLETED 5 / 2 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using MSCOPE

Well was developed for 1 hours at 2 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 1050

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or (Screen) (No. Used 010)	5	20	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	20	10	#1 Sand	1100 lbs
Grout	0	3	10	Neat Cement Bentonite	121 lbs. 7 lbs.

Grouting Method Placement
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Fill
10-15' Silty, clayey sand
15-20' Glounconite

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William Petley
Driller's Signature
Registration No. J13761 Date 5/24/00

NJ2993

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42888

Atlas Sheet Coordinates 29 : 14 : 446

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE DR
City FORT MONMOUTH State NJ Zip Code 812

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW14
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 812 MURPHY DR

DATE WELL STARTED 5/12/00
DATE WELL COMPLETED 5/12/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.# —

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) M Lang Tele. # —

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface N/A ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using M-tape

Well was developed for .5 hours
at 2 gpm

Method of development Sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid None Type of Rig B-59

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	5	15	4	PVC	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	2.5	15	—	morie #1	350 lbs
Grout	0	2.5	—	Neat Cement	94 lbs.
				Bentonite	— lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 M-F Sand & Gravel
5-15 M-F Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC
Well Driller (Print) Michael A Komosinski
Driller's Signature [signature]
Registration No. J2420 Date 5/12/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42929

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY / De Watering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 6 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface .1 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	Steel sch 40	
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. .006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 Sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin DriPrime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 topsoil
2-6 clayey green saturated
6-19 F-M green glauconitic sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42930

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY / Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	steel	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. .006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 topsoil
2-6 Clayey green ~~ORANGE~~ subsoil
6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42931

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	Steel/sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S.006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 topsoil
2-6 clayey green orange subsoil
6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42932

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY/De watering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	Steel sch	40
Middle Casing (for triple cased wells only)	—				
Outer Casing (largest diameter)	—				
Open Hole or Screen (No. Used)	16	19	1.5	S.S. 006	Mesh
Blank Casings (No. Used)	—				
Tail Piece	—				
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid — Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 415T Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 top soil

2-6 Chyey green orange subsoil

6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42933

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	steel sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. 006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 Clayey Green orange subsoil
0-2 top soil
6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42934

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	Steel sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. .006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 top soil

2-6 Clayey green orange subsoil

6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42935

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	Steel sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. .006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	4	#0 sand	1501 bs
Grout	0	19	6	Neat Cement / (Bentonite)	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 top soil
2-6 Clayey green orange subsoil
6-19 F-M green glauconitic sand.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. Walker
Driller's Signature Douglas C. Walker
Registration No. 1457 Date 6/7/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42936

Atlas Sheet Coordinates 29 : 13 :634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/18/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	steel sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. .006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#2 sand	150 lbr
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: Godwin Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 topsoil
2-6 Clayey green orange sand soil
6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42937

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type: ~~Red~~ Godwin Dri Prime

Drilling Fluid — Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	steelsch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S.006	Mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / ~~Bentonite~~	— lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 top soil
2-6 Clayey green orange silt/cl
6-19 F-M green glauconitic sand.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. Walker
Driller's Signature Douglas C. Walker
Registration No. 1457 Date 6/7/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42938

Atlas Sheet Coordinates 29 : 13 634

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 111 RIVERVIEW RD.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality LITTLE SILVER B Lot No. 10 Block No. 72
Address 111 RIVERVIEW RD.

DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 ft.

Borehole diameter:
Top 5 in.
Bottom 6 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 1 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using tape

Well was developed for 1 hours at 2 gpm

Method of development Pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	16	1.5	steel sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	16	19	1.5	S.S. 006	mesh
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	19	6	#0 sand	150 lbs
Grout	0	19	6	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☒ Yes ☐ No

Pump capacity gpm

Pump type Goulds Dri Prime

Drilling Fluid Type of Rig Mobile

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company M & R SOIL INVESTIGATIONS, INC.

Well Driller (Print) D. Walker

Driller's Signature Douglas C. Walker

Registration No. 1457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 top soil
2-6 Clayey green orange subsoil
6-19 F-M green glauconitic sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43013

Atlas Sheet Coordinates 29 : 13 691

OWNER IDENTIFICATION - Owner LAUREL GARDENS COOPERATIV
Address 2 LAUREL PLACE
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW1
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1 Block No. 88
Address 2 LAUREL PLACE

DATE WELL STARTED 6/5/00
DATE WELL COMPLETED 6/5/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well USTS Case I.D.# 990324091553

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PSI Tele. # 856-764-6000

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 6 in.
Bottom 6 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 5.2 ft.

Water level was measured using TAPE

Well was developed for 1/2 hours at 2 gpm

Method of development Pump + Surge

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Geoprobe

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	.2	5	2"	PVC	40
Middle Casing (for triple cased wells only)	/				
Outer Casing (largest diameter)	/				
Open Hole or Screen (No. Used 10 SLOT)	5	15	2	PVC	40
Blank Casings (No. Used)	/				
Tail Piece	/				
Gravel Pack	3	15	6	#1 WG	350 LBS
Grout	.3	3	6	Neat Cement Bentonite	94 lbs. 6 lbs.

Grouting Method Pour To 3 feet deep
Drilling Method Augers

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-.5 Blacktop & stone
.5-13 Yellow med & fine sand
13-15 Orange med, Fine sand
Trace silt

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company TRISTATE ENVIRONMENTAL MGMT
Well Driller (Print) S. Weigand
Driller's Signature S Weigand
Registration No. TD1517 Date 6/8/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43014

Atlas Sheet Coordinates 29 : 13 691

OWNER IDENTIFICATION - Owner LAUREL GARDENS COOPERATIV
Address 2 LAUREL PLACE
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 2
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1 Block No. 88
Address 2 LAUREL PLACE

DATE WELL STARTED 6/5/00
DATE WELL COMPLETED 6/5/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well USTS Case I.D.# 9903240915553

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PSI Tele. # 856-764-6000

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 6 in.
Bottom 6 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 4.9 ft.

Water level was measured using TAPE

Well was developed for 1/2 hours at 2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig GEFCO

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	.2	5	2	PVC	40
Middle Casing (for triple cased wells only)	—				
Outer Casing (largest diameter)	—				
Open Hole or Screen (No. Used 10 SLOT)	5	15	2	PVC	40
Blank Casings (No. Used)	—				
Tail Piece	—				
Gravel Pack	3	15	6	#1 WG	350 LBS
Grout	.3	3	6	Neat Cement Bentonite	94 lbs. 6 lbs.

Grouting Method POUR TO 3 FT DEEP
Drilling Method AUGERS

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-.5 Black Top & STONE
.5-13. Yellow med SAND
13-15 Orange med & fine SAND & TRACE SILT

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company TRISTATE ENVIRONMENTAL MGMT
Well Driller (Print) S. Weigand
Driller's Signature S Weigand
Registration No. JD1517 Date 6/8/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43015

Atlas Sheet Coordinates 29 : 13 :691

OWNER IDENTIFICATION - Owner LAUREL GARDENS COOPERATIV
Address 2 LAUREL PLACE
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1 Block No. 88
Address 2 LAUREL PLACE

DATE WELL STARTED 6/5/00
DATE WELL COMPLETED 6/5/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well USTS Case I.D.# 9903240915553

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PSI Tele. # 856-764-6000

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 6 in.
Bottom 6 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 4.9 ft.

Water level was measured using Tape

Well was developed for 1/2 hours
at 2 gpm

Method of development Pump + Surge

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 75

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	.2	5	2	PVC	40
Middle Casing (for triple cased wells only)	—				
Outer Casing (largest diameter)	—				
Open Hole or Screen (No. Used 10 S/OJ	5	15	2	PVC	40
Blank Casings (No. Used)	—				
Tail Piece	—				
Gravel Pack	3	15	6	#1 WG	350 LBS
Grout	.3	3	6	Neat Cement	94 lbs.
				Bentonite	6 lbs.

Grouting Method Pour To 3FT. Deep
Drilling Method Augers

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-.5 Black Top + STONE
.5-13 Yellow Med SAND
13-15 Orange Med + Fine SAND Trace Silt

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company TRISTATE ENVIRONMENTAL MGMT
Well Driller (Print) S. Weigand
Driller's Signature S Weigand
Registration No. JD1517 Date 6/8/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43196

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address Owner's Well No. MW-3
County MONMOUTH 1122 ALEXANDER AVE Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING OWNER INVESTIGATION
DATE WELL STARTED 7/20/00
DATE WELL COMPLETED 7/20/00
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vannell Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed? ☑ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ____

Well was developed for 2 hours at 21 gpm

Method of development SUBMERSIBLE Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Canterra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	14	No. 1 Well Gravel		
Grout	0	3		Neat Cement	47 lbs.
				Bentonite	6 lbs.

Grouting Method TREMMY
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-14' Gray/green clay, silt and sand.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) Timothy Westover

Driller's Signature Timothy A Westover

Registration No. M1444 Date 7/28/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 3 COORDINATE NO. 29-14-445 PERMIT NO. 29-43196

DATE DRILLED 7-20-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg 1122 1122 ALEXANDER AVE. EATONTOWN NJ (Ft. Monmouth)

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE. FT. MONMOUTH, NJ. 077

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 14

CASING:

TYPE MONO FLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 4'

SCREEN:

TYPE MONO FLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 10'

GRAVEL PACK SIZE #1 well GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE WITH 2x2 CONCRETE PAD; CEMENT; BENT.; 4'—SOLID FLUSH CASING; CEMENT; BENT.; #1 well GRAVEL; 10'-.010 SLOT SCREEN; #1 well GRAVER	0"-14' → GRAY GREEN CLAYS SILTS AND SANDS
		WOOD		
		BORE		
		DRILLER		

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43197

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address 1122 ALEXANDER AVE

DATE WELL STARTED 7/20/00
DATE WELL COMPLETED 7/20/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☑ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ~~tape~~ STEEL TAPE

Well was developed for 2 hours
at 1 gpm

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Canterra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	4	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	14		No. 1 well Gravel	
Grout	0	3		Neat Cement	94 lbs.
				Bentonite	6 lbs.

Grouting Method TREMMY
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-14' Green/gray Clay, silt and sand (odor)

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) Timothy Westover
Driller's Signature Timothy A Westover
Registration No. M1444 Date 7/28/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 4 COORDINATE NO. 29-14-445 PERMIT NO. 29-43197

DATE DRILLED 7-20-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg 1122 1122 ALEXANDER AVE EATONTOWN NJ (FT. MONMO

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE. FT. MONMOUTH, NJ, 0770

DRILLING METHOD Auger SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 14'

CASING:

TYPE MONOFLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 4'

SCREEN:

TYPE MONO FLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 10'

GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SOONS	12" STEEL MANHOLE WITH 2X2 CONCRETE PAD; CEMENT; BENT.; CEMENT; 4'-SOLID F.M. CASING; 10'-.010 SLOT SCREEN; #1 well gravel	0'-14' → gray/green clays silts and sands. (stinky)
		NOT RECORDED		
		BY DRILLER		



DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43198

Atlas Sheet Coordinates 29 : 14 445

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-5
County MONMOUTH Municipality EATONTOWN BORO Lot No. N/A Block No. N/A
Address 1122 ALEXANDER AVE

DATE WELL STARTED 7/20/00
DATE WELL COMPLETED 7/20/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell. Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ____

Well was developed for 5 hours
at 21 gpm

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Centerra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 010)	5	15	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	4	15	#1 well Grave		
Grout	0	4		Neat Cement	94 lbs.
				Bentonite	6 lbs.

Grouting Method TREMMY
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15' Green/gray to orange/ha
clay, silt and sand.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) Timothy Westover

Driller's Signature Timothy A Westover

Registration No. M1444 Date 7/28/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW 5 COORDINATE NO. 09-14-445 PERMIT NO. 29-43198

DATE DRILLED 7-20-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg 1122 1122 ALEXANDER AVE. EATONTOWN NJ (FT. MONMOUTH)

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH, NJ. 07703

DRILLING METHOD AUGER SAMPLING METHOD COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 15'

CASING:

TYPE MONO FLEX FLUSH MOUNT SLOT — DIA 4" LENGTH 5'

SCREEN:

TYPE MONO FLEX FLUSH MOUNT SLOT .010 DIA 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
			12" STEEL MANHOLE WITH 2X2 CONCRETE PAD	
			CEMENT BENT.	0'-15' → GRAY/GREEN TO ORANGE/TAN CLAYS SILTS AND SANDS.
		NO SPOONS	5'-SOLID FLH. CASING	
			CEMENT BENT.	
			10'-.010 SLOT FLUSH MOUNT	
			#1 WELL GRAVEL	
			SET WELL @ 15'	

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43199

Atlas Sheet Coordinates 29 : 13 664

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 80-MW2
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 166 RIVERSIDE AVE

DATE WELL STARTED 7/24/00
DATE WELL COMPLETED 7/24/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☐ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ____

Well was developed for 5 hours
at 21 gpm

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ____ gpm

Pump type: ____

Drilling Fluid ____ Type of Rig Casterra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	2	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12		No. 1 well Gravel	
Grout	0	1		Neat Cement	lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12' Green/gray clayey silt and sands

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) Timothy Westover

Driller's Signature Timothy A Westover

Registration No. M1444 Date 7/28/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. 80-MW-2 COORDINATE NO. 29-13-664 PERMIT NO. 29-43199

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 07703

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07703

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA. 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT BENT.; 2'± SOLID CASING; CEMENT BENT.; #1 WELL GRAVEL; 10'-.010 SLOT SCREEN; #1 WELL GRAVEL	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		NO RECOVERY		
		6 D BY DRILLER		
				→ SET WELL @ 12'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43200

Atlas Sheet Coordinates 29 : 13 664

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 80-MW4
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 166 RIVERSIDE AVE

DATE WELL STARTED 7/24/00
DATE WELL COMPLETED 7/24/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed? ☑ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ____

Well was developed for 5 hours at <1 gpm

Method of development Submersible Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Canderra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	2	4	PVC	Schedule 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	Schd 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	No. 1 Well Gravel		
Grout	0	1		Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMY
Drilling Method Auger

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12' Green/gray clayey silt and sand.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) Timothy Westover

Driller's Signature Timothy A Westover

Registration No. M1444 Date 7/28/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. 80-MW-4 COORDINATE NO. 29-13-664 PERMIT NO. 29-43200

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 07703

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07703

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA. 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOON COMPOSITE	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT GROUT; 2" SOLID CASING; CEMENT GROUT; #1 WELL GRAVEL; 10'-.010 SLOT SCREEN; #1 WELL GRAVER	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		NOT RECORDED		
		BY DRILLER		
				→ SET WELL @ 12'

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43201

Atlas Sheet Coordinates 29 : 13 664

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 80-MW3
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 166 RIVERSIDE AVE

DATE WELL STARTED 7/24/00
DATE WELL COMPLETED 7/24/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☑ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ____

Well was developed for 1/2 hours
at 12 gpm

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Canterra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	2	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 010)	2	12	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	No. 1 well Gravel		
Grout	0	1		Neat Cement	10 lbs.
				Bentonite	0 lbs.

Grouting Method TREMMY
Drilling Method AUGER

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.
Well Driller (Print) Timothy Westover
Driller's Signature Timothy A. Westover
Registration No. M1444 Date 7/28/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12' Orange/tan clayey silt and sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. 80-MW-3 COORDINATE NO. 29-13-664 PERMIT NO. 29-43201

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 07703

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 07703

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA. 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT BENT; 4"-SOLID CASING; CEMENT BENT; #1 WELL GRAVEL; 10'-.010 SLOT SCREEN; #1 WELL GRAVEL	0'-12' → ORANGE/TAN, CLAYEY SILTS AND SANDS
		NO RECOVERY		
		BY DRILLER		
				→ SET WELL @ 12'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

E
ML

Well Permit No. 29 - 43202

Atlas Sheet Coordinates 29 : 13 664

OWNER IDENTIFICATION - Owner US ARMY
Address 173 RIVERSIDE AVE
City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 80-MW5
County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A
Address 166 RIVERSIDE AVE

DATE WELL STARTED 7/24/00
DATE WELL COMPLETED 7/24/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tecom Vinnell. Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Was steel protective casing installed?
☑ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using ____

Well was developed for 1 hours
at 21 gpm

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	2	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used, 010)	2	12	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12		No. 1 well Gravel	
Grout	0	1		Neat Cement Bentonite	10 lbs. 0 lbs.

Grouting Method TREMMY
Drilling Method Auger

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Centerra 450

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUTZ ENVIRONMENTAL INC.

Well Driller (Print) Timothy Westover

Driller's Signature Timothy C Westover

Registration No. M14414 Date 7/25/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12' Green/gray clayey silt and sand.

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. 80-MW-5 COORDINATE NO. 29-13-664 PERMIT NO. 29-43202

DATE DRILLED 7-24-2000 COUNTY MONMOUTH USE MONITOR

LOCATION Bldg. 166 (FORMERLY Bldg 80) 166 RIVERSIDE AVE FT. MONMOUTH NJ 07703

OWNER U.S. ARMY ADDRESS 173 RIVERSIDE AVE FT. MONMOUTH NJ 0770

DRILLING METHOD AUGER SAMPLING METHOD SPOON / COMPOSITE

HOLE DIA. 10" TOTAL DEPTH 12'

CASING:

TYPE MONOFLEX FLUSH MOUNT SLOT — DIA. 4" LENGTH 2'

SCREEN:

TYPE MONOFLEX FLUSH MOUNT SLOT .010 DIA. 4" LENGTH 10'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT

STATIC WATER LEVEL APPROX. 6' GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
		SPOONS	12" STEEL MANHOLE with 2x2 CONCRETE PAD; CEMENT BENT; 2" SOLID CASING; CEMENT BENT; #1 WELL GRAVEL; 10' - .010 SLOT SCREEN; #1 WELL GRAVEL	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		NOT REC		
		BY DRILLER		
				Set well @ 12'

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43670

Atlas Sheet Coordinates 29 : 14 458

OWNER IDENTIFICATION - Owner NJ SPORTS & EXPOSITION AU
Address GIANTS STADIUM E SERVICE GATE
City EAST RUTHERFORD State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County MONMOUTH Municipality OCEANPORT BORO Lot No. 30 Block No. 122
Address OCEANPORT AVE

DATE WELL STARTED 9/13/00
DATE WELL COMPLETED 9/13/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 00-4-27-1358-21

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) LAWSON Tele. # 201 7946900

WELL CONSTRUCTION

Total depth drilled 17 ft.
Well finished to 17 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed?
☑ Yes ☐ No

Static water level after drilling 8½ ft.

Water level was measured using Tape

Well was developed for 2 hours
at ½ gpm

Method of development Whale Pump

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 55

Health and Safety Plan submitted? ☐ Yes ☑ No

Level of Protection used on site (circle one) (None) D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	7	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .20)	7	17	2	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	5	17	8	SAND	500 lbs.
Grout	0	5	8	Neat Cement Bentonite	60 lbs. 50 lbs.

Grouting Method GRO-TX
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-17 Fine SAND
SOME SILT
Brn

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL REMED. CONT.
Well Driller (Print) Robert Kimley
Driller's Signature Robert Kimley
Registration No. JD 150 Date 9/13/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43671

Atlas Sheet Coordinates 29 : 14 458

OWNER IDENTIFICATION - Owner NJ SPORTS & EXPOSITION AU
Address GIANTS STADIUM E SERVICE GATE
City EAST RUTHERFORD State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 5
County MONMOUTH Municipality OCEANPORT BORO Lot No. 30 Block No. 122
Address OCEANPORT AVE

DATE WELL STARTED 9 / 18 / 00
DATE WELL COMPLETED 9 / 18 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 00-4-27-1358-21

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) LAWSON Tele. # 201 794 6900

WELL CONSTRUCTION

Total depth drilled 17 ft.
Well finished to 17 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 8½ ft.

Water level was measured using TAPE

Well was developed for 2 hours
at ½ gpm

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	7	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .20)	7	17	2	PVC	Sch 40
Blank Casings (No. Used .)					
Tail Piece					
Gravel Pack	5	17	8	SAND	500 lb
Grout	0	5	8	Neat Cement Bentonite	60 lbs. 50 lbs.

Grouting Method GRAVITY
Drilling Method HSA

Method of development SUBMERSIBLE PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig CME 55

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL REMED. CONT.

Well Driller (Print) Robert Kimley

Driller's Signature Robert Kimley

Registration No. JD 150[illegible] Date 9 / 18 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0 - 17 FM SAND
SOME SILT
BRN

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 43672

Atlas Sheet Coordinates 29 14 458

OWNER IDENTIFICATION - Owner NJ SPORTS & EXPOSITION AU
Address GIANTS STADIUM E SERVICE GATE
City EAST RUTHERFORD State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-6
County MONMOUTH Municipality OCEANPORT BORO Lot No. 30 Block No. 122
Address OCEANPORT AVE

DATE WELL STARTED 9/19/00
DATE WELL COMPLETED 9/19/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 00-4-27-1358-21

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) LANGAN Tele. # 201 794 6900

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 7 ft.

Water level was measured using Tape

Well was developed for 1 hours
at 2 gpm

Method of development Inside Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig MOBILE B-61

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) (None) D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .20)	5	15	2	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15	8	SAND	500 lbs
Grout	0	3	8	Neat Cement Bentonite	60 lbs. 25 lbs.

Grouting Method GRAVITY
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15 Fm Sand
Some Silt
Brn
Wet

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL REMED. CONT.
Well Driller (Print) Robert Kimley
Driller's Signature Robert Kimley
Registration No. JD 1504 Date 9/19/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43891

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW

Address BUILDING 173 ATT:SELF-PW-EV

City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. PW3

County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA

Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10/26/00

DATE WELL COMPLETED 10/26/00

TYPE OF WELL (as per Well Permit Categories)

Regulatory Program Requiring Well RECOVERY Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 7325368500

WELL CONSTRUCTION

Total depth drilled 20 ft.

Well finished to 20 ft.

Borehole diameter:
Top 15 in.
Bottom 15 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at — gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger.

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	6	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	5	20	6	PVC	10 Slot
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	20	15	Sand	#1 20 lbs.
Grout	0	3	15	Neat Cement Bentonite	20 lbs. 2 lbs.

Grouting Method Pressure

Drilling Method 10"/4 V HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand

10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESS

Well Driller (Print) Chris O'Shaughnessy

Driller's Signature

Registration No. 1419 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. _____ - 29 43892

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW

Address BUILDING 173 ATT:SELF-PW-EV

City FORT MONMOUTH State NJ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW 4

County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA

Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10/26/00

DATE WELL COMPLETED 10/26/00

TYPE OF WELL (as per Well Permit Categories) _____

Regulatory Program Requiring Well RECOVERY Case I.D.# _____

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.

Well finished to 20 ft.

Borehole diameter:
Top 15 in.
Bottom 15 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1/2 hours at 2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	6	PVC	Sch 40
Middle Casing (for triple cased wells only)	—		—		—
Outer Casing (largest diameter)	—		—	—	
Open Hole or Screen (No. Used 1)	5	20	6	PVC	10 Slot
Blank Casings (No. Used)	—		—	—	
Tail Piece	—		—	—	
Gravel Pack	3	20	15	Sand	#1
Grout	0	3	15	Neat Cement Bentonite	20 lbs. 2 lbs.

Grouting Method Pressure

Drilling Method 10"/4" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand

10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESSY

Well Driller (Print) Chris O'Shaughnessy

Driller's Signature [signature]

Registration No. J1419 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43893

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP1
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10/25/00
DATE WELL COMPLETED 10/25/00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—		—	—	—
Tail Piece	~~18~~	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout				Neat Cement	300 lbs.
				Bentonite	15 lbs.

Grouting Method Pressure
Drilling Method 4¼" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown Silty sand

10-20' Brown Silty sand to green Silty Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESS
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. 11419 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43894

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP2
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10 / 25 / 00
DATE WELL COMPLETED 10 / 25 / 00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—		—	—	
Outer Casing (largest diameter)	—		—	—	
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—				
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	0	13	8	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Pressure
Drilling Method 4¼" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown Silty Sand

10-20' Brown Silty Sand to Green Silty Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNES
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. J149 Date 11 / 6 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43895

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP3
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10/25/00
DATE WELL COMPLETED 10/25/00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 308500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using PUBL

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—		—	—	
Outer Casing (largest diameter)	—		—	—	
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—		—	—	
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	0	13	8	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Pressure
Drilling Method 4 1/4" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand
10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESS
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. 11419 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43896

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP4
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10/25/00
DATE WELL COMPLETED 10/25/00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—				
Outer Casing (largest diameter)	—				
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10Slot
Blank Casings (No. Used)	—				
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	0	13	8	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Pressure
Drilling Method 4 1/4" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand
10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESS
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. J1419 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43897

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP5
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10 / 25 / 00
DATE WELL COMPLETED 10 / 25 / 00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed?
☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours
at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—		—		—
Outer Casing (largest diameter)	—		—		—
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—		—		—
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	0	13	8	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Pressure
Drilling Method 4 1/4" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand
10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESSY
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. J1419 Date 11 / 6 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43898

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP6
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10 / 26 / 00
DATE WELL COMPLETED 10 / 26 / 00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	Ø	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—	—	—	—	
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	Ø	13	8	Neat Cement Bentonite	350 lbs. 15 lbs.

Grouting Method Pressure
Drilling Method 4 1/4" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand

10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESS
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. J1419 Date 11 / 6 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43899

Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW
Address BUILDING 173 ATT:SELF-PW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP7
County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA
Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10 / 26 / 00
DATE WELL COMPLETED 10 / 26 / 00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well GAS VENT Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	
Outer Casing (largest diameter)	—	—	—	—	
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—		—	—	
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	0	13	8	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Pressure
Drilling Method 4 1/4" HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNES
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature Chris O'Shaughnessy
Registration No. J1419 Date 11 / 6 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand

10-20' Brown silty sand to green silty sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

E
ML

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43900

29 13 659

US ARMY FORT MONMOUTH DPW Atlas Sheet Coordinates ___ : ___ : ___

OWNER IDENTIFICATION - Owner ___

Address BUILDING 173 ATT:SELF-PW-EV

City FORT MONMOUTH State NJ Zip Code ___

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SP8

County MONMOUTH Municipality OCEANPORT BORO Lot No. NA Block No. NA

Address BLDG. 699 SALTZMAN AVE.

DATE WELL STARTED 10/26/00

DATE WELL COMPLETED 10/26/00

TYPE OF WELL (as per Well Permit Categories) ___

Regulatory Program Requiring Well GAS VENT Case I.D.# ___

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536 8500

WELL CONSTRUCTION

Total depth drilled 20 ft.

Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade ☑ flush mounted

If finished above grade, casing height (stick up) above land surface — ft.

Was steel protective casing installed? ☐ Yes ☑ No

Static water level after drilling 8 ft.

Water level was measured using Probe

Well was developed for 1 hours at 1/2 gpm

Method of development Pump & Surge

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Auger

Health and Safety Plan submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	15	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 1)	15	18	2	PVC	10 Slot
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	18	20	2	PVC	Sch 40
Gravel Pack	13	20	8	Sand	#1
Grout	0	13	8	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Pressure

Drilling Method 4 1/4" HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10' Brown silty sand

10-20' Brown silty sand to green silty sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company HANDEX CORP./CHRIS O'SHAUGHNESS

Well Driller (Print) Chris O'Shaughnessy

Driller's Signature ___

Registration No. 51419 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.