FINAL

Remedial Investigation Report and Remedial Action Workplan

Site 283

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

Directorate of Public Works

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4700 South McClintock Drive, Suite 150
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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)/Remedial Action Workplan (RAWP) to document groundwater and surface water conditions at Site 283 located in the Main Post Area of Fort Monmouth, New Jersey. This report addresses the remedial investigation activities performed to investigate groundwater conditions from September 1999 through February 2004.

Site 283 is located in the north part of the Main Post Area of Fort Monmouth, on the north side of Sherrill Avenue. Site 283 is located approximately 200 feet south of Parkers Creek. Two Underground Storage Tank (UST) closure reports have been submitted to the New Jersey Department of Environmental Protection (NJDEP) regarding USTs in the immediate vicinity of Site 283.

The *UST Closure and Site Investigation Report, Building 283B, Main Post-West Area, NJDEP Registration No. 0081533-59* documents the removal of one tar-coated steel UST located north of former Building 283. Following soil excavation and removal of UST No. 0081533-59, post-excavation samples were collected and contained either non-detectable concentrations of total petroleum hydrocarbons (TPHC) or concentrations below the NJDEP cleanup criteria. Based on these post-excavation soil sampling results, the soil removed during the UST excavation was backfilled into the excavation.

The *UST Closure and Site Investigation Report, Building 283C, NJDEP Registration No. 0081533-229* documents the removal of one UST located in the courtyard area of Building 283. Following removal, numerous holes were observed on UST during inspection by the subsurface evaluator. Soils at the location of the holes were dark in color, and a sheen was observed on the groundwater. Following the removal of the UST, a spill was reported to the NJDEP and Case No. 97-08-28-1330-33 was assigned.

Six rounds of soil excavation and sampling were conducted at the UST excavation site. Approximately 398 cubic yards of potentially contaminated soil were removed and disposed off-site. One additional soil sample was collected from a Geoprobe® boring. During the six rounds of post-excavation sampling and one round of Geoprobe® soil sampling, TPHC was detected in 19 of 40 post-excavation soil samples at concentrations below the NJDEP criteria. Of the six volatile organic compounds (VOCs) detected in the soil samples, one VOC was detected at concentrations exceeding the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) in four of 13 soil samples. Lead was detected in 11 of 40 soil samples below the RDCSCC.

In response to the post-excavation soil sampling results and visual observations of potentially contaminated soil in the excavation area, three monitoring wells (283-MW1, 283-MW2 and 283-MW3) were installed at the excavation area of the UST in the vicinity of Building 283.

The Versar UST Closure and Site Investigation (SI) Report included sampling results collected from the three monitoring wells at Site 283. Benzene, ethylbenzene, total xylenes, aluminum, iron and lead were detected in groundwater samples collected at Site 283 at concentrations exceeding their respective NJDEP Groundwater Quality Criteria (GWQC).

In 1995, 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 283. A total of three monitoring wells comprise the quarterly groundwater monitoring program conducted by the DPW. As part of the remedial investigation of the Site 283, quarterly groundwater monitoring was conducted from September 1999 through February 2004.

During the 21 quarterly sampling events, three VOCs and eight Target Analyte List (TAL) metals were detected in groundwater samples at concentrations above their respective NJDEP GWQC. Based on the magnitude of their exceedances, the frequency of their occurrences and their wide-ranging results, benzene, ethylbenzene, total xylenes and lead are identified as the contaminants of concern (COCs) in groundwater at Site 283.

The RI also included the collection of groundwater depth measurements, the performance of slug tests, evaluation of 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. A MODFLOW computer model was used to simulate groundwater flow and contaminant transport beneath the site. The purpose of developing a groundwater model for Site 283 was to predict the migration of the identified COCs in site groundwater.

Due to the low concentrations of lead in groundwater at Site 283 and the slow migration rates for lead in the groundwater, there is little potential for significant lead impact by migration into Parkers Creek.

Based on biodegradation rates and the MODFLOW simulation, benzene, ethylbenzene and total xylenes could migrate from Site 283 northward towards Parkers Creek. The presence of underground utility lines beneath the surface at Site 283 and the fill material associated with these utilities implies the possibility that underground utilities could be conduits for contaminant migration.

The construction of three additional groundwater monitoring wells is suggested. The installation and quarterly monitoring of these additional monitoring wells will aid in more accurately determining if the present underground utilities are avenues for off-site transport of COCs and the extent of off-site migration of COCs at Site 283.

To evaluate surface water quality and ensure that groundwater seepage from Site 283 is not adversely impacting surface water, surface water samples should be collected and analyzed for COCs at locations in Parkers Creek, located north of Site 283.

Continued groundwater and surface water monitoring at Site 283 are recommended. Additional groundwater and surface water quality sampling results obtained from samples collected at Site 283 will be reported in Remedial Action Progress Reports (RAPRs).

A Limited Action with Enhanced Bioremediation and MNA alternative has been selected for Site 283 based upon its appropriateness for remediation of the relatively high concentrations of several COCs present at the site in a time frame acceptable to the NJDEP. ORC Advanced™ and MNA are very low in cost, and the COC concentrations at Site 283 do not require a permanent alternative. This alternative is equally effective in the short- and long-term, is easy to implement and can attain compliance with NJDEP criteria. Historical groundwater sampling results at Site 1122 indicate that natural attenuation is occurring at an acceptable rate, and the ORC Advanced™ injection program will accelerate this process. The ORC Advanced™ will be applied as specified by Regenesis.

Quarterly groundwater sampling at Site 283 will include groundwater samples collected from monitoring wells 283-MW1, 283-MW2 and 283-MW3 and the newly constructed monitoring wells 283-MW4, 283-MW5 and 283-MW6. The groundwater samples collected from these monitoring wells will be analyzed by the FMETL for VOCs plus 15 TICs and lead.

Quarterly surface water sampling at Site 283 will include surface water samples collected from locations in Parkers Creek, which is north of Site 283. Surface water samples collected from these locations will be analyzed by the FMETL for VOCs plus 15 TICs and lead.

The remedial action will be performed in accordance with the Quality Assurance Project Plan (QAPP) and the site-specific Health and Safety Plan (SSHSP) for Site 283.

1.0 INTRODUCTION

Versar has been contracted by the U.S. Army Garrison, Fort Monmouth, DPW, Fort Monmouth, New Jersey to prepare an RIR/RAWP to document groundwater and surface water conditions at Site 283 located in the Main Post Area of Fort Monmouth, New Jersey. This report addresses remedial investigation activities performed at this site to investigate groundwater conditions from September 1999 through February 2004.

1.1 Objectives

The objectives of this RIR/RAWP are to define aquifer chemical and physical characteristics and to determine the requirement for further remedial activities at Site 283. 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 283 through 19 quarterly groundwater sampling events conducted from September 1999 through February 2004 and two low-flow sampling events in August and October 2000.
- Comparison of the groundwater sampling results with the NJDEP GWQC.
- Investigation and evaluation of the designated aquifer uses, the associated aquifer classification, and the appropriate groundwater quality criteria for groundwater resources beneath Site 283. The NJDEP Ground Water Quality Standards (GWQS) (NJAC 7:9-6, January 7, 1993) 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 283 during August 2001 to characterize hydraulic conductivity and groundwater flow regime.
- Development of a groundwater flow and transport model for Site 283 based on hydrogeologic data, field investigation programs and technical research to evaluate the migration of potential COCs beneath Site 283.
- Formulation of an RAWP for Site 283.

1.2 Report Organization

This report is organized to minimize repetition. **Section 2.0** provides background information and a general description of Site 283 located in the Main Post Area of Fort Monmouth. **Section 3.0** describes and summarizes the field activities conducted at Site 283, including groundwater sampling from monitoring wells and aquifer testing. **Section 4.0** presents the physical characterization of Site 283 including lithology and groundwater conditions. The chemical characterization of Site 283 is presented in **Section 5.0**, which includes groundwater sampling results and the determination of potential COCs. **Section 6.0** discusses the potential for contaminant migration in the vicinity of Site 283 and presents groundwater modeling involving the COCs. Conclusions and recommendations for Site 283 are presented in **Section 7.0**. **Section 8.0** presents the RAWP for Site 283.

2.0 SITE BACKGROUND AND ENVIRONMENTAL SETTING

The following sections describe Site 283 background and environmental setting of the area surrounding Fort Monmouth and Site 283. Included is a description of location, background, current conditions and environmental setting at Site 283.

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 283 is located in the north part of the Main Post area of Fort Monmouth, on the north side of Sherrill Avenue (**Figure 2-2**). Site 283 is located approximately 200 feet south of Parkers Creek.

2.2 Site Background

In the early 1990s, the DPW developed a UST program for managing approximately 506 storage tanks located throughout the Fort Monmouth installation (Main Post, Charles Wood and Camp Evans areas). This program was undertaken 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 gas-fed boilers, and removing 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 September 1998 and October 2000) have been submitted to the NJDEP regarding USTs in the immediate vicinity of Site 283. These two reports are presented in **Appendix A** and **Appendix B** and are discussed below in **Sections 2.2.1** and **2.2.2**, respectively.

In 1995, the DPW submitted an SI report for the Main Post and Charles Wood areas. This site investigation report is discussed below in **Section 2.2.3**. The section of the SI Report pertaining to Site 283 is included in **Appendix C**.

The groundwater monitoring program presented in this report includes three monitoring wells (283-MW1, 283-MW2 and 283-MW3) installed as part of UST closures at Site 283. The locations of these three monitoring wells are shown in **Figure 2-3**. A well

construction summary is provided in **Table 2-1**. Monitoring well records are provided in **Appendix D**.

2.2.1 UST Closure and SI Report, Building 283B (SMC, 1998)

According to the *UST Closure and Site Investigation Report, Building 283B, Main Post-West Area, NJDEP Registration No. 0081533-59*, SMC, September 1998 (**Appendix A**), there was one tar-coated steel UST (UST No. 0081533-59) located north of former Building 283. UST No. 0081533-59 was a 10,000-gallon No.2 fuel oil UST. On August 11, 1997, UST number 0081533-59 was cleaned, excavated and disposed of in accordance with NJDEP requirements. No holes or punctures were observed on the tank during the inspection by the subsurface evaluator. There was no evidence of leakage into surrounding soils based on visual observations and field screening using an organic vapor analyzer (OVA).

Following soil excavation and removal of UST No. 0081533-59, seven post-excavation samples were collected and analyzed for TPHC. 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). Based on these post-excavation soil sampling results, the soil that was excavated during the UST excavation was backfilled into the excavation.

2.2.2 UST Closure and SI Report, Building 283C (Versar, 2000)

According to the *UST Closure and Site Investigation Report, Building 283C, NJDEP Registration No. 0081533-229*, Versar, October 2000, (**Appendix B**), there was one UST (No. 0081533-229) located in the courtyard area of Building 283 (**Figure 2-4**). UST No. 0081533-229 was a 3,000-gallon steel tank which contained gasoline. On August 28, 1997, UST No. 0081533-229 was cleaned, excavated and disposed of in accordance with NJDEP closure requirements. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, numerous holes were observed in the UST during inspection by the subsurface evaluator. Soils at the location of the holes were dark in color and appeared to be contaminated. Groundwater was encountered at 8 feet bgs and a sheen was observed on the groundwater. Following the removal of UST No. 0081533-229, a spill was reported to the NJDEP and Case No. 97-08-28-1330-33 was assigned.

Soil Sampling and Excavation

Between September 3, 1997 and October 3, 1997, six rounds of soil excavation and sampling were conducted at the UST excavation site of UST No. 0081533-229. Approximately 398 cubic yards of potentially contaminated soil were removed and disposed off-site. Soils were removed from the excavation to a maximum depth of 14 feet bgs until no evidence of contamination remained (visual or with an OVA). On July 1, 1998, one additional soil sample was collected from a Geoprobe® boring at a depth of 7.5 bgs. During the six rounds of post-excavation sampling and the one round of Geoprobe® soil sampling, a total of 40 soil samples were collected and analyzed for TPHC, VOCs plus 15 TICs and lead.

TPHC was detected in 19 of 40 post-excavation soil samples at concentrations below the NJDEP cleanup criteria of 10,000 mg/kg. There were six VOCs detected in soil samples collected at the UST excavation site of UST No. 0081533-229 (acetone, benzene, ethylbenzene, methylene chloride, toluene and total xylenes). Of these six VOCs, one VOC (benzene) was detected at concentrations exceeding the NJDEP RDCSCC. Benzene was detected above the RDCSCC of 3 mg/kg in four of 13 soil samples collected on September 3, 1997, at a maximum concentration of 21 mg/kg. Lead was detected in 11 of 40 soil samples below the RDCSCC of 400 mg/kg at a maximum concentration of 59.83 mg/kg.

Groundwater Sampling
In response to the post-excavation soil sampling results and visual observations of potentially contaminated soil in the excavation area, one shallow overburden monitoring well (283-MW2) was installed at the excavation area of UST No. 0081533-229 on July 28, 1999. Well 283-MW2 was installed to a maximum finished depth of 20 feet bgs. This well was screened from a depth of 5-20 feet bgs with 4-inch diameter 20-slot PVC.

On March 28, 2000, two additional monitoring wells (283-MW1 and 283-MW3) were installed in the vicinity of Building 283. Well 283-MW1 was installed to a maximum finished depth of 25 feet bgs and was screened from a depth of 5-25 feet bgs with 4-inch diameter 10-slot PVC. Well 283-MW3 was installed to a maximum finished depth of 20 feet bgs and was screened from a depth of 5-20 feet bgs with 4-inch diameter 10-slot PVC. The locations of these three monitoring wells are shown in **Figure 2-3**. Monitoring well records are provided in **Appendix D**. Well construction details are summarized in **Table 2-1**.

In the UST Closure and SI Report, October 2000 (**Appendix B**), Versar reported sampling results collected from the three monitoring wells (283-MW1, 283-MW2 and 283-MW3) at Site 283. Groundwater samples were collected by the DPW from well 283-MW2 during five quarterly sampling rounds between September 1999 and August 2000. Groundwater samples were collected by the DPW from wells 283-MW1 and 283-MW3 during two quarterly sampling rounds in June and August 2000. The groundwater samples collected at the three monitoring wells were analyzed for VOCs plus 15 tenatively identified compounds (TICs), SVOCs plus 15 TICs, pesticides, polychlorinated biphenyls (PCBs) and TAL metals. In the October 2000 report, Versar also presented one groundwater flow map that shows groundwater flow to the northwest. Groundwater sampling results for wells 283-MW1, 283-MW2 and 283-MW3, as presented in the Versar October 2000 report, are included in **Appendix B** and are included as part of this report (**Section 5.0**). In the October 2000 report, Versar reported that benzene, ethylbenzene, total xylenes, aluminum, iron and lead were detected in groundwater samples collected at Site 283 at concentrations exceeding their respective NJDEP GWQC.

2.2.3 SI Report for Main Post and Charles Wood Areas (Weston, 1995)
Roy F. Weston, Inc. (Weston), as part of the SI of the Fort Monmouth military installation, conducted soil sampling, monitoring well installation and sampling and

geophysical surveying. In addition to sampling of soil and groundwater at sites throughout the Main Post and Charles Wood areas of Fort Monmouth, Weston established background concentrations of chemical constituents in soil and groundwater for the Fort Monmouth installation, as reported in the Weston SI Report (1995) (**Appendix C**). These background concentrations have been used by the DPW for comparing sampling 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 Site Conditions

Versar conducted a site walk-through on April 28, 2004 to assess site conditions at Site 283. The site currently consists of Building 283, which is used by Fort Monmouth as an office building for military personnel. Underground utilities at Site 283 are shown in **Figure 2-5**. Due to security reasons, site photographs were not taken during the Site 283 walk-through.

2.4 Environmental Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Site 283. 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 283 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 10-60 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 60-80 percent of the sand fraction in the upper part of the unit. The upper part of the Tinton Sand is often highly oxidized and iron oxide encrusted (Minard, 1969). Groundwater occurs beneath the site at a depth of approximately 5-8 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 1995 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.

As presented in **Appendix D**, the lithologic logs from monitoring well installations at Site 283 indicate that the lithology consists of asphalt, topsoil, fill and native material. The fill observed in two of the three borings at Site 283 was encountered at 2-7 feet bgs and consists of cinders, slag, coal fragments and brown coarse-medium-fine sand with some medium-fine gravel. The native material encountered in the borings at Site 283 consists of brown to orange sand, silt and clay. Water-level elevation data collected during this RI indicate groundwater flow was north-northwest toward Parkers 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 2-25 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 (2-9 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 283.

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 on April 17, 2001. 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.

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 (e.g., streams, lakes); and
- 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. Groundwater in the vicinity of Site 283 appears to be flowing in a north-northwest direction toward Parkers Creek (see **Section 4.2**).

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 0-10 percent slopes)
- HV Humaquepts, frequently flooded
- KvA Kresson loam (with 0-5 percent slopes)
- UA Udorthents, smoothed
- UD Udorthents – urban land complex (with 0-3 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 1-10 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 283 are classified as UA – Udorthents, smoothed, which may also include old sand and gravel pits that have been smoothed or filled in (**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 above amsl in elevation.

Surface water runoff from the western part of the Main Post flows into the Lafetra Creek to the north or into the 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 283 is located approximately 200 feet south of Parkers 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 from Site 283 is likely northward into Parkers 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 283. Remedial investigation activities were performed from September 1999 and continued through February 2004. 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 283 are described in the following sections.

3.1 Well Installation

A total of three monitoring wells (283-MW1, 283-MW2 and 283-MW3) comprise the quarterly groundwater monitoring program conducted by the DPW. As discussed in **Section 2.2.2**, these monitoring wells were installed as part of the closure for former UST No. 0081533-229. Well 283-MW2 was installed in July 1999, and wells 283-MW1 and 283-MW3 were installed in March 2000. The locations of these monitoring wells (**Figure 2-3**) were strategically selected by the DPW to monitor possible contaminants released into the groundwater due to the former UST located at Site 283. The monitoring well construction details are discussed in **Section 2.2** and are summarized in **Table 2-1**. Well boring logs and monitoring well records are provided in **Appendix D**.

3.2 Groundwater Sample Collection Activities

As part of the remedial investigation of Site 283 quarterly groundwater monitoring was conducted from September 1999 through February 2004. Sampling activities were performed in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (December 1997). Monitoring well 283-MW2 was sampled during 19 quarterly sampling rounds (#1 through #19) from September 1999 through February 2004. Monitoring wells 283-MW1 and 283-MW3 were incorporated later into the quarterly monitoring program and sampled from June 2000 through February 2004 during 16 quarterly rounds (#4 through #19).

During the 19 rounds of quarterly groundwater sampling, a total of 96 groundwater samples, including 11 duplicate samples, 17 field blanks and 17 trip blanks for quality assurance/quality control (QA/QC), were collected from the three monitoring wells at Site 283. The quarterly groundwater samples were analyzed by the Fort Monmouth Environmental Testing Laboratory (FMETL) for VOCs plus 15 TICs using USEPA Method 624, SVOCs plus 25 TICs using USEPA Method 625, pesticides and PCBs using USEPA Method 608, and TAL metals 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 E**. The results of the quarterly groundwater monitoring program are discussed in **Section 5.1** and are presented in **Table 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 August 31, 2000 (Low Flow #1) and October 13, 2000 (Low Flow #2) using an NJDEP-accepted low-flow groundwater sampling technique A total of ten samples, including two duplicate samples and two field blanks, were collected and analyzed for TAL metals to determine whether metal concentrations observed in the groundwater samples at Site 283 are due to entrained soil particles (e.g., high turbidity) rather than dissolved phased groundwater constituents. The samples collected during the two low-flow sampling rounds were analyzed by the FMETL for 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 E**. The results of the low-flow sampling rounds for Site 283 are discussed in **Sections 5.1** and presented in **Table 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 5.3** and discussed in **Section 6.1**.

3.3 Groundwater Depth Measurements

During each of the groundwater monitoring rounds conducted at Site 283 (including the 19 quarterly monitoring rounds and two low-flow rounds), measurements of the depth to water was recorded with an accuracy of 0.01 feet. These depth to groundwater measurements, recorded from September 1999 through February 2004, are presented in **Table 3-2**. 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 three monitoring wells located at Site 283 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.

The 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 over time. The collected data were then transferred to a personal computer for later review and reduction. The raw data are presented in **Appendix F**. 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 COC at Site 283. An Offsite Receptor Report (October 24, 2001) was prepared by Environmental Data Resources, Inc. (EDR) for COCs at a central point surrounding the Main Post (less than one mile from Site 283).

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 COCs at Site 283. The search was performed for a one-mile radius surrounding a point at the center of the M-18 Landfill site on the Main Post of Fort Monmouth (addressed in a separate RIR). The M-18 Landfill site is located approximately 100 feet north of Site 283.

A copy of the sensitive receptor survey is provided in **Appendix G** and a copy of the well search summary is provided in **Appendix H**. 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 283. 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 September 1999 through February 2004 are also presented in this section.

4.1 Lithology

The lithology encountered at Site 283 consists of asphalt, topsoil, fill and native material. The fill observed in the borings at Site 283 consisted of cinders, slag, coal fragments, and brown coarse-medium-fine sand, some medium-fine gravel. Native material encountered in the borings at Site 283 consists of brown to orange sand, silt and clay. Two geologic cross-sections (A-A' and A-A") were prepared that depict the subsurface lithology in the study area. Geologic cross section A-A' depicts the profiles for monitoring wells 283-MW2 and 283-MW3. Geologic cross section A'-A" depicts the profiles for monitoring wells 283-MW1 and 283-MW3. The geologic 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 D**.

The geologic cross-sections A-A' and A-A" depict eight lithologic units. Lithologic units 1 and 2 represent asphalt and topsoil, respectively. Lithologic units 3 and 4 represent fill material, and lithologic units 5, 6, 7 and 8 represent native materials. The lithology of the native material is consistent with the Tinton Sand Formation (Minard, 1969). The following underground utilities are shown in geologic cross-sections A-A' and A-A":

- One 20-inch diameter sanitary sewer is shown in both geologic cross-section A-A' and geologic cross-section A-A". The elevation of this sanitary sewer is approximately 2.75 feet amsl (inferred from invert elevations shown on **Figure 4-1)**.
- One 8-inch diameter storm sewer is shown in geologic cross-section A-A". The elevation of this storm sewer is unknown (shown on **Figure 4-3** as approximately 7 feet amsl).

4.2 Groundwater Flow

During the groundwater sampling program at Site 283 (19 quarterly rounds and two low-flow rounds), groundwater was encountered in monitoring wells at Site 283 at depths ranging from 4.62 to 8.54 feet bgs (**Table 3-2**) with a slight gradient toward the northwest. Groundwater velocity and flow directions were predicted based on groundwater elevation data and slug test results (see below), as well as the interpretation of groundwater contour maps prepared for selected sampling events.

4.2.1 Groundwater Flow Direction

In accordance with NJAC 7:26E-3.13(d) 2iv, 16 groundwater contour maps were generated based on groundwater elevations at the three monitoring wells. Three of these groundwater contour maps also include groundwater elevation data based on measurements at 11 monitoring wells located in the nearby M-18 Landfill site (wells 290-MW1, 290-MW2, 296-MW1, 296-MW2, 296-MW3, 296-MW4, 296-MW6, 296-MW7, 296-MW8, MP18-MW24 and MP18-MW25). The 16 groundwater contour maps were derived from groundwater depth measurements collected on June 28, 2000 (**Figure 4-4a**), August 10, 2000 (**Figure 4-4b**), October 17, 2000 (**Figure 4-4c**), January 5, 2001 (**Figure 4-4d**), April 4, 2001 (**Figure 4-4e**), July 24, 2001 (**Figure 4-4f**), December 11, 2001 (**Figure 4-4g**), March 8, 2002 (**Figure 4-4h**), May 16, 2002 (**Figure 4-4i**), September 10, 2002 (**Figure 4-4j**), December 3, 2002 (**Figure 4-4k**), February 27, 2003 (**Figure 4-4l**), May 19, 2003 (**Figure 4-4m**), August 4, 2003 (**Figure 4-4n**), November 13, 2003 (**Figure 4-4o**) and February 5, 2004 (**Figure 4-4p**). The groundwater underlying Site 283 consistently flows to the north-northwest towards Parkers Creek. No significant variations in groundwater flow conditions were observed in these 16 groundwater contour maps. The groundwater elevation data are presented in **Table 3-2**.

4.2.2 Hydrogeologic Properties

As discussed in **Section 3.4**, Versar conducted slug testing of the three monitoring wells located at Site 283 on August 14, 2001. Versar used the computer software *Aquifer Test* by Waterloo Hydrogeologic, Inc. (version 3.01, 2001) to reduce slug testing data using the Bouwer-Rice methodologies. Data plots generated by Aquifer Test are presented in **Appendix F**. A summary of the calculated conductivity values is presented in **Table 4-3**.

The calculated conductivity values range from 2.41 feet per day at monitoring well 283-MW2 to 4.38 feet per day at well 283-MW3, with a calculated geometric mean of 3.5 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 283. 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 283 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 283, based on water level measurements collected on January 5, 2001, was estimated at approximately 0.0074 feet per foot.

Groundwater flow velocity (v) in the vicinity of Site 283 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, 3.5 feet per 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 283 was calculated to be approximately 0.065 feet per day (approximately 24 feet per year) based on the January 5, 2001 water-level measurements.

5.0 SITE CHEMICAL CHARACTERIZATION

This section includes a discussion of the chemical characterization of Site 283 based on groundwater samples collected and analyzed during 21 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, a New Jersey certified laboratory (Certification No. 13461).

5.1 Groundwater Sampling Results

This section presents a discussion of the results of laboratory analyses performed for the 21 rounds of groundwater samples collected from September 1999 through February 2004 from the three monitoring wells (283-MW1 through 283-MW3) at Site 283. These 21 rounds are a combination of 19 quarterly rounds (#1 through #19) conducted at well 283-MW2, 16 quarterly rounds (#4 through #19) at wells 283-MW1 and 283-MW3 and two additional low-flow rounds (Low Flow #1 and Low Flow #2) 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 August 31, 2000 (Low Flow #1), and October 13, 2000 (Low Flow #2) using a low-flow groundwater sampling technique for 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 metal concentrations at Site 283.

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 groundwater that is 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 GWQC for Class II-A aquifers per NJAC 7:9-6, Table 1.

During the 21 quarterly sampling rounds, a total of seven VOCs were detected in site groundwater. Three VOCs were detected at concentrations that exceeded their respective GWQC in at least one sample, while the remaining four VOCs were detected below their respective GWQC. A total of nine SVOCs were detected in site groundwater below their respective GWQC. No pesticides or 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 TAL Metals (**Section 5.1.4**). Analytes detected in groundwater samples at Site 283 at concentrations above the NJDEP criteria are bold and highlighted in **Table 5-1** and are discussed below. Due to the occurrences of high concentrations of TICs (both VOCs and

SVOCs) in samples collected at well 283-MW2, the total concentrations of these TICs are provided in **Table 5-1** and are also discussed below.

5.1.1 VOCs

During 21 quarterly sampling rounds, three VOCs were detected in site groundwater at concentrations that exceeded their respective GWQC in at least one sample.

Benzene was detected at concentrations exceeding the GWQC of 1.0 ug/L in 19 rounds of sampling collected at two monitoring well locations. Concentrations ranged from 1.47 ug/L (sampling round #16) in 283-MW3 to 1,055.06 ug/L (sampling round #10) in 283-MW2.

Ethylbenzene was detected at concentrations exceeding the GWQC of 700 ug/L in nine rounds of sampling collected at one monitoring well location. Concentrations ranged from 711.17 ug/L (sampling round #10) in 283-MW2 to 1,160.45 ug/L (sampling round #7) in 283-MW2.

Total xylenes were detected at concentrations exceeding the GWQC of 1,000 ug/L in 18 rounds of sampling collected at one monitoring well location. Concentrations ranged from 1,427.1 ug/L (sampling round #19) in 283-MW2 to 5,960.7 ug/L (sampling round #4) in 283-MW2.

VOC TICs were detected in 19 rounds of sampling collected at three monitoring well locations. Concentrations ranged from 9 ug/L (sampling round #16) in 283-MW3 to 13,500 ug/L (sampling round #6) in 283-MW2. There are no NJDEP criteria for VOC TICs in groundwater.

5.1.2 SVOCs

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

SVOC TICs were detected at concentrations exceeding the GWQC of 100 ug/L in 19 rounds of sampling collected at three monitoring well locations. Concentrations ranged from 4 ug/L (sampling round #19) in 283-MW1 to 4,912 ug/L (sampling round #7) in 283-MW2.

5.1.3 Pesticides and PCBs

No pesticides or PCBs were detected above the appropriate GWQC at the site.

5.1.4 Metals

During 21 quarterly sampling rounds, 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 21 rounds of sampling collected at three monitoring well locations. Concentrations ranged from 234 ug/L (sampling round #18) in 283-MW3 to 4,710 ug/L (sampling round #19) in 283-MW1.

Antimony was detected at concentrations exceeding the GWQC of 20 ug/L in one round of sampling collected at one monitoring well location at a concentration of 83.6 ug/L (sampling round #17) in 283-MW1.

Arsenic was detected at concentrations exceeding the GWQC of 8.0 ug/L in three rounds of sampling collected at three monitoring well locations. Concentrations ranged from 8.1 ug/L (sampling round #18) in 283-MW3 to 29.9 ug/L (sampling round #12) in 283-MW3.

Cadmium was detected at concentrations exceeding the GWQC of 4.0 ug/L in one round of sampling collected at one monitoring well location at a concentration of 5.1 ug/L (sampling round #8) in 283-MW3.

Iron was detected at concentrations exceeding the GWQC of 300 ug/L in 21 rounds of sampling collected at three monitoring well locations. Concentrations ranged from 306 ug/L (sampling round #6) in 283-MW1 to 40,500 ug/L (sampling round #8) in 283-MW3.

Lead was detected at concentrations exceeding the GWQC of 10 ug/L in 15 rounds of sampling collected at three monitoring well locations. Concentrations ranged from 11.5 ug/L (sampling round #4) in 283-MW2 to 33.1 ug/L (Low Flow #1) in 283-MW2.

Manganese was detected at concentrations exceeding the GWQC of 50 ug/L in one round of sampling collected at one monitoring well location at a concentration of 58.2 ug/L (sampling round #19) in 283-MW1.

Sodium was detected at concentrations exceeding the GWQC of 50,000 ug/L in seven rounds of sampling collected at one monitoring well location. Concentrations ranged from 50,800 ug/L (sampling round #14) to 80,100 ug/L (sampling round #19) in 283-MW1.

5.2 COCs

In order to determine the potential COCs in groundwater at Site 283, the first step was to identify exceedances of the NJDEP GWQC in monitoring well samples collected at Site 283. These exceedances are presented in **Section 5.1** above and in **Table 5-1**. There were four groundwater constituents identified as COCs (benzene, ethylbenzene, total xylenes and lead) at Site 283, as discussed in this section.

There were several factors that were used to eliminate or identify analytes as COCs. These factors include the magnitude of the exceedances, the frequency of the occurrences, comparisons to low-flow sampling results (for metals only), and comparisons to established background concentrations (see **Section 2.2.3**). **Table 5-2** summarizes the groundwater sampling results for the potential COCs. **Table 5-3** summarizes the process used to identify COCs in groundwater at Site 283.

There were three VOCs (benzene, ethylbenzene and total xylenes) that were detected at concentrations exceeding the NJDEP GWQC in groundwater samples collected at Site 283. These three compounds are considered to be COCs at Site 283, as discussed below:

- Benzene was detected at concentrations exceeding the GWQC of 1.0 ug/L in each of the seven quarterly groundwater monitoring rounds conducted at well 283-MW2 (at concentrations ranging from 130.8 ug/L to 1,009.73 ug/L). Benzene was also detected at concentrations above the GWQC of 1.0 ug/L in each of the four quarterly groundwater monitoring rounds conducted at well 283-MW3 (at concentrations ranging from 5.3 ug/L to 11.76 ug/L). Based on the magnitude of the exceedances and the frequency of the occurances, benzene is considered a COC in groundwater at Site 283.

- Ethylbenzene was detected at concentrations exceeding the GWQC of 700 ug/L in six of the seven quarterly groundwater monitoring rounds conducted at well 283-MW2 (at concentrations ranging from 717.50 ug/L to 1,160.45 ug/L). Based on the magnitude of the exceedances and the frequency of the occurances, ethylbenzene is considered a COC in groundwater at Site 283.

- Total xylenes were detected at concentrations exceeding the GWQC of 1,000 ug/L in each of the seven quarterly groundwater monitoring rounds conducted at well 283-MW2 (at concentrations ranging from 2,125.86 ug/L to 5,960.70 ug/L). Based on the magnitude of the exceedances and the frequency of the occurances, total xylenes is considered a COC in groundwater at Site 283.

There were SVOCs detected above their respective GWQC in groundwater samples collected at Site 283. Therefore, there are no SVOCs of concern at this site.

There were no pesticides or PCBs detected in groundwater samples collected at Site 283. Therefore, there are no pesticides or PCBs of concern at this site.

There were eight metals that were detected in Site 283 groundwater at concentrations exceeding the NJDEP GWQC (aluminum, antimony, arsenic, cadmium, iron, lead, managanese and sodium). The specific exceedances and the identification of each of these metals as a potential contaminant of concern 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 283. The seven different metals that were detected in Site 283 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 SI (Weston, 1995), which are presented in **Tables 5-1** and **5-3**. Non-native metals are discussed in relation to the NJDEP GWQC only.

Of the seven metals detected in Site 283 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 four 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 (sodium) as follows:

- Aluminum is not considered to be a COC because aluminum was not detected in groundwater at concentrations exceeding the MBC.
- Iron is not considered to be a COC because iron was not detected in groundwater at concentrations exceeding the MBC.
- Manganese is not considered to be a COC because manganese was not detected in groundwater at concentrations exceeding the MBC.
- Sodium is not considered to be a COC because although sodium was detected above its MBC, it was detected infrequently in only one monitoring well.

There were four non-native metals that exceeded their respective GWQC (antimony, arsenic, cadmium and lead). The concentrations of antimony, arsenic, cadmium and lead that were detected in groundwater samples collected during the quarterly sampling rounds were compared to sampling results obtained during the two low-flow sampling rounds.

Two separate rounds of sampling (August 31, 2000 and October 13, 2000) were performed during the quarterly groundwater sampling program using the low-flow groundwater sampling technique as discussed in **Section 3.2**. This technique was used to determine if the detected metal concentrations observed in 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:

- Antimony was not detected during either of the low-flow sampling rounds conducted at any of the three monitoring wells. During the quarterly groundwater monitoring rounds (round #1 through #19), antimony was detected at a concentration exceeding the NJDEP GWQC of 20 ug/L during one of 16 quarterly sampling rounds conducted at well 283-MW1. Based on these results, antimony is not considered to be a COC in groundwater at Site 283.

- Arsenic was not detected during either of the low-flow sampling rounds conducted at any of the three monitoring wells. During the quarterly groundwater monitoring rounds (round #1 through #19), arsenic was detected at concentrations exceeding the NJDEP GWQC of 8.0 ug/L during one of 16 quarterly sampling rounds conducted at well 283-MW1, in three of 19 quarterly sampling rounds conducted at well 283-MW2 and in two of 16 quarterly sampling rounds

conducted at well 283-MW3. Based on these results, arsenic is not considered to be a COC in groundwater at Site 283.

- Cadmium was not detected during either of the low-flow sampling rounds conducted at any of the three monitoring wells. During the quarterly groundwater monitoring rounds (round #1 through #19), antimony was detected at a concentration exceeding the NJDEP GWQC of 4.0 ug/L during one of 16 quarterly sampling rounds conducted at well 283-MW3. Based on these results, antimony is not considered to be a COC in groundwater at Site 283.

- Lead was detected at concentrations exceeding the NJDEP criterion of 10 ug/L during one of the low-flow sampling rounds (Low Flow #1) conducted at well 283-MW1 (at a concentration of 20.1 ug/L), and in each of the two low-flow sampling rounds conducted at well 283-MW2 (at concentrations of 33.1 ug/L and 25.7 ug/L). During the quarterly groundwater monitoring rounds (round #1 through #19), lead was also detected at concentrations exceeding the NJDEP GWQC of 10 ug/L during 13 of 19 quarterly sampling rounds conducted at well 283-MW2, and in one of 16 quarterly sampling rounds conducted at well 283-MW3. Lead was also detected in 11 of 40 soil samples associated with the UST excavation at concentrations below the RDCSCC. Based on these results, lead is considered to be a COC in groundwater at Site 283.

The four COCs (benzene, ethylbenzene, total xylenes and lead) identified above are given further consideration with regard to contaminant migration potential in **Section 6.0** of this RIR/RAWP. No other potential contaminants of concern were identified in groundwater at Site 283. The concentrations of these COCs in groundwater at Site 283 are summarized on **Figure 5-1** and in **Table 5-2**.

The method detection limits (MDLs) for each of the sampling results in which there was a non-detect (ND) result are included in **Table 5-2**. The MDLs for each analysis is included in the laboratory data packages. These MDLs were used in the groundwater model as discussed in **Section 6.0**.

5.3 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 4.82 in well 283-MW1 to 5.84 in well 283-MW3. The average DO ranged from 2.92in wells 283-MW1 and 283-MW3 to 3.15 in well 283-MW2. The aquifer pH and DO measurements are shown in **Table 5-4**. The pH and DO data is included in the laboratory data packages (**Appendix E**). 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 283 was to predict the migration of the four identified COCs in site groundwater: benzene, ethylbenzene, total xylenes and lead. Predictions of the migration and change in COC concentration over time were made based on observed groundwater concentrations (summarized in **Section 5.0**). The initial COC concentrations, as well as future predictions (results) of the COC concentrations, are presented both in table form and graphically. The results of the groundwater models discussed in this section were then used to develop an RAWP to address the four COCs in groundwater at Site 283 (**Section 8.0**).

6.1 Groundwater Model Development

The models presented in this report involve predictions of future concentrations of COCs in groundwater at Site 283 with the assumption that no significant changes in physical conditions will occur at Site 283. This assumption of "natural attenuation" is used to predict both the time that the COC concentrations in groundwater will decrease below the GWQC, as well as the area that could be impacted by groundwater contamination. The modeling methods used for this investigation include a simple spreadsheet model and a three-dimensional MODFLOW simulation, which were chosen based on the physical and chemical properties of the COCs.

A conceptual site model was developed for Site 283 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, as discussed in **Section 6.1.1**. **Section 6.1.2** addresses the biodegradation of organic compounds. A spreadsheet model used to predict the transport and decay of benzene at Site 283 is discussed in **Section 6.1.3**. The United States Geologic Survey (USGS) Modular Three-Dimensional Groundwater Flow Model, MODFLOW, was chosen for additional groundwater modeling for benzene and lead at Site 283 to incorporate the effects of dispersion and 3-dimensional (3-D) groundwater flow. The MODFLOW simulation includes the effect of dispersion, which accounts for the dilution of the groundwater due to mixing, 3-D groundwater flow, degradation (applied to benzene only) and retardation due to sorption. The MODFLOW simulation is discussed in **Sections 6.1.4** (Input Parameters), **6.1.5** (Calibration) and **6.1.6** (Results).

6.1.1 Conceptual Site Model

The 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 283 is located approximately 2,000 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 the Site 283 is likely to flow north-northwest towards Parkers Creek, located approximately 200 feet north of the site.

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 283 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 top layer of the MODFLOW model except in paved areas (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 geologic 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 283 consists of asphalt, topsoil, fill and native material. The fill observed in the borings at Site 283 consisted of cinders, slag, coal fragments and brown coarse-medium-fine sand, some medium-fine gravel. The native material encountered in the borings at Site 283 consists of brown to orange sand, silt and clay, which is consistent with the Tinton Sand formation as described in Minard (1969). Underground utilities (discussed in **Sections 2.2** and **4.1**) were not included as part of the groundwater migration models. However, underground utilities could have had some effect on the velocity and direction of shallow groundwater flow and could affect the flow of contaminants at Site 283. Possible effects of underground utilities are discussed with the MODFLOW results (**Section 6.1.6**).

Groundwater was encountered in each monitoring well at depths ranging from 4.62 to 8.54 feet bgs **(Table 3-2**) with a hydraulic gradient indicating flow north-northwest toward Parkers Creek (**Figure 4-4a** through **Figure 4-4p**). The groundwater flow gradient for Site 283 was estimated to be 0.0074 feet per foot. The calculated conductivity values range from 2.41 feet per day at monitoring well 283-MW1 to 4.38 feet per day at well 283-MW3, with a calculated geometric mean of 3.5 feet per day. The groundwater velocity for Site 283 was calculated to be approximately 0.065 feet per day (approximately 24 feet per year) based on the January 5, 2001 water-level measurements.

6.1.2 Biodegradation of Organic Compounds

The COCs in groundwater at Site 283 can be separated into two groups: organic and inorganic. The three organic COCs consist of benzene, ethylbenzene and total xylenes. The one inorganic COC is lead. The COCs that are organic may have the potential to degrade through biological means, whereas lead is not biodegradable. Published

degradation rates for the COCs that are organic compounds are shown in **Table 6-1**. A discussion of the appropriate degradation rate which was used in modeling groundwater migration at Site 283 is provided below.

Aerobic respiration is the first reaction in an environment that contains microorganisms capable of biodegradation (Wiedemeir, 1999). Aerobic degradation requires the presence of DO. 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. As discussed in **Section 5.3**, during each sampling event at each well, DO was recorded while the wells were being purged. **Table 5-4** shows the DO measurements for the monitoring wells at Site 283 during sampling events between September 1999 and February 2004.

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, either 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 following factors (based on Wiedemeier, 1999) show that there is probably insufficient DO at Site 283 for aerobic decay of the COCs that are organic compounds (benzene, ethylbenzene and total xylenes) to occur at Site 283. The sum of benzene, toluene, ethylbenzene and total xylenes is used for this analysis. The calculation below provides insight related to the degradation rates for BTEX compounds at Site 283.

- The plume zone is assumed to be located in the vicinity of well 283-MW2.
- The electron acceptor for aerobic decay is DO.
- The utilization factor for aerobic degradation of BTEX is 3.14.

- The most recent total BTEX concentration observed at Site 283 on January 5, 2001 in monitoring well 283-MW2 was 7,634.65 ug/L. This total was calculated as a sum of the concentrations of the BTEX comounds (1,009.73 ug/L for benzene, 320.72 ug/L for toluene, 1,160.45 ug/L for ethylbenzene, and 5,143.75 ug/L for total xylenes).
- For aerobic decay to occur, the "Average Upgradient" DO would need to be sufficiently high, as follows. This relation was derived by rearranging the definition of biodegradation capacity discussed above:
  ⇒ {Average Upgradient DO} must be greater than (>)
  {total BTEX concentration at well 283-MW2} * {Utilization Factor}
  +{Minimum Plume Zone DO}
- Based on the expression above, the average upgradient DO would have to be greater than 23.9 mg/L.

Since 23.9 mg/L is much greater than any DO measurements made at Site 283 monitoring wells and other monitoring wells at Fort Monmouth (not presented in this report), the calculation above demonstrates that *aerobic* degradation of the COCs is not likely to occur at Site 283. There are several different possible electron acceptors that can be utilized in *anaerobic* decay. The models discussed below use the most conservative degradation rate for benzene of 730 days (Wiedemeier, 1999) (**Table 6-1**).

6.1.3 Spreadsheet Degradation Model for Benzene

As shown in **Table 6-1**, benzene has the longest half-life among the COCs that are organic compounds. Benzene concentrations in groundwater samples collected from monitoring well 283-MW2 at Site 283 have been consistently over 100 times greater than the GWQC (**Table 5-3**), which is the highest among the four identified COCs. In addition, benzene has the lowest sorption coefficient among the four identified COCs at Site 283 (**Table 6-2**), which implies that benzene is the most mobile of these COCs. Due to the fact that the two other organic COCs (ethylbenzene and total xylenes) are less mobile than benzene, have lower concentrations relative to their respective GWQC, and have faster degradation rates, the model predictions for organic compounds (discussed below) are limited to benzene.

Two *Microsoft Excel* spreadsheets were prepared to predict the biodegradation and migration of benzene at Site 283. The biodegradation model incorporates the effects of horizontal groundwater flow, first-order biodegradation and retardation. The gradients used in these spreadsheets were derived from the groundwater contour map for January 5, 2001 (**Figure 4-4d**). Predictions were made based on analytical results at well 283-MW2 (**Table 6-3**) and well 283-MW3 (**Table 6-4**).

Due to the lack of a decreasing trend in the benzene detections, a site-specific decay rate for benzene was not calculated. As discussed in **Section 6.1.2**, the half-life of 730 days was obtained from published results (Howard, 1991) and used in the model below. This half-life corresponds to a degradation rate constant (k) of 0.00095 (1/day).

At monitoring well 283-MW2, the initial benzene concentration of 838.48 ug/L was based on the average of the two most recent concentrations detected at well 283-MW2 (10/17/00 and 01/05/01). This initial concentration led to a predicted time of 20 years for compliance with the NJDEP criteria (1.0 ug/L). The migration distance to achieve compliance at well 283-MW2 is predicted to be 270 feet based on the hydraulic conductivity of 3.5 feet per day, the hydraulic gradient of 0.0074, the effective porosity of 0.4, the bulk density of 1.65 kg/L, and the sorption coefficient of 0.1851 L/kg (**Table 4-3**).

At monitoring well 283-MW3, the initial benzene concentration of 7.58 ug/L was based on the average of the two most recent concentrations detected at well 283-MW3 (10/17/00 and 01/05/01). This initial concentration led to a predicted time of 5.9 years for compliance with the NJDEP criteria (1.0 ug/L). The migration distance to achieve compliance at well 283-MW3 is predicted to be 400 feet based on a hydraulic conductivity of 3.5 feet per day, the hydraulic gradient of 0.037, the effective porosity of 0.4, the bulk density of 1.65 kg/L, and the sorption coefficient of 0.1851 L/kg (**Table 4-3**). The hydraulic gradient of 0.037 is five times greater than the gradient at well 283-MW2. This difference in gradient is due to the change in topography just north of Building 283 and approaching Parkers Creek. Based on the result of the spreadsheet model shown in **Table 6-4**, benzene (as well as other organic contaminants) could migrate north from Building 283 and seep into Parkers Creek sometime within the next 5.7 years.

The spreadsheets discussed in this section do not include the effects of dilution due to dispersion and 3-D groundwater flow. The groundwater flow used in these spreadsheet calculations is assumed to flow through surficial materials with hydraulic conductivity of 3.5 feet per day. The additional factors of 3-D flow and dispersion were simulated using MODFLOW as discussed below.

6.1.4 MODFLOW Input Parameters

Visual MODFLOW Version 2.8.2 (Waterloo Hydrogeologic, Inc.) was used to simulate the groundwater flow at Site 283 and *MT3D 1999* (1999, Papadopolos & Associates, Inc.) was used to simulate the movement of the contaminants over time at Site 283. *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 benzene and lead concentrations. As discussed above, the predicted concentration and migration of benzene represents the most conservative approach for modeling the organic COCs in groundwater at Site 283. Input parameters for the MODFLOW model for Site 283 are presented in **Table 6-5**.

Physical Boundaries and Grid

The model grid for Site 283 is presented in **Figure 6-2** with topographic contours shown as brown lines, Parkers Creek highlighted as solid blue (groundwater constant head boundary condition of 0 feet amsl), areas assigned zero groundwater recharge highlighted in yellow, and the Fort Monmouth Base Map shown in black. The Fort Monmouth Base

Map was used to determine the location of Parkers Creek and areas of no recharge (paved areas and buildings).

The model area for Site 283 was 2,400 feet (west to east) by 1,800 feet (south to north). This area was divided into a grid with 137 columns and 113 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 Site 283 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.

Groundwater recharge for Site 283 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 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**).

The model area for Site 283 was divided into five layers, which relate to three published hydrogeologic units and one five-foot layer of surficial of fill. **Figure 6-3** 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 283. 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 five 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 10 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 including fill surrounding underground utilities (**Figures 4-2** and **4-3**). Layer 1 was assigned a hydraulic conductivity of 3.5 feet

per day, which is the geometric mean of the conductivity values obtained from slug tests (**Table 4-3**).

- Layer 2 (approximately 20 feet thick) and Layer 3 (95 feet thick) correspond to the Navesink-Hornerstown Confining Unit. This confining unit was divided into two layers in order to assign initial concentrations of benzene and lead to depths less than 30 feet bgs. Layers 2 and 3 were assigned a hydraulic conductivity of 0.12 feet per day. The thickness of the Navesink-Hornerstown Confining Unit is approximately 125 feet at Site 283 (**Figure 2-7**).
- Layer 4, 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 5, corresponds to the Marshalltown-Wenonah Confining Unit and was assigned a 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 two groundwater constituents at Site 283, benzene and lead. The contaminant transport parameters include initial concentrations of the COCs, dispersivity, bulk density, sorption type and sorption coefficients. In addition, the biodegradation rate corresponding to a half-life of 730 days (see **Section 6.1.2**) was used for the MODFLOW simulation of benzene. The initial concentrations of these COCs in each well are summarized in **Table 6-5**. The initial concentration maps used in MODFLOW are portrayed in **Figure 6-4** (benzene) and **Figure 6-5** (lead).

The initial concentration maps for benzene were derived with *Golden Software Surfer* for the MODFLOW model area by entering the average of the two most recent analytical results (October 17, 2000 and January 5, 2001). Because the detections of lead at Site 283 were more widespread and sporadic, the initial concentration map for lead was derived from the average of concentrations obtained during the nine sampling rounds (between September 20, 1999 and January 5, 2001). Points outside of Site 283 monitoring wells were assigned half the respective MDLs for derivation of the initial concentration maps.

Contaminant Transport Inputs: Aquifer Characteristics

The contaminant transport simulation for Site 283 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:

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

where R_d is the retardation factor, r_d is the bulk density of the soil, α is the porosity, and K_d is the sorption coefficient (Domenico and Schwartz, 1998). For benzene, 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 6-5**, the retardation factors for benzene and lead at Site 283 are 1.76 and 3,700, respectively.

Dispersion was incorporated in the model to predict the effects of dilution of the COCs at Site 283. The longitudinal dispersivity of 13.8 feet was used in the model, which was calculated using the method published by the USEPA (2001) based on an estimated plume length of 300 feet. The plume length of 300 feet was estimated to be 20 percent greater than the distance between wells 283-MW2 and 283-MW3 (equal to 1.2 times 250 feet).

6.1.5 MODFLOW Calibration

The model was first run to simulate groundwater conditions at Site 283, without the contaminant transport simulation. **Figure 6-6** shows the flow directions and groundwater elevation contours that were predicted during model calibration. **Figure 6-7** shows these groundwater flow results in cross section view. In **Figure 6-7**, groundwater is shown to be flowing downward through the Composite Confining Unit (Layers 2 and 3) and flowing more horizontal in Wenonah-Mount Laurel aquifer (Layer 5). This change in direction is because of the higher conductivity of the Wenonah-Mount Laurel aquifer.

These groundwater flow 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 6-8** presents a comparison of the groundwater elevations simulated in the model ("Calculated Heads") and field measurements ("Observed Heads") observed on January 5, 2001 at Site 283 (see **Table 3-2** for groundwater elevation data). The model calibration results shown in **Figure 6-8** provide evidence that the model accurately predicts groundwater flow conditions at Site 283 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 283 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 both benzene and lead. The MODFLOW results are presented in **Figure 6-9** through **Figure 6-12** (benzene) and

Figure 6-13 and **Figure 6-14** (lead). The estimated times for benzene and lead to achieve compliance with the GWQC at Site 283 are summarized in **Table 6-6**.

As shown in **Figure 6-9**, the MODFLOW simulation predicts that the benzene concentration in groundwater at Site 283 will reduce below 1.0 ug/L in 19 years. The predicted time of 19 years for compliance with the GWQC is slightly less than the 20 years predicted using the biodegradation spreadsheet in **Table 6-1**. In well 283-MW2, the MODFLOW simulation predicts that benzene concentrations will diminish to less than the NJDEP criteria of 1.0 ug/L in approximately 18 years (**Figure 6-10**). In well 283-MW3, the MODFLOW simulation predicts that benzene concentrations will diminish to less than the NJDEP criteria of 1.0 ug/L in approximately 9 years (**Figure 6-11**). In the MODFLOW simulation, benzene migration was slowed due to sorption of benzene to subsurface soil and biodegradation. A cross-cross section view of the benzene concentrations in groundwater near well 283-MW2 is shown in **Figure 6-12**. This cross-section view shows that benzene has not migrated downward below Layer 3 and into Layer 4 (Layers 2 and 3 represent of the Composite Confining Unit and Layer 4 represents the Wenonah-Mount Laurel aquifer – see **Table 6-5**)

Although the MODFLOW simulation predicts that benzene migration will be minimal, it is possible that benzene migration may occur (or may have already occurred) northward and into Parkers Creek. This possibility is substantiated by the results of the spreadsheet model (**Section 6.1.3**) and by the presence of underground utility lines. As shown in **Figures 4-2** and **4-3**, several underground utility lines are present at elevations below the groundwater table at Site 283. Shallow groundwater might flow along these underground utility lines due to the higher conductivity associated with subsurface fill surrounding these pipes.

Based on the predicted change in concentration of lead in groundwater at Site 283 over 20 years (**Figure 6-13**), the estimated times for compliance with the NJDEP criteria is approximately 210 years. The results of the groundwater modeling indicate that lead migration will be minimal due to low hydraulic conductivity and strong retardation by the soils at Site 283.

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 283 by Environmental Data Resources, Inc. (EDR) of Southport, Connecticut. A copy of the Offsite Receptor Report, identifying sensitive receptors in the area, is provided in **Appendix G**.

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 283. These schools are not located downgradient of Site 283, and thus could not be affected by Site 283 groundwater quality.

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 283. The search was performed for a one-mile radius surrounding the central point of the M-18 Landfill Site (approximately 300 feet west of the center of Building 283). This well search was conducted as part of an RIR for the M-18 Landfill Site (submitted October 2003), and the results are included in this report based on the proximity of the M-18 Landfill site to Site 283.

The well records obtained during the well search are provided in **Appendix H** and are summarized in **Table 6-7**. The wells designated for domestic or irrigation uses are presented in **Figure 6-15**. There were no domestic or irrigation wells identified by records within 1,000 feet of the Site 283.

Due to the significant distance of the Site 283 from any sensitive receptors, the concern for sensitive receptors is minimal. The probability that any well in the vicinity of Site 283 is being used for consumptive purposes is low, thus minimizing health-based risks associated with ingestion. There were no sensitive receptors identified within 1,000 feet of Site 283.

6.3 Aquifer Classification

Upon review of the NJDEP GWQS (NJAC 7:9-6), January 7, 1993, Site 283 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, the 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.
    - The areal extent defined as Class III-A must be at least 100 acres.

The shallow aquifer at Fort Monmouth meets each of the three 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 in the vicinity of Fort Monmouth is approximately 125 feet.
- Published hydraulic conductivities (Martin, 1998) for the Navesink-Hornerstown Confining Unit (shown in **Table 6-5)** yield a geometric mean of 0.12 feet per day, which was the conductivity used in the MODFLOW Model (**Section 6.1.4**) and which is consistent with an aquitard.
- The area of Fort Monmouth is greater than 100 acres.

6.4 Contaminant Migration Summary

At Site 283, benzene, ethylbenzene, total xylenes 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 groundwater quality criteria to be used for Class III-A aquifers are the most stringent criteria associated with vertically or horizontally adjacent groundwater that is not Class III-A.

Groundwater modeling and a sensitive receptor survey were conducted to determine whether groundwater from Site 283 could impact surface water, off-site domestic wells and the subsurface groundwater aquifers. Groundwater modeling indicates the impact of COC migration in groundwater at Site 283 could impact groundwater and surface water quality north of Site 283. The results of the groundwater modeling and sensitive receptor survey are summarized below:

- Using published biodegradation rates for benzene, benzene concentrations are predicted to fall below the NJDEP criteria within approximately 20 years. Based on this result, it is possible that benzene could migrate in groundwater northward towards Parkers Creek.
- Although the MODFLOW simulation did not predict this migration, the presence of underground utility lines beneath the surface at Site 283 and the fill material associated with these utilities implies the possibility that underground utilities could be conduits for contaminant migration.
- The two other organic COCs in groundwater (ethylbenzene and total xylenes) have faster degradation rates than benzene, as well as higher sorption rates. In addition, the groundwater sampling results for benzene at Site 283 indicate that benzene concentrations are much higher in relation to the GWQC than these three other organic COCs. These factors indicate that benzene concentrations will remain above the NJDEP criteria longer than these two other organic COCs and that benzene will most likely migrate farther.

- Due to the low concentrations of the identified metal COC (lead) at Site 283, and high retardation of lead migration due to sorption, there is little potential for off-site migration of lead. The presence of lead in groundwater at Site 283 will therefore have little or no impact on nearby groundwater or surface water.
- The closest aquifer, the Wenonah-Mount Laurel Aquifer, is located approximately 125 feet bgs. The results of groundwater modeling indicate that this aquifer is too deep to be affected by the COCs near the ground surface at Site 283, and that the vertical exchange of groundwater between the aquifers (leakage) is minimal.
- The sensitive receptor survey indicates that there are three schools located less than one mile from Site 283 and that there are no domestic or irrigation wells within 1,000 feet of Site 283. There is no potential for groundwater contamination at Site 283 to impact any of the identified sensitive receptors.

Because benzene, ethylbenzene and total xylenes could migrate from Site 283 northward and potentially into Parkers Creek, remedial actions to address this possibility are appropriate. Recommended remedial actions are discussed below in **Section 8.0**, RAWP.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Geologic publications show that Site 283 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 September 1999 and February 2004 indicate that benzene, ethylbenzene, total xylenes and lead are potential COCs at Site 283. The Class II-A criteria were used for comparison with site-specific data obtained from the various sampling rounds because the GWQS (N.J.A.C. 7:9-6.7e) state that the GWQC 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.

The Wenonah Mount Laurel aquifer, which is approximately 125 feet bgs, is too deep to be affected by the COCs near the ground surface. In addition, the sensitive receptor survey indicates that there are no schools or domestic or irrigation wells close enough to Site 283 to be adversely impacted by COC migration.

Due to low concentrations of lead in groundwater at Site 283 and the slow migration rates for lead in groundwater, there is little potential for significant lead impact by migration into Parkers Creek.

Based on biodegradation rates and the MODFLOW simulation, benzene, ethylbenzene and total xylenes could migrate from Site 283 northward towards Parkers Creek. The presence of underground utility lines beneath the surface at Site 283 and the fill material associated with these utilities implies the possibility that underground utilities could be conduits for contaminant migration.

The construction of three additional groundwater monitoring wells (283-MW4, 283-MW5 and 283-MW6) is suggested. The monitoring wells should be located downgradient (north) of monitoring wells 283-MW1, 283-MW2 and 283-MW3 at Site 283, as shown in **Figure 7-1**. The installation and quarterly monitoring of these additional monitoring wells will aid in more accurately determining if the present underground utilities are avenues for off-site transport of COCs and the extent of off-site migration of COCs at Site 283.

To evaluate surface water quality and ensure that groundwater seepage from Site 283 is not adversely impacting surface water, surface water samples should be collected and analyzed for COCs at locations in Parkers Creek, which is north of Site 283. NJDEP Surface Water Quality Standards (SWQS) for the four identified COCs should be used as comparison to surface water sampling results.

The monitored natural attenuation (MNA) program at Fort Monmouth includes quarterly groundwater monitoring and quarterly surface water sampling at strategic locations. Continued groundwater and surface water monitoring at Site 283 are recommended.

An ORC Advanced™ injection program is recommended to reduce the concentrations of benzene, ethylbenzene and total xylenes at Site 283. The ORC Advanced™ injection program will be implemented at Site 283 according to the RAWP included in **Section 8.0** of this RIR/RAWP.

8.0 REMEDIAL ACTION WORKPLAN

The following sections present the RAWP for the remediation of the identified organic COCs at Site 283: benzene, ethylbenzene and total xylenes. This RAWP was prepared in accordance with the applicable sections of NJDEP *Technical Requirements for Site Remediation* (February 2003), NJAC 7:26E, et seq. The remedial activities described in the RAWP will be performed by the DPW.

8.1 Description of Remedial Action Alternatives

Based on the findings of the previous RIR sections of this report, four general response actions were considered for implementation at Site 283: No Action, Limited Action and MNA, *In-Situ* Active Restoration and *Ex-Situ* Active Restoration. Numerous remedial technologies were identified for each general response action, and process options of each remedial technology were screened based on effectiveness, implementability and cost. The remedial technology process options derived from the consideration of the general response actions yielded the following remedial action alternatives for further consideration: No Action, Limited Action with MNA, Limited Action with Enhanced Bioremediation and MNA and a Mass Extraction Pump-and-Treat System with MNA.

Alternative #1: No Action

A No Action alternative is evaluated to establish a baseline for the comparison of other remedial alternatives. Under this alternative, no remedial action will take place and there are no associated costs.

Alternative #2: Limited Action with MNA

A Limited Action with MNA alternative includes long-term monitoring of groundwater and surface water. No active treatment will be implemented to remove the COCs from groundwater at the site under this alternative. Monitoring of groundwater and surface water for the natural attenuation of the COCs will verify that the COCs are naturally biodegrading and COC levels are continually decreasing over time. This remedial action alternative will minimize capital and Operation and Maintenance (O&M) costs while effectively allowing COC concentrations to naturally degrade below action levels.

Alternative #3: Limited Action with Enhanced Bioremediation and MNA

A Limited Action with Enhanced Bioremediation and MNA alternative includes direct-push injections of ORC Advanced™ and long-term monitoring of groundwater and surface water. The ORC Advanced™ will be injected into the "hot-spot" areas of the site, accelerating the rate of biodegradation of the COCs. Monitoring of groundwater and surface water for the natural attenuation of the COCs will verify that the COCs are naturally biodegrading and COC levels are continually decreasing over time. This remedial action alternative has low capital costs and virtually zero O&M costs while effectively enhancing and accelerating the degradation of COC concentrations to below action levels.

Alternative #4: Mass Extraction Pump-and-Treat System with MNA

A Mass Extraction Pump-and-Treat System with MNA alternative includes powered machinery that actively pumps contaminated groundwater to an above-ground remediation facility and long-term monitoring of groundwater and surface water. The Mass Extraction Pump-and-Treat System degrades contamination levels in the above-ground facility and often returns the treated water to a nearby surface water body. Monitoring of groundwater and surface water for the natural attenuation of the COCs will verify that the COCs are naturally biodegrading and COC levels are continually decreasing over time. This remedial action alternative typically requires extensive O&M costs, as well as high capital costs for equipment and site preparation.

8.2 Comparative Analysis of Remedial Action Alternatives

Each of the above alternatives was evaluated against a standard set of criteria, such as protection of human health and the environment, compliance with the NJDEP, short- and long-term effectiveness, permanence, reduction of toxicity, mobility or volume through treatment, implementability and cost.

Alternative #1: A No Action alternative takes no actions to eliminate, reduce or control exposure pathways, provides no short- or long-term effectiveness or permanence and does not comply with NJDEP criteria. This alternative is not appropriate for remediating COCs under current conditions at Site 283.

Alternative #2: Limited Action with MNA alternatives are becoming increasingly popular due to their non-existant capital costs and extremely low O&M costs and their effective treatment of low-concentration contaminant plumes. These remedial alternatives are easily implemented, not permanent and are accepted by the NJDEP. However, due to the relatively high concentrations of several COCs present at Site 283, this alternative would not significantly impact COC levels at the site.

Alternative #4: A Mass Extraction Pump-and-Treat System with MNA is one of the most widely used groundwater remediation technologies. This remedial alternative is a very aggressive treatment approach with long-term effectiveness and permanence; however, this alternative is also difficult to implement, has low short-term effectiveness, is high is cost and often experiences unforeseen difficulties relating to the sorption of COCs to soil particles. The molecular nature of groundwater contaminants allows them to sorb to soil particles, which prevents the COCs from being effectively pumped out of the ground for treatment. Greater capital costs combined with protracted O&M costs, plus the high incidence of unexpected treatment difficulties and marginal efficiency, often lead to total project costs that exceed the initial estimates by an order of magnitude. Due to the low residual COC concentrations at Site 1122, this approach is not of appropriate cost and remediation strength for success at the site.

Alternative #3: A Limited Action with Enhanced Bioremediation and MNA alternative has been selected for Site 283 based upon its appropriateness for remediation of the relatively high concentrations of several COCs present at the site in a time frame acceptable to the NJDEP. ORC Advanced™ and MNA are very low in cost, and the

COC concentrations at Site 283 do not require a permanent alternative. This alternative is equally effective in the short- and long-term, is easy to implement and can attain compliance with NJDEP criteria. Historical groundwater sampling results at Site 1122 indicate that natural attenuation is occurring at an acceptable rate, and the ORC Advanced™ injection program will accelerate this process. The ORC Advanced™ will be applied as specified by Regenesis (**Appendix I**). Based on recommendations by Regenesis, the ORC Advanced™ will be injected in a grid pattern in the vicinity of 283-MW2 over a 4,220 square foot area. The specifics of the ORC Advanced™ and MNA remedial action are discussed below.

8.3 Approach

The following sections provide details of the approach the DPW will use to perform this remedial action.

8.3.1 Equipment

The ORC Advanced™ injections will be performed using direct-push hydraulic equipment associated with a truck-mounted GeoProbe® rig to apply the ORC Advanced™/water slurry mixture throughout the specified depth intervals, generally over a region that may include both saturated and unsaturated zones where the COCs have been identified (e.g., slightly above the groundwater table to the maximum depth at which the COCs were detected). The ORC Advanced™ will be mixed with water to create a slurry mixture and will then be injected into the ground. Equipment required for the ORC Advanced™ injection program shall include, but is not limited to, the following items:

- GeoProbe® truck-mounted rig and associated injection equipment
- Mixing equipment
- Adapted union
- ORC Advanced™ material
- Water

8.3.2 Mobilization

Equipment and supplies will be transported to the site and staged appropriately near Site 283. Prior to mobilization to the site, the DPW will contact the New Jersey One Call system to have underground utilities in the vicinity of the site located and marked. Prior to mobilization, Fort Monmouth will have the underground electric utilities in the vicinity of Site 283 located and marked.

8.3.3 Injection Procedure

A full-scale remediation approach for Site 283 will consist of injecting ORC Advanced™ in a grid-based pattern to reduce COC levels in the 4,220 square foot treatment area, which is shown on **Figure 8-1**. The points of injection will be 8 feet on-center between rows and 8 feet on-center within rows, which translates to five rows of ten points and five rows of five points, placed as shown on **Figure 8-2**, for a total of 75 injection points. The ORC Advanced™ will be injected into the first 10 feet of saturated aquifer, and the ORC

Advanced™ dose rate will be 4 pounds (lbs) per vertical foot, which translates to 40 lbs per injection point.

The ORC Advanced™/water slurry mixture is typically 20% to 40% ORC Advanced™ solids by weight. An average ORC Advanced™ solids content is 30%, but this value may need to be adjusted in the field so that the required mass of ORC Advanced™ can be injected at each location. The volume (V) of water per injection location can be calculated from the following equation:

$$\text{V of water (gal/point)} = \frac{\text{ORC Advanced™ pounds/hole}}{(8.34 \text{ lbs/gal water})(\%\text{ ORC Advanced™ solids})} [1-(\%\text{ ORC Advanced™ solids})]$$

8.3.4 Equipment Decontamination

The GeoProbe® rig and other equipment used for the ORC Advanced™ application will be decontaminated prior to the removal from Site 283. Decontamination will be conducted at the injection site. The equipment will be sprayed with a pressure washer. The water used during decontamination will be collected in 55-gallon containers and staged temporarily for off-site disposal.

8.3.5 Remedial Action-Derived Waste Management

The waste derived from the remedial action will be placed in Department of Transportation (DOT) approved 55-gallon drums and staged temporarily for off-site disposal. The waste generated from these activities will be disposed of in accordance with the Resource Conservation Recovery Act (RCRA) guidelines. The anticipated wastes generated during the remedial action include:

- Decontamination water
- Level D Personal Protective Equipment (PPE), such as disposable gloves and/or tyvek suits

8.3.6 Soil and Sediment Erosion

As described above, the ORC Advanced™ application will be accomplished using a GeoProbe®. There is no planned disturbance of the soil at Site 283 as part of the proposed remedial action. Soil and sediment control measures will be implemented to minimize the transport of soil onto the installation roadways from vehicles entering and exiting the site.

8.3.7 Quarterly Sampling

The long-term monitoring program at Fort Monmouth includes quarterly groundwater monitoring and quarterly surface water sampling at strategic locations. Continued groundwater and surface water monitoring at Site 283 is recommended.

Quarterly groundwater sampling at Site 283 will include groundwater samples collected from monitoring wells 283-MW1, 283-MW2 and 283-MW3 and the newly constructed monitoring wells 283-MW4, 283-MW5 and 283-MW6. The groundwater samples collected from these monitoring wells will be analyzed by the FMETL for VOCs plus 15

TICs and lead. NJDEP GWQC for the four identified COCs should be used for comparison to groundwater sampling results.

Monitoring Well	Analyzed for	Future Sampling Status
283-MW1	VOCs, TAL Metals	Continue Quarterly Sampling
283-MW2	VOCs, TAL Metals	Continue Quarterly Sampling
283-MW3	VOCs, TAL Metals	Continue Quarterly Sampling
283-MW4	VOCs, TAL Metals	Begin Quarterly Sampling
283-MW5	VOCs, TAL Metals	Begin Quarterly Sampling
283-MW6	VOCs, TAL Metals	Begin Quarterly Sampling

Quarterly surface water sampling at Site 283 will include surface water samples collected from locations in Parkers Creek, which is north of Site 283. Surface water samples collected from these locations will be analyzed by the FMETL for VOCs plus 15 TICs and lead. NJDEP SWQS for the four identified COCs should be used for comparison to surface water sampling results.

Surface Water Site	Analyzed for	Future Sampling Status
SS-14	VOCs, TAL Metals	Begin Quarterly Sampling
SS-15	VOCs, TAL Metals	Begin Quarterly Sampling
SS-27	VOCs, TAL Metals	Begin Quarterly Sampling

8.3.8 Quality Assurance Project Plan (QAPP)

Field sampling activities will be conducted in accordance with the NJDEP Field Sampling Manual. The FMETL will conduct all analyses in accordance with the New Jersey Laboratory Certification Program. A separate QAPP will not be submitted for the planned ORC Advanced™ injection program implementation.

Quality control samples will be collected to assure that data developed during sampling are comparable to, or are of greater quality than, prior data collected at the site. Quality control samples for this project include trip blanks, field blanks and duplicate samples. One trip blank will be included with each sample shipment; one field blank will be taken each day that sampling is performed. Duplicate samples are to be collected at a rate of one duplicate sample for every 20 samples; therefore, one duplicate sample is required for every round of samples submitted to the FMETL for analysis. The FMETL will conduct internal auditing procedures according to their established Quality Assurance Manual.

All samples will be placed in laboratory-supplied bottles and placed on ice upon collection to assure samples are maintained below 4°C. Proper chain-of-custody procedures will be followed, tracking the samples from collection through analysis and reporting.

8.3.9 Remedial Action Progress Report (RAPR)

An RAPR will be prepared one year after the completion of the ORC Advanced™ injection program in accordance with NJDEP *Technical Requirements for Site Remediation* (February 2003), NJAC 7:26E-6.6. The RAPR will include a summary of the remedial actions performed during the reporting period, an analysis of the quarterly

groundwater and surface water sampling results collected during the reporting period, conclusions about the effectiveness of the ORC Advanced™ injection program, and the trends of the COCs and recommendations concerning further action at Site 283.

8.4 Project Organization

The Contracting Officer's Representative (COR) for this project is Mr. Kevin Dooney, who is responsible for all procurement and change orders. Mr. Doug Guenther can provide technical site guidance as requested by the contractor. Any variance to the NJDEP *Technical Requirements for Site Remediation* (February 2003), NJAC 7:26E, et seq. will be communicated to the NJDEP immediately. No variance to the NJDEP regulations will be permitted unless approved by the NJDEP Case Manager, Mr. Greg Zalaskus.

8.5 Site Specific Health and Safety Plan (SSHSP)

The SSHSP will be prepared, as required by NJDEP *Technical Requirements for Site Remediation* (February 2003), NJAC 7:26E, et seq., and adhered to as part of the remediation activities.

8.6 Required Permits

A Discharge to Groundwater Permit is required to perform the ORC Advanced™ application at Site 283 and can be obtained under the Permit-By-Rule provision in NJAC 7:14A-7.5, Subsection (b). Because Fort Monmouth is conducting remedial activities under NJDEP oversight, the DPW is eligible to receive a Discharge to Groundwater Permit through Permit-By-Rule. By submitting this RAWP, Fort Monmouth is requesting written approval for a Discharge to Groundwater Permit by Permit-By-Rule for the proposed ORC Advanced™ application and discharge to groundwater.

8.7 Effectiveness Analysis and Certification

The effectiveness of this remedial action will be assured through an evaluation of the post- ORC Advanced™ application groundwater sampling analytical results. This analysis will be performed as discussed in **Section 8.2.7** - Quarterly Sampling. If after one year the results indicate that COC concentrations remain either at levels comparable to pre- ORC Advanced™ application levels or in excess of their respective NJDEP GWQC, additional remedial actions will be considered.

8.8 Remedial Action Costs

The estimated costs for implementation of the remedial action to be performed at Site 283 are provided below:

Estimated Costs of Remedial Actions to be Performed at Site 283 (per year)	
TASK	**ESTIMATED COSTS**
1. Total Labor Cost	$ 11,400
2. Laboratory costs	$ 3,700
3. Material costs	$ 25,500
4. Data analysis and Progress Report	$ 8,700
TOTAL ESTIMATED COSTS	$ 49,300
TOTAL ESTIMATED COST TO CLOSURE	$ 153,000

8.9 Implementation Schedule

Upon written approval from the NJDEP, Fort Monmouth will solicit and award a contract for completion of the planned remedial actions addressed within this RAWP. Following contract award, the implementation schedule will be as follows:

- Procurement and delivery of equipment to the site – Two weeks
- Site mobilization and utility clearances – One week
- Performance of ORC Advanced™ injection program – One week
- Demobilization – One week
- Quarterly groundwater and surface water sampling, post- ORC Advanced™ injections – Two days per quarter for one year
- Submittal of an RAPR – One year following ORC Advanced™ injections

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TABLES

Table 2-1
Well Construction Summary
Site 283
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 Diameter	Screen Material	Date of Construction
Units	**--**	**ft**	**ft**	**ft (amsl)[1]**	**ft (amsl)[1]**	**in**	**ft (bgs)[2]**	**ft (bgs)[2]**	**ft**	**in**	**--**	**--**
283-MW1	29-40367	540539.91	619033.2	11.34	11.55	10	20.0	5.0	15.0	4.0	10 Slot PVC	3/28/2000
283-MW2	29-40887	540322.37	618946.24	13.52	14.00	10	20.0	5.0	15.0	4.0	20 Slot PVC	7/28/1999
283-MW3	29-41650	540508.03	618821.32	11.86	12.42	10	20.0	5.0	15.0	4.0	10 Slot PVC	3/28/2000

Notes:
[1]amsl = above mean sea level
[2]bgs = below ground surface
Where a difference in reported data exists between a monitoring well permit and the corresponding boring log, data from the permit was used.
Well locations were recorded using Trimble GPS equipment in August 2001.
Wells 283-MW1, 283-MW2, and 283-MW3 were installed by Lutz Environmental for the DPW.

Table 3-1
Groundwater Sample Collection Summary
Site 283
Fort Monmouth, New Jersey

Round	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
Quarterly Sampling Rounds								
#1	4798.01	283-MW2	09/20/99	09/21/99	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#2	5045.01	Trip Blank	12/27/99	01/03/00	aqueous	Blank	VOCs+15	624
	5045.02	Field Blank	12/27/99	01/03/00	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5045.03	Duplicate	12/27/99	N/A	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5046.01	283-MW2	12/27/99	12/29/99	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#3	5280.01	283-MW2	03/23/00	03/28/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5283.01	Trip Blank	03/23/00	03/31/00	aqueous	Blank	VOCs +15	Method 624
	5283.02	Field Blank	03/23/00	03/29/00	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5283.03	Duplicate	03/23/00	N/A	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#4	5505.01	283-MW2	06/28/00	07/04/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5505.02	283-MW1	06/28/00	07/04/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5505.03	283-MW3	06/28/00	07/04/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#5	5619.01	283-MW1	08/10/00	08/14/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5619.02	283-MW2	08/10/00	08/14/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5619.03	283-MW3	08/10/00	08/14/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5620.01	Trip Blank	08/10/00	08/17/00	aqueous	Blank	VOCs +15	Method 624
	5620.02	Field Blank	08/10/00	08/14/00	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5620.03	Duplicate	08/10/00	N/A	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
Low Flow #1	5681.01	Field Blank	08/31/00	09/18/00	aqueous	Blank	TAL metals	Methods 3112B and 3120B
	5681.02	283-MW3	08/31/00	09/18/00	aqueous	GW	TAL metals	Methods 3112B and 3120B
	5681.03	283-MW1	08/31/00	09/18/00	aqueous	GW	TAL metals	Methods 3112B and 3120B
	5681.04	283-MW2	08/31/00	09/18/00	aqueous	GW	TAL metals	Methods 3112B and 3120B
	5681.05	Duplicate	08/31/00	09/18/00	aqueous	Blank	TAL metals	Methods 3112B and 3120B
Low Flow #2	5788.01	Field Blank	10/13/00	10/17/00	aqueous	Blank	TAL metals	Methods 3112B and 3120B
	5788.02	Duplicate	10/13/00	10/17/00	aqueous	Blank	TAL metals	Methods 3112B and 3120B
	5788.03	283-MW1	10/13/00	10/17/00	aqueous	GW	TAL metals	Methods 3112B and 3120B
	5788.04	283-MW2	10/13/00	10/17/00	aqueous	GW	TAL metals	Methods 3112B and 3120B
	5788.05	283-MW3	10/13/00	10/17/00	aqueous	GW	TAL metals	Methods 3112B and 3120B
#6	5797.01	Trip Blank	10/17/00	10/20/00	aqueous	Blank	VOCs +15	Method 624
	5797.02	Field Blank	10/17/00	10/20/00	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5797.03	Duplicate	10/17/00	10/20/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5797.04	283-MW1	10/17/00	10/23/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5797.05	283-MW2	10/17/00	10/20/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	5797.06	283-MW3	10/17/00	10/23/00	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#7	28	Trip Blank	01/05/01	01/10/01	aqueous	Blank	VOCs +15	Method 624
	29	Field Blank	01/05/01	01/10/01	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	30	Duplicate	01/05/01	01/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	31	283-MW1	01/05/01	01/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	32	283-MW2	01/05/01	01/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	33	283-MW3	01/05/01	01/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#8	1602901	Trip Blank	04/04/01	04/10/01	aqueous	Blank	VOCs +15	Method 624
	1602902	Field Blank	04/04/01	04/10/01	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1602903	Duplicate	04/04/01	04/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1602904	283-MW1	04/04/01	04/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1602905	283-MW2	04/04/01	04/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1602906	283-MW3	04/04/01	04/10/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B

Notes:
GW : Groundwater
VOCs+15 : Target Compound List Volatile Organic Analysis plus 15 Tentatively Identified Compounds (TICs)
SVOCs+25: Semi-Volatile Organic Compounds plus 25 TICs
TAL metals : Target Analyte List metals
Low Flow 1 and Low Flow 2: Low Flow Sampling Method was used to collect sample
N/A: Not Available

Table 3-1
Groundwater Sample Collection Summary
Site 283
Fort Monmouth, New Jersey

Round	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
Quarterly Sampling Rounds								
#9	1628501	Trip Blank	07/24/01	07/25/01	aqueous	Blank	VOCs +15	Method 624
	1628502	Field Blank	07/24/01	07/25/01	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1628503	Duplicate	07/24/01	07/25/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1628504	283-MW1	07/24/01	07/25/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1628505	283-MW2	07/24/01	07/25/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1628506	283-MW3	07/24/01	07/25/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#10	1663701	Trip Blank	12/11/01	12/13/01	aqueous	Blank	VOCs +15	Method 624
	1663702	Field Blank	12/11/01	12/13/01	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1663801	283-MW1	12/11/01	12/13/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1663802	283-MW2	12/11/01	12/13/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	1663803	283-MW3	12/11/01	12/13/01	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#11	2014201	Trip Blank	03/08/02	03/19/02	aqueous	Blank	VOCs +15	Method 624
	2014202	Field Blank	03/08/02	03/19/02	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2014501	283-MW1	03/08/02	03/19/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2014502	283-MW2	03/08/02	03/19/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2014503	283-MW3	03/08/02	03/19/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#12	2029201	Trip Blank	05/16/02	05/26/02	aqueous	Blank	VOCs +15	Method 624
	2029202	Field Blank	05/16/02	05/26/02	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2029203	Duplicate	05/16/02	05/26/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2029204	283-MW1	05/16/02	05/26/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2029205	283-MW2	05/16/02	05/26/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2029206	283-MW3	05/16/02	05/26/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#13	2064401	Trip Blank	09/10/02	09/20/02	aqueous	Blank	VOCs +15	Method 624
	2064402	Field Blank	09/10/02	09/20/02	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2064701	283-MW1	09/10/02	09/20/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2064702	283-MW2	09/10/02	09/20/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2064703	283-MW3	09/10/02	09/20/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#14	2086101	Trip Blank	12/03/02	12/09/02	aqueous	Blank	VOCs +15	Method 624
	2086102	Field Blank	12/03/02	12/09/02	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2086401	283-MW1	12/03/02	12/09/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2086402	283-MW2	12/03/02	12/09/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	2086403	283-MW3	12/03/02	12/09/02	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#15	3008601	Trip Blank	02/27/03	03/13/03	aqueous	Blank	VOCs +15	Method 624
	3008602	Field Blank	02/27/03	03/13/03	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3008603	Duplicate	02/27/03	03/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3008604	283-MW1	02/27/03	03/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3008605	283-MW2	02/27/03	03/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3008606	283-MW3	02/27/03	03/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#16	3023401	Trip Blank	05/19/03	05/29/03	aqueous	Blank	VOCs +15	Method 624
	3023402	Field Blank	05/19/03	05/29/03	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3023601	283-MW1	05/19/03	05/29/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3023602	283-MW2	05/19/03	05/29/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3023603	283-MW3	05/19/03	05/29/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#17	3046601	Trip Blank	08/04/03	08/13/03	aqueous	Blank	VOCs +15	Method 624
	3046602	Field Blank	08/04/03	08/13/03	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3046901	283-MW1	08/04/03	08/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3046902	283-MW2	08/04/03	08/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3046903	283-MW3	08/04/03	08/13/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B

Notes:
GW : Groundwater
VOCs+15 : Target Compound List Volatile Organic Analysis plus 15 Tentatively Identified Compounds (TICs)
SVOCs+25: Semi-Volatile Organic Compounds plus 25 TICs
TAL metals : Target Analyte List metals
Low Flow 1 and Low Flow 2: Low Flow Sampling Method was used to collect sample
N/A: Not Available

Table 3-1
Groundwater Sample Collection Summary
Site 283
Fort Monmouth, New Jersey

Round	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
Quarterly Sampling Rounds								
#18	3073101	Trip Blank	11/13/03	11/20/03	aqueous	Blank	VOCs +15	Method 624
	3073102	Field Blank	11/13/03	11/20/03	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3073103	Duplicate	11/13/03	11/20/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3073104	283-MW1	11/13/03	11/20/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3073105	283-MW2	11/13/03	11/20/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3073106	283-MW3	11/13/03	11/20/03	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
#19	4010201	Trip Blank	02/05/04	02/13/04	aqueous	Blank	VOCs +15	Method 624
	4010202	Field Blank	02/05/04	02/13/04	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4010203	Duplicate	02/05/04	02/13/04	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4010204	283-MW1	02/05/04	02/13/04	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4010205	283-MW2	02/05/04	02/13/04	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4010206	283-MW3	02/05/04	02/13/04	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B

Notes:
GW : Groundwater
VOCs+15 : Target Compound List Volatile Organic Analysis plus 15 Tentatively Identified Compounds (TICs)
SVOCs+25: Semi-Volatile Organic Compounds plus 25 TICs
TAL metals : Target Analyte List metals
Low Flow 1 and Low Flow 2: Low Flow Sampling Method was used to collect sample
N/A: Not Available

Table 3-2
Groundwater Elevation Summary
Site 283
Fort Monmouth, New Jersey

Round Number:		#1			#2			#3			#4		
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.
283-MW1	11.34	NS	NS	NS	NS	NS	NS	NS	NS	NS	06/28/00	6.31	5.03
283-MW2	13.52	09/20/99	7.20	6.32	12/27/99	6.81	6.71	03/23/00	6.38	7.14	06/28/00	7.83	5.69
283-MW3	11.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	06/28/00	7.12	4.74

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
4) For low-flow sampling rounds
(Aug. 31, 2000 and Oct 13, 2000)
depth to water shown is for previous day.

Table 3-2
Groundwater Elevation Summary
Site 283
Fort Monmouth, New Jersey

		Round Number:	#5			Low Flow #1			Low Flow 2			#6		
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.
283-MW1	11.34	08/10/00	5.54	5.80	08/31/00	5.73	5.61	10/13/00	5.60	5.74	10/17/00	6.07	5.27
283-MW2	13.52	08/10/00	6.28	7.24	08/31/00	6.80	6.72	10/13/00	6.90	6.62	10/17/00	7.09	6.43
283-MW3	11.86	08/10/00	6.41	5.45	08/31/00	6.70	5.16	10/13/00	6.75	5.11	10/17/00	6.88	4.98

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
4) For low-flow sampling rounds
(Aug. 31, 2000 and Oct 13, 2000)
depth to water shown is for previous day.

Table 3-2
Groundwater Elevation Summary
Site 283
Fort Monmouth, New Jersey

Round Number:		#7			#8			#9			#10		
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.
283-MW1	11.34	01/05/01	6.11	5.23	04/04/01	4.62	6.72	07/24/01	6.25	5.09	12/11/01	7.15	4.19
283-MW2	13.52	01/05/01	7.32	6.20	04/04/01	4.81	8.71	07/24/01	6.75	6.77	12/11/01	8.54	4.98
283-MW3	11.86	01/05/01	6.94	4.92	04/04/01	5.75	6.11	07/24/01	7.00	4.86	12/11/01	7.67	4.19

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
4) For low-flow sampling rounds
(Aug. 31, 2000 and Oct 13, 2000)
depth to water shown is for previous day.

Table 3-2
Groundwater Elevation Summary
Site 283
Fort Monmouth, New Jersey

Round Number:		#11			#12			#13			#14		
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.
283-MW1	11.34	03/08/02	6.43	4.91	05/16/02	6.14	5.2	09/10/02	5.91	5.43	12/03/02	5.37	5.97
283-MW2	13.52	03/08/02	7.47	6.05	05/16/02	6.90	6.62	09/10/02	5.93	7.59	12/03/02	5.28	8.24
283-MW3	11.86	03/08/02	7.10	4.76	05/16/02	6.90	4.96	09/10/02	6.51	5.35	12/03/02	6.31	5.55

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
4) For low-flow sampling rounds
(Aug. 31, 2000 and Oct 13, 2000)
depth to water shown is for previous day.

Table 3-2
Groundwater Elevation Summary
Site 283
Fort Monmouth, New Jersey

Round Number:		#15			#16			#17			#18			#19		
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.	Date	Depth to Water	Ground-water Elev.
283-MW1	11.34	02/27/03	5.12	6.22	05/19/03	6.02	5.32	08/04/03	5.74	5.6	11/13/03	5.72	5.62	02/05/04	5.50	5.84
283-MW2	13.52	02/27/03	4.70	8.82	05/19/03	6.46	7.06	08/04/03	6.11	7.41	11/13/03	6.03	7.49	02/05/04	5.60	7.92
283-MW3	11.86	02/27/03	5.94	5.92	05/19/03	6.77	5.09	08/04/03	6.56	5.3	11/13/03	6.45	5.41	02/05/04	6.60	5.26

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
4) For low-flow sampling rounds
(Aug. 31, 2000 and Oct 13, 2000)
depth to water shown is for previous day.

Table 4-1
Data for Geologic Cross Section A-A'
Site 283
Fort Monmouth, New Jersey

Well ID	Units	283-MW3	283-MW2
Elevation of Top of Casing	ft (amsl)	11.86	13.52
Elevation of Ground Surface	ft (amsl)	12.42	14
Elevation of Top of Screen	ft (amsl)	7.42	9
Elevation of Groundwater (1/5/01)	ft (amsl)	4.92	6.2
Elevation of Top of Unit 2	ft (amsl)	NA	0
Elevation of Top of Unit 3	ft (amsl)	NA	NA
Elevation of Top of Unit 4	ft (amsl)	11.92	NA
Elevation of Top of Unit 5	ft (amsl)	11.42	13.5
Elevation of Top of Unit 6	ft (amsl)	8.42	NA
Elevation of Top of Unit 7	ft (amsl)	NA	NA
Elevation of Top of Unit 8	ft (amsl)	-1.58	9
Elevation of Bottom of Well	ft (amsl)	-7.58	-6
Distance from Point A on Cross-Section	ft	0	222

Explanation of Units (see Minard, 1969):

Surface Materials:

*Unit 1 = asphalt

Unit 2 = topsoil

Unit 3 = fill -- cinders, slag, coal fragments (NA)

Unit 4 = brown coarse-medium-fine sand, some medium-fine gravel (fill?)

Tinton Sand:

Unit 5 = brown medium-fine sand, little silt

Unit 6 = brown-green/brown medium-fine sand and silty clay

Unit 7 = brown-orange/brown green silty clay (NA)

Lower Red Bank Formation (Sandy Hook):

Unit 8 = green silty clay, some black fine sand

Notes:

*Shown in geologic cross section A-A" but not in table above

All measurements in feet.

amsl: above mean sea level

NA: Not Applicable

Unit numbering matches Geologic Cross Section A-A".

Table 4-2
Data for Geologic Cross Section A-A''
Site 283
Fort Monmouth, New Jersey

Well ID	Units	283-MW3	283-MW1
Elevation of Top of Casing	ft (amsl)	11.86	11.34
Elevation of Ground Surface	ft (amsl)	12.42	11.55
Elevation of Top of Screen	ft (amsl)	7.42	6.55
Elevation of Groundwater (1/5/01)	ft (amsl)	4.92	5.23
Elevation of Top of Unit 2	ft (amsl)	NA	0
Elevation of Top of Unit 3	ft (amsl)	NA	11.05
Elevation of Top of Unit 4	ft (amsl)	11.92	NA
Elevation of Top of Unit 5	ft (amsl)	11.42	NA
Elevation of Top of Unit 6	ft (amsl)	8.42	8.55
Elevation of Top of Unit 7	ft (amsl)	NA	6.55
Elevation of Top of Unit 8	ft (amsl)	-1.58	-0.45
Elevation of Bottom of Well	ft (amsl)	-7.58	-13.45
Distance from Point A on Cross-Section	ft	0	216

Explanation of Units (see Minard, 1969):

Surface Materials:
- Unit 1 (not in table) = asphalt
- Unit 2 = topsoil
- Unit 3 = fill -- cinders, slag, coal fragments
- Unit 4 = brown coarse-medium-fine sand, some medium-fine gravel (fill?)

Tinton Sand:
- Unit 5 = brown medium-fine sand, little silt
- Unit 6 = brown-green/brown medium-fine sand and silty clay
- Unit 7 = brown-orange/brown green silty clay

Lower Red Bank Formation (Sandy Hook):
- Unit 8 = green silty clay, some black fine sand

Notes:

*Shown in geologic cross section A-A' but not in table above

All measurements in feet.

amsl: above mean sea level

NA: Not Applicable

Unit numbering matches Geologic Cross Section A-A'.

Table 4-3
Slug Testing Results Summary
Site 283
Fort Monmouth, New Jersey

Well ID	Date	Depth to Static Water Level	DTW at t=0	b	DTW Adjustment	Hydraulic Conductivity (feet/day)
283-MW1	8/14/2001	6.55	8.871	16.129	3.871	4.06
283-MW2	8/14/2001	7.94	9.528	10.472	0.295	2.41
283-MW3	8/14/2001	7.20	9.807	10.193	9.801	4.38
Geometric Mean of Hydraulic Conductivity (feet/day):						3.5

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.

Table 5-1
Groundwater Sampling Results
Site 283
Fort Monmouth, New Jersey

Well ID			283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1
Lab Sample ID	**NJDEP**	**Site Specific**	5505.02	5619.01	5681.03[2]	5788.03[2]	5797.04	31	1602904	1628504	1663801	2014501	2029204	2064701	2086401	3008604	3023601	3046901	3073104	4010204
Sample Date	**Criteria**	**MBC[1]**	06/28/00	08/10/00	08/31/00	10/13/00	10/17/00	01/05/01	04/04/01	07/24/01	12/11/01	03/08/02	05/16/02	09/10/02	12/03/02	02/27/03	05/19/03	08/04/03	11/13/03	02/05/04
		Round	#4	#5	Low Flow #1	Low Flow #2	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19
Volatiles																				
Acetone	**700**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**6**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	**30**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**1000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**700**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes[3]	**1000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs - VOCs	**NLE**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	130	ND	ND	ND	ND	30
Semi-Volatiles																				
2,4-Dimethylphenol	**100**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	**NLE**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND
Naphthalene[3]	**300**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	**5000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	**10**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	**100**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	**4000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs - SVOCs	**100**	**N/A**	40	6	NS	NS	48	5	ND	ND	5	17	5	59	27	99	12	20	11	4
Pesticides/PCBs			ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																				
Aluminum	**200**	**121000**	**2070**	**1930**	**1930**	**1920**	**2120**	**2460**	**2350**	**3150**	**3600**	**3520**	**3330**	**3350**	**3190**	**3130**	**3140**	**2960**	**4010**	**4710**
Antimony	**20**	**N/A**	ND	3.92	ND	ND	3.97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**83.6**	ND	ND
Arsenic	**8**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**27.7**	3.16	ND	ND	ND	ND	ND	ND
Barium	**2000**	**699**	71.1	64.1	68.8	73.1	80.7	78.2	78.7	102	92.7	96	94.4	110	108	87.9	95.6	96	118	121
Beryllium	**20**	**N/A**	0.682	0.562	0.757	0.618	0.709	0.627	0.6	0.99	1.04	1.05	0.782	1.11	0.905	0.699	0.815	0.9	1.19	1.01
Cadmium	**4**	**N/A**	ND	ND	ND	ND	ND	ND	ND	1.67	ND	ND	ND	ND	0.887	0.836	ND	0.719	0.436	ND
Calcium	**NLE**	**45400**	5040	5390	5710	5800	6220	7180	6240	8190	7100	8380	8570	8600	8790	8590	9370	9170	11200	13300
Chromium	**100**	**N/A**	9.79	4.2	ND	3.13	1.1	0.88	1	3.98	19.1	4.99	3.03	3.31	1.39	1.62	1.77	ND	2.73	ND
Cobalt	**NLE**	**N/A**	3.28	3.08	3.76	3.53	3.2	4.03	3.9	4.36	4.41	4.84	4.19	4.93	4.45	4.65	4.48	4.36	5.48	6.39
Copper	**1000**	**65.6**	16.9	ND	ND	66.5	ND	ND	17	6.44	39.8	9.42	4.35	8.24	22.1	7.22	3.24	3.45	3.76	5.33
Iron	**300**	**431000**	**1450**	**739**	214	165	**306**	**868**	**410**	**575**	**4490**	**897**	**577**	**692**	281	ND	275	194	**515**	ND
Lead	**10**	**N/A**	ND	2.38	1.5	**20.1**	1.85	ND	3	3.03	7.83	1.36	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	**NLE**	**62700**	11800	11400	12300	12200	13200	15300	15200	16500	13700	18600	17600	17700	17500	17900	18400	16900	20100	22400
Manganese	**50**	**331**	22.2	23.8	16.6	29	21.8	26	34.7	**55.2**	29.3	36.1	33.9	33.1	43.2	40.6	36.3	33	42.9	**58.2**
Mercury	**2**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND
Nickel	**100**	**187**	10.4	5.91	5.06	13.3	5.56	4.89	12	20.4	12.5	11.9	10.9	11.9	13.4	11.2	11.1	10.4	13.9	13.5
Potassium	**NLE**	**137000**	5220	5370	5880	5210	5590	5310	4350	6020	6980	5900	5580	11000	6870	4810	5690	6670	7080	6360
Selenium	**50**	**N/A**	ND	ND	ND	ND	ND	ND	ND	7.93	ND	10.4	13.7	8.98	10.6	ND	3.78	ND	ND	ND
Silver	**20**	**N/A**	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	4.44	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	35600	25400	39500	37300	42700	46600	41300	49100	38400	50000	**51500**	**54400**	**50800**	49000	**54300**	**51400**	**60900**	**80100**
Thallium	**10**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	2.74	1.41	ND	1.38	ND	ND	ND	1.62	7.61	1.36	0.943	0.967	ND	ND	0.537	0.362	0.717	ND
Zinc	**5000**	**233**	53	73.5	78.8	234	67	46.6	100	92.2	110	87.1	72.2	86.8	123	76.7	66.5	79.1	83.9	99.5

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)
Exceedences of NJDEP GWQS are shaded and **bold**
ND: Analyte not detected in sample
N/A: Not Applicable NS: Not Sampled
NLE: No NJDEP GWQC exists for this analyte
*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

[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

Table 5-1
Groundwater Sampling Results
Site 283
Fort Monmouth, New Jersey

Well ID			283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2
Lab Sample ID	**NJDEP**	**Site Specific**	4798.01	5046.01	5280.01	5505.01	5619.02	5681.04[2]	5788.04[2]	5797.05	32	1602905	1628505	1663802	2014502	2029205	2064702	2086402	3008605	3023602	3046902	3073105	4010205
Sample Date	**Criteria**	**MBC[1]**	09/20/99	12/27/1999*	03/23/00	06/28/00	08/10/00	08/31/00	10/13/00	10/17/00	01/05/01	04/04/01	07/24/01	12/11/01	03/08/02	05/16/02	09/10/02	12/03/02	02/27/03	05/19/03	08/04/03	11/13/03	02/05/04
		Round	#1	#2	#3	#4	#5	Low Flow #1	Low Flow #2	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19
Volatiles																							
Acetone	**700**	**N/A**	ND	ND	ND	7.16	15.55	NS	NS	ND	23.44	ND	ND	ND	ND	ND	ND	ND	5.23	ND	ND	ND	2.78
Chloroform	**6**	**N/A**	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.46	ND	ND	2.59	ND
Chloromethane	**30**	**N/A**	15.51	ND	ND	ND	ND	NS	NS	ND	ND	18.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	**N/A**	**536.85**	**720.56**	**827.72**	**908.16**	**152**	NS	NS	**670.35**	**1009.73**	**264**	**502.2**	**1055.06**	**710.22**	**395.51**	**223.8**	**119.4**	**123.79**	**112.54**	**239.49**	**290.54**	**156.83**
Toluene	**1000**	**N/A**	598.45	413.22	511.78	663.58	381.19	NS	NS	303.92	320.72	235.04	241.61	24.78	172.69	99.1	94.08	39.32	122.91	27.19	108.66	175.5	47.53
Ethylbenzene	**700**	**N/A**	**797.4**	422.5	**725.71**	**1129.23**	**717.5**	NS	NS	**810.07**	**1160.45**	502.14	604.67	**711.17**	**925.08**	659.8	476.21	349.99	560.9	215.6	485.84	**899.91**	672.01
Total Xylenes[3]	**1000**	**N/A**	**3831.36**	**2125.86**	**4295.69**	**5960.7**	**4009.44**	NS	NS	**3829.91**	**5143.75**	**3221.45**	**2797.88**	**1524.1**	**3744.16**	**2192.84**	**1910.78**	970.36	**3067.89**	**2499.45**	**1985.34**	**2648.84**	**1427.1**
Total TICs - VOCs	**NLE**	**N/A**	8400	3669	4102	3851	44	NS	NS	13500	377	331	323	327	8250	298	338	5720	4270	4932	232	5280	1890
Semi-Volatiles																							
2,4-Dimethylphenol	**100**	**N/A**	3.88	3.57	3.9	ND	1.48	NS	NS	ND	ND	ND	ND	ND	ND	1.75	ND	ND	7.37	ND	4.34	1.8	4.88
4-Methylphenol	**NLE**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.72
bis(2-Ethylhexyl)phthalate	**30**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND
Naphthalene[3]	**300**	**N/A**	119.16	183.38	82.44	174.92	101.97	NS	NS	152.89	223.45	65.12	150.61	89.93	80.67	101.9	135.69	76.68	21.97	51.41	80.88	108.81	62.19
2-Methylnaphthalene[3]	**100**	**N/A**	25.25	26.28	7.43	24.57	25.13	NS	NS	22.89	26.93	6.1	18.69	13.36	13.24	16.78	30.03	11.88	ND	6.73	9.03	20.23	10.16
Diethylphthalate	**5000**	**N/A**	ND	ND	ND	ND	0.17	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.01
Nitrobenzene	**10**	**N/A**	ND	ND	ND	ND	1.17	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	**100**	**N/A**	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	9.83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	**4000**	**N/A**	ND	ND	5.11	ND	ND	NS	NS	ND	ND	8.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs - SVOCs	**100**	**N/A**	**3225**	**2698**	**2892**	**4041**	**1758**	NS	NS	**3685**	**4912**	**2070**	**3061**	**2419**	**1717**	**2777**	**2979**	**1695**	**2410**	**1555**	**2379**	**2569**	**1987**
Pesticides/PCBs			ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																							
Aluminum	**200**	**121000**	**309**	123	**241**	81.4	**812**	**411**	**247**	**917**	**360**	**2200**	**1780**	**1470**	**249**	**996**	**267**	157	**235**	**2690**	**984**	**762**	**3760**
Antimony	**20**	**N/A**	ND	ND	ND	ND	4.14	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	**8**	**N/A**	4.74	ND	ND	ND	3.4	6.6	5.36	2.38	3.72	3	6.78	3.09	ND	**24.2**	7.95	6.04	2.59	6.64	4.95	**10.7**	**10.1**
Barium	**2000**	**699**	39.9	40.3	38.5	45.9	21.7	27.2	25.3	38.9	34.6	30.5	43.1	47.6	43.5	34	24.4	23.2	54.8	39	34.5	37.6	48.4
Beryllium	**20**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.136	0.157	ND
Cadmium	**4**	**N/A**	1.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.744	ND	ND	ND	ND	0.779	ND	ND	ND	ND	ND
Calcium	**NLE**	**45400**	3500	7350	3590	2240	1010	1120	950	1650	1770	ND	1540	3870	3900	2590	1670	1950	1720	1810	1240	1200	1980
Chromium	**100**	**N/A**	5.05	ND	1.51	1.38	3.31	ND	0.874	8.6	2.6	12.7	13.6	21.5	3.24	11.4	2.58	0.701	3.15	33.3	11.3	8.95	46.3
Cobalt	**NLE**	**N/A**	0.908	1.43	ND	0.718	ND	ND	ND	0.556	0.717	ND	ND	1.5	ND	0.623	ND	ND	ND	1.41	ND	ND	2.32
Copper	**1000**	**65.6**	41.2	ND	ND	41.1	ND	ND	14.1	ND	80.5	19	8.26	79.3	11.5	8.35	2.36	4.13	7.25	7.46	3.22	4.92	30.4
Iron	**300**	**431000**	**2330**	**2060**	**2010**	**2130**	**2060**	**1780**	**1330**	**3340**	**3220**	**4360**	**4050**	**7120**	**3220**	**4040**	**2490**	**1720**	**1230**	**8350**	**4420**	**3830**	**10100**
Lead	**10**	**N/A**	**22**	6.92	**15.3**	**11.5**	**31.9**	**33.1**	**25.7**	**14.5**	**25.3**	**23**	**12.3**	**11.8**	9.02	7.47	9.58	5.84	**17.1**	**11.8**	9.71	**13.3**	**21.5**
Magnesium	**NLE**	**62700**	799	1990	1320	1230	532	604	744	1300	1150	1020	842	2320	1950	1480	9.32	764	917	2020	1210	1140	2360
Manganese	**50**	**331**	14.5	44	11.9	8.31	5.97	ND	2.67	4.68	6.47	8.1	36	15	14.3	11.2	6.62	29.8	6.39	8.97	5.08	6.2	11
Mercury	**2**	**N/A**	ND	0.3	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND
Nickel	**100**	**187**	4.11	3.62	6.43	6.01	ND	ND	1.4	ND	2.85	5	12.2	8.52	4.99	3.7	2.12	1.56	3.06	5.59	2.76	2.91	6.53
Potassium	**NLE**	**137000**	1930	2530	1820	1730	1170	1180	1100	2130	1960	1420	2110	3370	2240	1960	2260	2770	1120	3310	2140	1770	4360
Selenium	**50**	**N/A**	6.49	4.73	7.29	4.36	8.4	5.7	4.09	6.69	6.22	5	30	ND	13.4	15.7	11.1	6.81	6.98	6.97	ND	9.53	ND
Silver	**20**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.87	ND	1.24	ND	ND	ND	0.636	ND
Sodium	**50000**	**21500**	12100	18600	10600	15100	10100	16100	16300	17900	17300	14100	16100	17800	16700	16500	15500	17000	13300	16700	13600	13500	16100
Thallium	**10**	**N/A**	8.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	1.73	ND	1.68	1.17	2.84	ND	1.89	3.13	ND	6.4	6.21	7.77	0.773	4.21	1.32	0.858	0.654	12.2	4.38	3.29	17.3
Zinc	**5000**	**233**	21.9	29.4	43.1	18.1	43.9	84.8	51.5	28.4	147	37	36.6	87	23.9	57.1	21.6	10.1	18.8	15.2	15.8	17.4	60.5

Notes

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

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

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No NJDEP GWQC exists for this analyte

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

[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

Table 5-1
Groundwater Sampling Results
Site 283
Fort Monmouth, New Jersey

Well ID			283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3
Lab Sample ID	**NJDEP**	**Site Specific**	5505.03	5619.03	5681.02[2]	5788.05[2]	5797.06	33	1602906	1628506	1663803	2014503	2029206	2064703	2086403	3008606	3023603	3046903	3073106	4010206
Sample Date	**Criteria**	**MBC[1]**	06/28/00	08/10/00	08/31/00	10/13/00	10/17/00	01/05/01	04/04/01	07/24/01	12/11/01	03/08/02	05/16/02	09/10/02	12/03/02	02/27/03	05/19/03	08/04/03	11/13/03	02/05/04
		Round	#4	#5	Low Flow #1	Low Flow #2	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19
Volatiles																				
Acetone	**700**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**6**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	**30**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	**N/A**	**9.25**	**11.76**	NS	NS	**9.86**	**5.3**	**10.06**	**10.2**	**8.53**	**8.38**	**6.21**	ND	**3.45**	**8.24**	**1.47**	ND	ND	**3.21**
Toluene	**1000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**700**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes[3]	**1000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.14	15.94	ND	ND	ND
Total TICs - VOCs	**NLE**	**N/A**	ND	ND	NS	NS	ND	ND	ND	238	ND	ND	71	ND	10	123	9	ND	ND	21
Semi-Volatiles																				
2,4-Dimethylphenol	**100**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	**NLE**	**N/A**	ND	ND	NS	NS	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	1.33	ND	ND	ND	ND	ND	ND
Naphthalene[3]	**300**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene[3]	**100**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	**5000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	**10**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	**100**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	**4000**	**N/A**	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs - SVOCs	**100**	**N/A**	ND	45	NS	NS	48	ND	ND	ND	6	10	6	55	20	67	12	17	ND	5
Pesticides/PCBs			ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																				
Aluminum	**200**	**121000**	**3920**	**302**	**298**	149	**365**	**1680**	**880**	**289**	**1030**	**503**	**246**	**393**	48.3	64	**336**	109	**234**	**340**
Antimony	**20**	**N/A**	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	**8**	**N/A**	ND	3.56	ND	ND	2.32	6.4	5	3.3	7.27	3.25	**29.9**	6.61	4.18	2.74	7.68	3.1	**8.1**	ND
Barium	**2000**	**699**	99.5	64.8	59.2	66.5	66.6	284	534	178	193	197	150	135	20.7	76.7	336	173	131	282
Beryllium	**20**	**N/A**	0.566	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0682	0.128	ND
Cadmium	**4**	**N/A**	ND	ND	ND	ND	ND	ND	**5.1**	1.48	0.748	ND	0.597	ND	0.564	ND	0.899	0.66	0.463	ND
Calcium	**NLE**	**45400**	11700	10400	10600	10700	10400	12400	8800	10000	11100	10400	10800	11400	8150	10700	12300	11600	12300	14300
Chromium	**100**	**N/A**	50.7	2.22	ND	0.662	1.56	18	4.5	2.31	14	4.81	2.29	1.5	ND	0.911	3.55	ND	1.93	ND
Cobalt	**NLE**	**N/A**	2.38	1.03	1.09	0.9	0.753	0.963	ND	ND	1.63	1.23	1.02	0.919	0.658	0.831	ND	ND	0.542	ND
Copper	**1000**	**65.6**	ND	ND	ND	24.6	ND	105	ND	5.78	ND	ND	14.1	13.1	53.6	3.33	ND	ND	ND	ND
Iron	**300**	**431000**	**21000**	**7090**	**6740**	**6640**	**7030**	**38500**	**40500**	**11200**	**23400**	**19100**	**13000**	**10700**	**1230**	**6360**	**26500**	**12300**	**10300**	**17600**
Lead	**10**	**N/A**	ND	ND	ND	ND	2.17	**21.1**	2	2.6	ND	ND	ND	ND	9.11	ND	1.16	ND	ND	ND
Magnesium	**NLE**	**62700**	4080	1940	2020	2040	2110	2860	2310	1450	2540	2190	1950	2230	1560	2030	2390	2200	2360	2750
Manganese	**50**	**331**	36.9	30.8	24.2	31.5	27.5	34.3	31.5	**63.4**	35.5	33.9	33.3	35.7	48.2	33.5	40.8	34.4	38.4	46
Mercury	**2**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	**100**	**187**	9.39	2.93	ND	3.87	1.96	8.53	6	14.9	5.8	5.3	10.2	5.55	3.96	4.68	5.78	5.13	5.4	6
Potassium	**NLE**	**137000**	12200	ND	7540	7300	7610	10000	7800	6880	8310	7650	7000	8150	6070	7530	8670	7900	7920	8650
Selenium	**50**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.75	7.31	5.54	5.69	ND	ND	ND	ND	ND
Silver	**20**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.47	ND	ND	ND	ND	ND
Sodium	**50000**	**21500**	7350	5730	7800	8140	8870	7960	7600	7840	6950	7490	8200	8430	7530	7950	9050	7600	7330	14300
Thallium	**10**	**N/A**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	**NLE**	**N/A**	18.2	1.17	ND	ND	ND	5.04	3	0.945	5	1.38	ND	ND	ND	ND	1.37	0.497	0.524	ND
Zinc	**5000**	**233**	28.7	33	20.3	21.8	26	216	7	34.7	17.8	12.1	36.1	50.8	10.9	14.4	47.4	10.4	14.1	ND

Notes

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

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

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

NLE: No NJDEP GWQC exists for this analyte

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

[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

Table 5-2
Groundwater Sampling Results for Contaminants of Concern
Site 283
Fort Monmouth, New Jersey

Well ID		283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1	283-MW1
Lab Sample ID	**NJDEP**	5505.02	5619.01	5681.03[2]	5788.03[2]	5797.04	31	1602904	1628504	1663801	2014501	2029204	2064701	2086401
Sample Date	**Criteria**	06/28/00	08/10/00	08/31/00	10/13/00	10/17/00	01/05/01	04/04/01	07/24/01	12/11/01	03/08/02	05/16/02	09/10/02	12/03/02
Round No.		#4	#5	Low Flow #1	Low Flow #2	#6	#7	#8	#9	#10	#11	#12	#13	#14
Benzene	**1**	0.115	0.115	NS	NS	0.115	0.115	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene[3]	**700**	0.325	0.325	NS	NS	0.325	0.325	ND	ND	ND	ND	ND	ND	ND
Xylenes[3][4]	**1000**	0.88	0.88	NS	NS	0.88	0.88	ND	ND	ND	ND	ND	ND	ND
Lead	**10**	1	2.38	1.5	**20.1**	1.85	1	3	3.03	7.83	1.36	ND	ND	ND

Well ID		283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2
Lab Sample ID	**NJDEP**	4798.01	5046.01	5280.01	5505.01	5619.02	5681.04[2]	5788.04[2]	5797.05	32	1602905	1628505	1663802	2014502
Sample Date	**Criteria**	09/20/99	12/27/99	03/23/00	06/28/00	08/10/00	08/31/00	10/13/00	10/17/00	01/05/01	04/04/01	07/24/01	12/11/01	03/08/02
Round No.		#1	#2	#3	#4	#5	Low Flow #1	Low Flow #2	#6	#7	#8	#9	#10	#11
Benzene	**1**	**536.85**	**720.56**	**827.72**	**908.16**	**152**	NS	NS	**670.35**	**1009.73**	**264**	**502.2**	**1055.06**	**710.22**
Ethylbenzene[3]	**700**	**797.4**	422.5	**725.71**	**1129.23**	**717.5**	NS	NS	**810.07**	**1160.45**	502.14	604.67	**711.17**	**925.08**
Xylenes[3][4]	**1000**	**3831.36**	**2125.86**	**4295.69**	**5960.7**	**4009.44**	NS	NS	**3829.91**	**5143.75**	**3221.45**	**2797.88**	**1524.1**	**3744.16**
Lead	**10**	**22**	6.92	**15.3**	**11.5**	**31.9**	**33.1**	**25.7**	**14.5**	**25.3**	**23**	**12.3**	**11.8**	9.02

Well ID		283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3	283-MW3
Lab Sample ID	**NJDEP**	5505.03	5619.03	5681.02[2]	5788.05[2]	5797.06	33	1602906	1628506	1663803	2014503	2029206	2064703	2086403
Sample Date	**Criteria**	06/28/00	08/10/00	08/31/00	10/13/00	10/17/00	01/05/01	04/04/01	07/24/01	12/11/01	3/8/2002	05/16/02	09/10/02	12/03/02
Round No.		#4	#5	Low Flow #1	Low Flow #2	#6	#7	#8	#9	#10	#11	#12	#13	#14
Benzene	**1**	**9.25**	**11.76**	NS	NS	**9.86**	**5.3**	**10.06**	**10.2**	**8.53**	**8.38**	**6.21**	ND	**3.45**
Ethylbenzene[3]	**700**	0.325	0.325	NS	NS	0.325	0.325	ND	ND	ND	ND	ND	ND	ND
Total Xylenes[3]	**1000**	0.88	0.88	NS	NS	0.88	0.88	ND	ND	ND	ND	ND	ND	ND
Lead	**10**	1	1	1	1	2.17	**21.1**	2	2.6	ND	ND	ND	ND	9.11

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)
Exceedences of NJDEP GWQS are shaded and **bold**
ND: Analyte not detected in sample
N/A: Not Applicable
NS: Not Sampled
[1]Low Flow Sampling Method used to collect sample
[2]Interim Criteria used as NJDEP criteria

Table 5-2
Groundwater Sampling Results for Contaminants of Concern
Site 283
Fort Monmouth, New Jersey

Well ID		283-MW1	283-MW1	283-MW1	283-MW1	283-MW1
Lab Sample ID	**NJDEP**	3008604	3023601	3046901	3073104	4010204
Sample Date	**Criteria**	02/27/03	05/19/03	08/04/03	11/13/03	02/05/04
Round No.		#15	#16	#17	#18	#19
Benzene	**1**	ND	ND	ND	ND	ND
Ethylbenzene[3]	**700**	ND	ND	ND	ND	ND
Xylenes[3][4]	**1000**	ND	ND	ND	ND	ND
Lead	**10**	ND	ND	ND	ND	ND

Well ID		283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2	283-MW2
Lab Sample ID	**NJDEP**	2029205	2064702	2086402	3008605	3023602	3046902	3073105	4010205
Sample Date	**Criteria**	05/16/02	09/10/02	12/03/02	02/27/03	05/19/03	08/04/03	11/13/03	02/05/04
Round No.		#12	#13	#14	#15	#16	#17	#18	#19
Benzene	**1**	**395.51**	**223.8**	**119.4**	**123.79**	**112.54**	**239.49**	**290.54**	**156.83**
Ethylbenzene[3]	**700**	659.8	476.21	349.99	560.9	215.6	485.84	**899.91**	672.01
Xylenes[3][4]	**1000**	**2192.84**	**1910.78**	970.36	**3067.89**	**2499.45**	**1985.34**	**2648.84**	**1427.1**
Lead	**10**	7.47	9.58	5.84	**17.1**	**11.8**	9.71	**13.3**	**21.5**

Well ID		283-MW3	283-MW3	283-MW3	283-MW3	283-MW3
Lab Sample ID	**NJDEP**	3008606	3023603	3046903	3073106	4010206
Sample Date	**Criteria**	02/27/03	05/19/03	08/04/03	11/13/03	02/05/04
Round No.		#15	#16	#17	#18	#19
Benzene	**1**	**8.24**	**1.47**	ND	ND	**3.21**
Ethylbenzene[3]	**700**	ND	ND	ND	ND	ND
Total Xylenes[3]	**1000**	3.14	15.94	ND	ND	ND
Lead	**10**	ND	1.16	ND	ND	ND

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)
Exceedences of NJDEP GWQS are shaded and **bold**
ND: Analyte not detected in sample
N/A: Not Applicable
NS: Not Sampled
[1]Low Flow Sampling Method used to collect sample
[2]Interim Criteria used as NJDEP criteria

Table 5-3
Determination of Contaminants of Concern
Site 283
Fort Monmouth, New Jersey

Analyte	NJDEP Cleanup Criteria[1]	Site Specific Groundwater MBC[2]	Maximum Result	No. of NJDEP Criteria Exceedences	No. of Site Maximum Background Exceedences	Comments
Volatiles						
Acetone	700	N/A	15.55	0	N/A	No exceedence of NJDEP criteria
Chloroform	6	N/A	17.56	1	N/A	**Not a Contaminant of Concern: only one exceedence of NJDEP criteria**
Chloromethane	30	N/A	15.51	0	N/A	No exceedence of NJDEP criteria
Benzene	1	N/A	1009.73	11	N/A	**Contaminant of Concern at monitoring wells 283-MW2 and 283-MW3.**
Toluene	1000	N/A	663.58	0	N/A	No exceedence of NJDEP criteria
Ethylbenzene	700	N/A	1160.45	6	N/A	**Contaminant of Concern at monitoring well 283-MW2.**
Xylenes[3]	1000	N/A	5960.7	7	N/A	**Contaminant of Concern at monitoring well 283-MW2.**
Semi-Volatiles						
2,4-Dimethylphenol	100	N/A	3.9	0	N/A	No exceedence of NJDEP criteria
4-Methylphenol	NLE	N/A	2.72	N/A	N/A	No NJDEP Groundwater Criteria
bis(2-Ethylhexyl)phthalate	30	N/A	1.33	0	N/A	No exceedence of NJDEP criteria
Naphthalene[3]	300	N/A	223.45	6	N/A	No exceedence of NJDEP criteria
2-Methylnaphthalene[3]	100	N/A	26.93	0	N/A	No exceedence of NJDEP criteria
Diethylphthalate	5000	N/A	1.01	0	N/A	No exceedence of NJDEP criteria
Nitrobenzene	10	N/A	1.17	0	N/A	No exceedence of NJDEP criteria
Phenol	4000	N/A	5.11	0	N/A	No exceedence of NJDEP criteria
Pesticides/PCBs: None Detected						
Metals						
Aluminum	200	121000	3920	18	0	**Not a Contaminant of Concern: did not exceed Site Specific Groundwater MBC.**
Antimony	20	N/A	83.6	1	N/A	**Not a Contaminant of Concern: was not detected in low-flow sampling rounds.**
Arsenic	8	N/A	29.9	6	N/A	**Not a Contaminant of Concern: was not detected in low-flow sampling rounds.**
Barium	2000	699	534	0	0	No exceedence of NJDEP criteria
Beryllium	20	N/A	1.19	0	N/A	No exceedence of NJDEP criteria

Table 5-3
Determination of Contaminants of Concern
Site 283
Fort Monmouth, New Jersey

Analyte	NJDEP Cleanup Criteria[1]	Site Specific Groundwater MBC[2]	Maximum Result	No. of NJDEP Criteria Exceedences	No. of Site Maximum Background Exceedences	Comments
Cadmium	**4**	**N/A**	**5.1**	**1**	**N/A**	**Not a Contaminant of Concern: was not detected in low-flow sampling rounds.**
Calcium	**NLE**	**45400**	14,300	N/A	0	No NJDEP Groundwater Criteria
Chromium	**100**	**N/A**	50.7	0	N/A	No exceedence of NJDEP criteria
Cobalt	**NLE**	**N/A**	6.39	N/A	N/A	No NJDEP Groundwater Criteria
Copper	**1000**	**65.6**	105	0	3	No exceedence of NJDEP criteria
Iron	**300**	**431000**	**40,500**	**19**	**0**	**Not a Contaminant of Concern: did not exceed Site Specific Groundwater MBC.**
Lead	**10**	**N/A**	**33.1**	**10**	**N/A**	**Contaminant of Concern at monitoring wells 283-MW2 and 283-MW3. At well 283-MW1, lead exceeded the NJDEP Criteria only on 10/13/00 (2nd Low Flow round).**
Magnesium	**NLE**	**62700**	22,400	N/A	0	No exceedence of NJDEP criteria
Manganese	**50**	**331**	**58.2**	**1**	**0**	**Not a Contaminant of Concern: did not exceed Site Specific Groundwater MBC.**
Mercury	**2**	**N/A**	0.3	0	N/A	No exceedence of NJDEP criteria
Nickel	**100**	**187**	20.4	0	0	No exceedence of NJDEP criteria
Potassium	**NLE**	**137000**	12,200	N/A	0	No NJDEP Groundwater Criteria
Selenium	**50**	**N/A**	30	0	N/A	No exceedence of NJDEP criteria
Silver	**20**	**N/A**	2	0	N/A	No exceedence of NJDEP criteria
Sodium	**50000**	**21500**	**80,100**	**7**	**18**	**Not a Contaminant of Concern: infrequent exceedences in a limited area.**
Thallium	**10**	**N/A**	8.76	0	N/A	No exceedence of NJDEP criteria
Vanadium	**NLE**	**N/A**	18.2	N/A	N/A	No NJDEP Groundwater Criteria
Zinc	**5000**	**233**	234	0	1	No exceedence of NJDEP criteria

Notes:

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

NJDEP GWQC: New Jersey Department of Environmental Protection Groundwater Quality Criteria.

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 NJAC 7:9-6

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

[3]Interim Criteria used as NJDEP criteria

Table 5-4
Aquifer pH and Dissolved Oxygen
Site 283
Fort Monmouth, New Jersey

283-MW1			283-MW2			283-MW3		
Sample Date	pH	DO (mg/L)	Sample Date	pH	DO (mg/L)	Sample Date	pH	DO (mg/L)
			09/20/99	7.66	5.37			
			12/27/99	6.6	5.27			
			03/23/00	6.84	5.07			
06/28/00	6.9	5.3	06/28/00	6.85	4.17	06/28/00	6.97	5.17
08/10/00	3.7	4.07	08/10/00	5.25	4.11	08/10/00	5.75	4.23
08/31/00	3.48	0.01 ?	08/31/00	4.81	0.13 ?	08/31/00	5.4	0.09 ?
10/13/00	3.33	0.53 ?	10/13/00	4.78	1.3 ?	10/13/00	5.22	1.12 ?
10/17/00	6.23	4.33	10/17/00	6.44	3.71	10/17/00	6.87	4.11
01/05/01	6.38	4.86	01/05/01	6.49	4.02	01/05/01	6.81	4.21
04/04/01	3.49	5.37	04/04/01	5.1	5.41	04/04/01	5.57	5.27
07/24/01	3.73	0.03	07/24/01	5.1	0.49	07/24/01	5.73	0.49
12/11/01	3.53	0.64	12/11/01	5.61	0.44	12/11/01	5.59	0.64
03/08/02	4.09	0.98	03/08/02	5.81	0.97	03/08/02	5.61	1.07
05/16/02	6.4	4.59	05/16/02	6.5	3.9	05/16/02	6.86	4.38
09/10/02	6.54	3.76	09/10/02	6.56	4.03	09/10/02	6.9	3.59
12/03/02	3.49	0.07	12/03/02	4.75	3.15	12/03/02	5.17	1.96
02/27/03	4.71	2.98	02/27/03	4.74	2.18	02/27/03	5.2	2.37
05/19/03	4.5	2.16	05/19/03	4.69	1.11	05/19/03	5.26	2.58
08/04/03	5.3	2.66	08/04/03	4.81	2.06	08/04/03	5.36	2.17
11/13/03	5.49	2.58	11/13/03	4.99	2.16	11/13/03	5.4	2.27
02/05/04	5.48	2.37	02/05/04	5.21	2.23	02/05/04	5.51	2.15
Min:	3.33	0.03	Min:	4.69	0.44	Min:	5.17	0.49
Max:	6.90	5.37	Max:	7.66	5.41	Max:	6.97	5.27
Average:	4.82	2.92	Average:	5.69	3.15	Average:	5.84	2.92

Notes:
1.) DO: Dissolved Oxygen
2.) NA: Not Available / Not Applicable
3.) ?: Questionable Data (not used in calculations)

Table 6-1
Degradation Rates in Groundwater for Contaminants of Concern
Site 283
Fort Monmouth, New Jersey

Contaminant of Concern	Degradation Half life ("high") for anaerobic decay (days)	Degradation Half-life ("low") for aerobic decay (days)	Degradation Rate Constant (k) for anaerobic decay (1/day)	Degradation Rate Constant (k) for aerobic decay (1/day)	Source/Comments
Benzene	**730**	10	**9.5E-04**	6.93E-02	Howard (1991)
Ethylbenzene	228	6	3.0E-03	1.16E-01	Howard (1991)
Total Xylenes	365	14	1.9E-03	4.95E-02	Howard (1991)
Lead	-		-		Does not degrade

Notes:
Values shown are for biodegradation in groundwater.
Decay Rates are shown in scientific notation (9.5E-04 = 0.00095).
"high": Scientific judgement based on anaerobic decay rate in unacclimated groundwater.
"low": Scientific judgement based on aerobic decay rate in unacclimated groundwater.
Bold: Degradation rate used in groundwater modeling for Site 283.
Source: Howard, P.H., et. al., 1991, *Handbook of Environmental Degradation Rates* . Lewis Publishers.

Table 6-2
Sorption Coefficients for Contaminants of Concern
Site 283
Fort Monmouth, New Jersey

Contaminant of Concern	Organic Carbon/Water Partition Coefficient (K_{oc}) (L/kg)	Sorption Coefficient* (K_d) (L/kg)	Source/Comments
Benzene	61.7	0.1851	USEPA (1996)
Ethylbenzene	204	0.612	USEPA (1996)
Total Xylenes:	--	--	--
m-xylene	196	0.588	USEPA (1996)
o-xylene	241	0.723	USEPA (1996)
p-xylene	311	0.933	USEPA (1996)
Lead	N/A	890	PADEP (2000)

Notes:
*Sorption coefficients of organic compounds are based on fraction of organic carbon (f_{oc}) of 0.003.
N/A: Not applicable.

Table 6-3
Benzene Biodegradation Calculation for Well 283-MW2
Site 283
Fort Monmouth, New Jersey

Duration of Benzene Degradation Based on Published Biodegradation Rate		
Input		
Parameters	**Units**	**Constituent: Benzene**
Δt	**days**	**365**
$T_{1/2}$	**days**	**730**
k (1)	**$days^{-1}$**	**0.00095**
Initial Concentration, C_0 (2)	**µg/L**	**838.48**
November 26, 2000		
Calculation and Results		
Time (days)	**Date**	**Predicted Concentrations, C (ug/L)**
0	November 26, 2000	838.48
365	November 26, 2001	592.89
730	November 26, 2002	419.24
1095	November 26, 2003	296.45
1460	November 25, 2004	209.62
1825	November 25, 2005	148.22
2190	November 25, 2006	104.81
2555	November 25, 2007	74.11
2920	November 24, 2008	52.41
3285	November 24, 2009	37.06
3650	November 24, 2010	26.20
4015	November 24, 2011	18.53
4380	November 23, 2012	13.10
4745	November 23, 2013	9.26
5110	November 23, 2014	6.55
5475	November 23, 2015	4.63
5840	November 22, 2016	3.28
6205	November 22, 2017	2.32
6570	November 22, 2018	1.64
6935	November 22, 2019	1.16
7300	November 21, 2020	0.82
Time until NJDEP criteria is reached:		
7,300	**November 21, 2020**	**0.82**
New Jersey Criteria	**µg/L**	**1**

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**	**3.5**
Hydraulic Gradient (4) (i):	**ft/ft**	**0.0074**
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**	**61.7**
Fraction of Organic Carbon (7) (f_{oc})	**---**	**0.003**
Sorption Coefficient (K_d)	**L/kg**	**0.1851**
Calculation and Results		
Seepage Velocity (ft/day)	vs = K*i/ne =	0.065
Retardation Factor	Rd = 1 + (Kd * ρ_b / ne) =	1.76
Pollutant Transport Rate (ft/day)	vpt = vs/Rd =	0.037
or (ft/year)		13.40
TNJC (days)	**Determined above**	**7,300**
TNJC (years)		**20**
Length (ft)	**vpt * TNJC =**	**270**

Notes:
(1) Half-Life for anaerobic biodegradation in groundwater, upper limit: Howard, P.H. et. al. 1991.
(2) Initial concentration (Co) is the average of the two most recent concentrations that were detected at well 283-MW2 (10/17/00 and 01/05/01)
(3) Hydraulic conductivity of surficial fill, K = 3.5 ft/day (Geometeric mean of slug tests performed by Versar on August 14, 2001)
(4) Hydraulic gradient (i) derived from ground water elevation contours (January 5, 2001)
(5) Effective porosity, n = 0.4, and bulk density, ρ_b = 1.5 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 6-4
Benzene Biodegradation Calculation for Well 283-MW3
Site 283
Fort Monmouth, New Jersey

Duration of Benzene Degradation Based on Published Biodegradation Rate		
Input		
Parameters	**Units**	**Constituent: Benzene**
Δt	**days**	**180**
$T_{1/2}$	**days**	**730**
k (1)	**$days^{-1}$**	**0.00095**
Initial Concentration, C_0 (2)	**µg/L**	**7.58**
November 26, 2000		
Calculation and Results		
Time (days)	**Date**	**Predicted Concentrations, C (ug/L)**
0	November 26, 2000	7.58
180	May 25, 2001	6.39
360	November 21, 2001	5.39
540	May 20, 2002	4.54
720	November 16, 2002	3.83
900	May 15, 2003	3.23
1080	November 11, 2003	2.72
1260	May 9, 2004	2.29
1440	November 5, 2004	1.93
1620	May 4, 2005	1.63
1800	October 31, 2005	1.37
1980	April 29, 2006	1.16
2160	October 26, 2006	0.97
Time until NJDEP criteria is reached:		
2,160	**October 26, 2006**	**0.97**
New Jersey Criteria	**µg/L**	**1**

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**	**3.5**
Hydraulic Gradient (4) (i):	**ft/ft**	**0.037**
Effective Porosity (5) (n_e):	**---**	**0.4**
Bulk Density of Formation (5) (ρ_b)	**kg/L**	**1.59**
n-Octanol/Carbon Partition (6) (K_{oc}):	**L/kg**	**62**
Fraction of Organic Carbon (7) (f_{oc})	**---**	**0.003**
Sorption Coefficient (K_d)	**L/kg**	**0.186**
Calculation and Results		
Seepage Velocity (ft/day)	vs = K*i/ne =	0.324
Retardation Factor	Rd = 1 + (Kd * ρ_b / ne) =	1.74
Pollutant Transport Rate (ft/day)	vpt = vs/Rd =	0.186
or (ft/year)		67.94
TNJC (days)	**Determined above**	**2,160**
TNJC (years)		**5.9**
Length (ft)	**vpt * TNJC =**	**400**

Notes:
(1) Half-Life for anaerobic biodegradation in groundwater, upper limit: Howard, P.H. et. al. 1991.
(2) Initial concentration (Co) is the average of the two most recent concentrations that were detected at well 283-MW2 (10/17/00 and 01/05/01)
(3) Hydraulic conductivity of surficial fill, K = 3.5 ft/day (Geometeric mean of slug tests performed by Versar on August 14, 2001)
(4) Hydraulic gradient (i) derived from ground water elevation contours (January 5, 2001)
(5) Effective porosity, n = 0.4, and bulk density, ρ_b = 1.5 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 6-5
MODFLOW Input Parameters
Site 283
Fort Monmouth, New Jersey

Software used for Modelling
Waterloo Hydrogeologic *Visual Modflow Version 2.8.2*
Golden Software, Inc. *Surfer for WindowsVersion 7.04*
Papadopulos & Associates, Inc. *MT3D 99*

Grid			
Model Area:	Min	Max	Range
X (Easting, NJ Nad 83):	617600	620000	2400
Y (Northing, NJ Nad 83):	539600	541400	1800
Number of Columns:	137		
Number of Rows:	113		
Default Grid Size:	20' x 20'		
Grid Size in vicinity of Building 283:	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 6-5
MODFLOW Input Parameters
Site 283
Fort Monmouth, New Jersey

Layer properties			
Number of Layers:	5		
Layer Number	Formation	Thickness	Porosity (ne)*
Layer 1	Fill	10 ft** (0.5 ft at stream)	0.40
Layer 2	Navesink-Hornerstown Confining Unit	15 ft	0.40
Layer 3	Navesink-Hornerstown Confining Unit	110 ft	0.40
Layer 4	Wenonah-Mount Laurel Aquifer	75 ft	0.40
Layer 5	Marshalltown-Wenonah Confining Unit	10 ft	0.40
**Porosity estimated from Dominico and Schwarts (1998), Table 2.1.*			
***Thickness of fill was estimated based on boring logs for Site 283 and underground utilities.*			

Recharge	
Majority of Area:	13.28 in. / year
Selected Area:	0.00 in./year in paved area at Site 283 and surrounding areas.
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.*

River (Boundary Condition)	
Location:	Parkers Creek was assigned as a "river" in the area shown on the Fort Monmouth Base Map near the 283 site.
Stage Elevation:	0 ft
Elevation of River Bottom:	-1 ft
Conductance:	1600 ft^2/day

Table 6-5
MODFLOW Input Parameters
Site 283
Fort Monmouth, New Jersey

Hydraulic Conductivity (K)		
The geometric means were used for the layers specified below:		
Fill:	*From Slug tests conducted August 14, 2001.*	
(Layer 1)	Well	K
	283-MW1	4.06
	283-MW2	2.41
	283-MW3	4.38
Geometric Mean:		**3.5**
Navesink-Hornerstown		*From Martin (1998)*
Confining Unit:		2
(Layers 2 and 3)		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 4)		17
		13
		19
		13
		19
Geometric Mean:		**15.964987**
Marshaltown Wenonah		*From Martin (1998)*
Confining Unit:		2.60E-04
(Layer 5)		1.30E-01
		4.90E-04
		5.70E-06
		2.40E-05
		1.50E-05
Geometric Mean:		**0.00018**
Source:	Martin, Mary, 1998, Groundwater Flow in the New Jersey Coastal Plain, USGS Professional Paper 1404-H.	

Table 6-5
MODFLOW Input Parameters
Site 283
Fort Monmouth, New Jersey

Contaminant Transport Inputs

Dispersivity: Longitudinal: 13.8 ft Lattitudinal = 0.1 * Longitudinal = 1.38 ft.

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

Dispersivity (ax) determined from the following equation (Lp = plume length in feet):

$$\alpha_x = 0.83[\log_{10}(L_p)]^{2.414}$$

Dispersivity calculated based on a plume length of 300 feet.

Bulk Density (pb): 46.7 kg/ft^3 = 1.65 kg/L

Sorption type: Linear Isotherm

Sorption Constants Used in Model (Kd):

Source	COC	Kd (L/kg)	Kd (L/ug)	Kd (ft^3/kg)	**Calculated Rd=1+(Kd*pb/ne)**
(1)	Benzene	0.1851	1.851E-10	6.54E-03	**1.76**
(2)	Lead	890	0.00000089	3.14E+01	**3,700**

Notes:

Kd for benzene was found from the relationship: Kd = foc * Koc.

From EPA (1996): Koc = 61.7 L/Kg = 2.18 ft^3/Kg; foc = 0.003.

Benzene was also modelled separately using biodegradation only (See Tables 6-1 and 6-2).

Sources:

(1)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.

(2) 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 6-5
MODFLOW Input Parameters
Site 283
Fort Monmouth, New Jersey

Contaminant Transport Inputs (Continued):

Inititial Concentrations used in MODFLOW:

Contaminant of Concern	NJDEP Criteria[(1)]	Maximum Result	283-MW1 Initial Concentration	283-MW2 Initial Concentration	283-MW3 Initial Concentration
BENZENE	1	1009.7	0.115	838.480	7.580
LEAD	10	33.1	4.638	20.691	4.545

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).

One-half the Method Detection Limit (MDL) was used for results of "Non-Detect" (ND).

See Table 5-3 for MDLs used in this calculation.

Bold with Shading: exceeds the NJDEP Criteria.

Initial concentrations for benzene were derived from average of two most recent concentrations (10/17/00 and 01/05/01).

Initial concentrations for lead were derived from average of groundwater sample results between 09/20/99 and 01/05/99.

Initial concentration maps were derived in *Golden Software Surfer* using the "minimal curvature" method.

The initial concentration map was applied to the Layers 1 and 2 (see above for description of layers).

Biodegradation:

Contaminant of Concern	Biodegradation Half-life (days)	Biodegradation Constant (1/day)
BENZENE	730	0.00095
LEAD	N/A	N/A

Notes: N/A: not applicable.

Biodegradation rate applied to both sorbed and nonsorbed species.

Source: Howard, P.H. et. al. 1991, Environmental Degradation Rates, Lewis Publishers.

Half-life used is the upper limit for biodegradation of benzene in groundwater (anaerobic)

Table 6-6
MODFLOW Results
Site 283
Fort Monmouth, New Jersey

Contaminant of Concern	NJDEP Criteria (ug/L)[(1)]	Well used for Calculation	**Estimated Time for Compliance (Years)**
Benzene	1	283-MW2	**18**
		283-MW3	**9**
Lead	10	283-MW2[(2)]	**210**

Notes:

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

[(2)]Calculation based on extrapolating concentration versus time graph (Figure 6-14)

Table 6-7
Well Search Summary
Site 283
Fort Monmouth, New Jersey

Permit No.	Use*	Permit Date	Depth (ft)	Lattitude	Longitude
2900871	D	7/21/1953	140	401853	740346
2901016	D	12/24/1953	150	401839	740240
2901308	D	12/3/1954	46	401826	740319
2901458	D	5/20/1955	150	401853	740346
2901788	D	11/30/1955	60	401920	740253
2902505	D	10/10/1957	100	401908	740226
2902774	D	9/22/1958	124	401933	740226
2902919	I	5/11/1959	110	401906	740253
2903369	D	8/8/1960	100	401933	740213
2904271	D	2/13/1964	60	401933	740213
2904782	D	8/5/1965	50	401839	740240
2905052	D	5/2/1988	60	401933	740240
2905454	D	10/9/1967	60	401920	740346
2905609	D	10/7/1968	50	401906	740306
2905673	D	1/22/1969	100	401838	740226
2906861	D	1/29/1973	40	401933	740319
2907110	D	7/24/1973	40	401920	740306
2907451	D	4/9/1974	50	401933	740319
2908438	D	8/3/1976	60	401853	740200
2908510	D	6/7/1972	50	401839	740200
2908785	D	4/28/1977	120	401853	740346
2908810	D	5/12/1977	50	401839	740146
2911063	M	3/31/1981	25	401906	740213
2911064	M	3/31/1981	25	401905	740213
2911065	M	3/31/1981	25	401906	740213
2911066	M	3/31/1981	25	401906	740213
2911067	M	3/31/1981	25	101906	740213
2911068	M	3/31/1981	25	401906	740213
2911771	H	12/22/1981	100	401920	740253
2911772	H	12/22/1981	100	401906	740240
2912553	M	1/21/1983	25	401646	740152
2912554	M	1/21/1983	25	401846	740152
2912555	M	1/21/1983	25	401646	740152
2912785	M	6/2/1983	10	401939	740219
2912786	M	6/2/1983	10	101939	740219
2912787	M	6/2/1983	10	401939	740219
2912788	M	6/2/1983	10	401939	740219
2912789	M	6/2/1983	10	401939	740219
2912790	M	6/2/1983	10	401939	740219
2912792	M	6/2/1983	10	401939	740219
2912793	M	6/2/1983	10	401939	740219
2912794	M	6/2/1983	10	401939	740219
2912795	M	6/2/1983	10	401939	740219
2912796	M	6/2/1983	10	401939	740219
2912798	M	6/2/1983	10	401939	740219
2913696	M	8/5/1984	10	401939	740219
2913697	M	8/5/1984	10	401939	740219
2913698	M	8/5/1984	25	401939	740219
2914168	G	9/15/1984	200	401832	740339
2914244	D	6/30/1900	120	401819	740219
2914593	M	NA	17	401846	740352
2914594	M	NA	17	401846	740352
2914595	M	NA	17	401846	740352
2914596	M	N/A	17	401846	740352
2914980	R	5/5/1985	200	401912	740246
2915008	G	5/5/1985	200	101806	740248
2916628	M	6/11/1986	12	401939	740232
2916629	M	6/11/1986	12	401939	740232
2916630	M	6/11/1986	12	401939	740232
2917404	D	1/26/1900	100	401806	740246
2917657	B	12/4/1986	20	401939	740246
2917918	B	2/9/1987	20	401926	740246
2917919	B	2/9/1987	20	401926	740246

Permit No.	Use*	Permit Date	Depth (ft)	Lattitude	Longitude
2919007	B	7/21/1987	20	401906	740346
2919669	M	12/4/1987	20	401933	740240
2919670	M	12/4/1987	20	401933	740240
2919671	M	12/4/1987	20	401933	740240
2919672	M	12/4/1987	20	401933	740240
2919673	M	12/4/1987	20	401933	740240
2920626	M	5/13/1988	12	401826	740333
2920627	M	5/13/1988	12	401828	740333
2920628	M	5/13/1988	12	401826	740333
2921172	G	9/1/1988	200	401853	740306
2922571	G	4/14/1989	60	401920	740253
2923076	Y	6/29/1989	250	401839	740346
2923608	D	10/18/1989	200	401933	740226
2923677	M	11/3/1989	30	401908	740226
2923678	M	11/3/1989	30	401906	740226
2923679	M	11/3/1989	30	401906	740225
2923680	M	11/3/1989	30	401906	740226
2923690	D	11/2/1989	89	401813	740253
2923732	M	11/17/1989	15	401946	740226
2923733	M	11/17/1989	15	401946	740226
2923734	M	11/17/1989	15	401946	740226
2923735	M	11/17/1989	15	401946	740226
2923808	M	11/29/1989	30	401933	740253
2923809	M	11/29/1989	30	401933	740253
2923810	M	11/29/1989	30	401933	740253
2923811	M	11/29/1989	30	401933	740253
2923955	M	N/A	15	401933	740333
2923956	M	N.A	15	401933	740333
2924138	M	1/11/1990	40	401933	740240
2924139	M	1/11/1990	40	401933	740240
2924140	M	1/11/1990	40	401933	740240
2924141	M	1/11/1990	40	401933	740240
2924639	M	NA	30	401906	740226
2924640	M	NA	30	401906	740226
2924953	M	1/25/1900	10	401853	740200
2924954	M	1/25/1900	10	401853	740200
2924955	M	1/25/1900	10	401853	740200
2924956	M	1/25/1900	10	401853	740200
2925357	M	9-188	20	401639	740213
2926116	M	1/22/1900	25	401839	740346
2926147	G	1/6/1900	300	401933	740319
2926684	M	5/21/1900	15	401946	740240
2926704	D	1/1/1900	230	401920	740253
2926706	M	2/11/1900	15	401920	740333
2926707	M	2/11/1900	15	401920	740333
2926925	M	9/24/1991	20	401906	740200
2926926	M	9/24/1991	20	401906	740200
2926927	M	9/24/1991	20	401906	740200
2926928	M	9/24/1991	20	401906	740200
2926930	M	9/24/1991	20	401906	740200
2926931	M	9/24/1991	20	401906	740200
2926939	M	9/25/1991	20	401920	740200
2926940	M	9/25/1991	20	401906	740200
2926942	M	9/25/1991	20	401906	740200
2927072	M	10/24/1991	25	401933	740240
2927073	M	10/24/1991	25	401933	740240
2927755	G	3/31/1992	200	401920	740333
2927770	E	4/2/1992	16	401626	740333
2927771	E	4/2/1992	18	401826	740333
2927772	E	4/2/1992	16	401826	740333
2927773	E	4/2/1992	18	401826	740333
2928031	E	5/14/1992	20	401906	740200
2928144	E	8/4/1992	20	401933	740240

Table 6-7
Well Search Summary
Site 283
Fort Monmouth, New Jersey

Permit No.	Use*	Permit Date	Depth (ft)	Lattitude	Longitude
2928236	M	6/18/1992	20	401826	740333
2928907	M	10/13/1992	20	401906	740200
2928929	M	9/24/1991	20	401906	740200
2928938	M	9/25/1991	20	401920	740200
2928941	M	9/25/1991	20	401906	740200
2928992	M	10/27/1992	20	401920	740200
2928993	M	10/27/1992	20	401920	740200
2928994	M	10/27/1992	20	401920	740200
2928995	M	10/27/1992	20	401920	740200
2929158	M	12/8/1992	20	401839	740333
2929159	M	12/8/1992	20	401839	740333
2929208	M	12/31/1992	20	401946	740240
2929627	M	5/4/1993	15	401839	740319
2929628	M	5/4/1993	15	401839	740319
2929629	M	5/4/1993	15	401839	740319
2929739	M	6/3/1993	20	401920	740146
2929740	M	6/3/1993	20	401920	740146
2929741	M	8/3/1993	20	401920	740146
2930139	M	8/24/1993	25	401933	740333
2930282	M	9/28/1993	20	401946	740240
2930283	E	9/28/1993	25	401946	740240
2930284	E	9/28/1993	25	401946	740240
2930388	G	11/1/1993	20	401839	740253
2930781	G	2/16/1994	100	401933	740253
2930957	M	4/5/1994	15	401906	740200
2930961	M	4/5/1994	15	401653	740240
2930962	M	4/5/1994	15	401906	740200
2930962	M	4/5/1994	15	401906	740200
2930964	M	4/5/1994	15	401906	740200
2930965	M	4/5/1994	15	401906	740306
2930966	M	4/5/1994	15	401906	740253
2930973	M	4/5/1994	15	401905	740240
2930974	M	4/5/1994	15	401906	740240
2930975	M	4/5/1994	15	401920	740240
2930976	M	4/5/1994	15	401920	740240
2930979	M	4/5/1994	15	401906	740253
2930980	M	4/5/1994	15	401906	740240
2930983	M	4/5/1994	15	401906	740200
2930987	M	4/5/1994	15	401906	740253
2930988	M	4/5/1994	15	401906	740253
2931158	M	5/4/1994	25	401853	740200
2931159	M	5/4/1994	25	401653	740200
2931401	M	6/2/1994	20	401946	740226
2931772	M	8/3/1994	15	401906	740240
2931773	M	8/3/1994	15	401906	740240
2931774	M	6/3/1994	15	401906	740240
2931775	M	8/3/1994	15	401906	740240
2931776	M	8/3/1994	15	401920	740319
2931777	M	8/3/1994	15	401920	740319
2931778	M	8/3/1994	15	401920	740319
2931779	M	8/3/1994	15	401920	740319
2931780	M	8/3/1994	15	401906	740253
2931781	M	8/3/1994	15	101906	740253
2931782	M	8/3/1994	15	401906	740253
2931783	M	8/3/1994	15	401920	740319
2931784	M	8/3/1994	15	401906	740319
2931785	M	8/3/1994	15	401906	740306
2931787	M	8/3/1994	15	401920	740333
2931788	M	8/3/1994	15	401920	740333
2931792	M	8/3/1994	15	401946	740240
2932115	M	9/14/1994	15	401906	740346
2932189	B	10/4/1994	30	401906	740306
2932190	B	10/4/1994	30	401906	740306
2932191	B	10/4/1994	30	401906	740306

Permit No.	Use*	Permit Date	Depth (ft)	Lattitude	Longitude
2932192	B	10/4/1994	30	401906	740306
2932560	M	11/29/1994	25	401906	740253
2932561	M	11/29/1994	25	401906	740253
2932562	M	11/29/1994	25	401906	740253
2932564	M	11/29/1994	25	401839	740319
2932566	M	11/29/1994	25	401906	740253
2932566	M	11/29/1994	25	401839	740319
2932567	M	11/29/1994	25	401906	740253
2932568	M	11/29/1994	25	401839	740319
2932569	M	11/29/1994	25	401906	740306
2932570	M	11/29/1994	25	401906	740306
2932571	M	11/29/1994	25	401906	740306
2932572	M	11/29/1994	25	401906	740306
2932573	M	11/29/1994	25	401906	740306
2932574	M	11/29/1994	25	401906	740306
2932575	M	11/29/1994	25	401906	740306
2932576	M	11/29/1994	25	401853	740226
2932577	M	11/29/1994	25	401653	740226
2932578	M	11/29/1994	25	401853	740226
2932579	M	11/29/1994	25	401653	740226
2932580	M	11/29/1994	25	401853	740226
2932581	M	11/29/1994	25	401853	740226
2932582	M	11/29/1994	25	401853	740226
2932583	M	11/29/1994	25	401906	740253
2932583	M	11/29/1994	25	401653	740226
2932585	M	11/29/1994	25	401906	740253
2932585	M	11/29/1994	25	401839	740319
2932587	M	11/29/1994	25	401639	740319
2932588	M	11/29/1994	25	401906	740306
2932588	M	11/29/1994	25	401839	740319
2932589	M	11/29/1994	25	401839	740319
2932743	B	1/20/1995	50	401906	740253
2932925	M	3/13/1995	25	401933	740333
2933063	M	4/5/1995	17	401946	740226
2933064	M	4/5/1995	17	401946	740226
2933065	M	4/5/1995	17	401946	740226
2933754	M	7/19/1995	20	401906	740200
2933755	M	7/19/1995	20	401906	740200
2933770	M	7/19/1995	20	401853	740253
2933771	M	7/19/1995	20	401853	740253
2933772	M	7/19/1995	20	401653	740253
2933773	M	7/19/1995	20	401853	740253
2933789	M	7/19/1995	20	401853	740253
2933989	M	8/18/1995	20	401920	740240
2934248	M	9/28/1995	25	401825	740319
2934249	M	9/28/1995	25	401626	740319
2934250	M	9/28/1995	25	401825	740319
2934251	M	9/28/1995	25	401626	740319
2934252	M	9/28/1995	25	401826	740319
2934565	M	11/22/1995	40	401933	740333
2934566	M	11/17/1995	20	401946	740306
2934582	M	11/22/1995	40	401933	740333
2934583	M	11/22/1995	10	401933	740333
2934586	M	11/22/1995	40	401933	740333
2934702	B	12/15/1995	40	401920	740146
2934857	B	2/8/1996	50	401920	740146
2935127	E	4/2/1996	45	401813	740319
2935128	E	4/2/1996	45	401813	740319
2935129	E	4/2/1996	45	401813	740319
2935130	E	4/2/1996	45	401813	740319
2935312	M	5/1/1996	50	401853	740319
2935313	M	5/1/1996	50	401853	740319
2935314	M	5/1/1996	50	401653	740319
2935314	M	5/1/1996	50	401653	740319

Table 6-7
Well Search Summary
Site 283
Fort Monmouth, New Jersey

Permit No.	Use*	Permit Date	Depth (ft)	Lattitude	Longitude
2935585	M	8/19/1996	20	401826	740319
2935585	M	6/19/1996	20	401826	740319
2935931	E	8/29/1996	35	401813	740306
2935931	E	8/29/1996	35	401813	740306
2937524	M	6/26/1997	15	401839	740333
2937524	M	8/28/1997	15	401839	740333
2937602	E	9/11/1997	35	401813	740306
2937602	E	9/11/1997	35	401813	740306
2937603	E	9/11/1997	35	401813	740306
2937603	E	9/11/1997	35	401813	740306
2937604	E	9/11/1997	35	401813	740306
2937604	E	9/11/1997	35	401813	740306
2937605	E	9/11/1997	35	401813	740306
2937605	E	9/11/1997	35	401813	740306
2937606	E	9/11/1997	35	401813	740306
2937606	E	9/11/1997	35	401813	740306
2937737	V	10/8/1997	25	401853	740319
2937737	V	10/8/1997	35	401853	740319
2937738	V	10/8/1997	25	401853	740319
2937739	V	10/8/1997	25	401853	740319
2937740	V	10/8/1997	25	401853	740319
2937878	G	11/14/1997	35	401853	740200
2938172	M	2/11/1998	30	401826	740226
2938350	G	3/20/1998	100	401933	740305
2939416	M	9/24/1998	20	401946	740306
2939550	H	10/21/1998	300	401826	740225
2939820	M	1/6/1999	20	401946	740226
2939821	M	1/6/1999	20	401946	740226
2939822	M	1/6/1999	20	401946	740226
2939826	M	1/7/1999	20	401839	740319
2912797	M	6/2/1983	10	401939	740219
2934584	M	11/22/1995	40	401933	740333

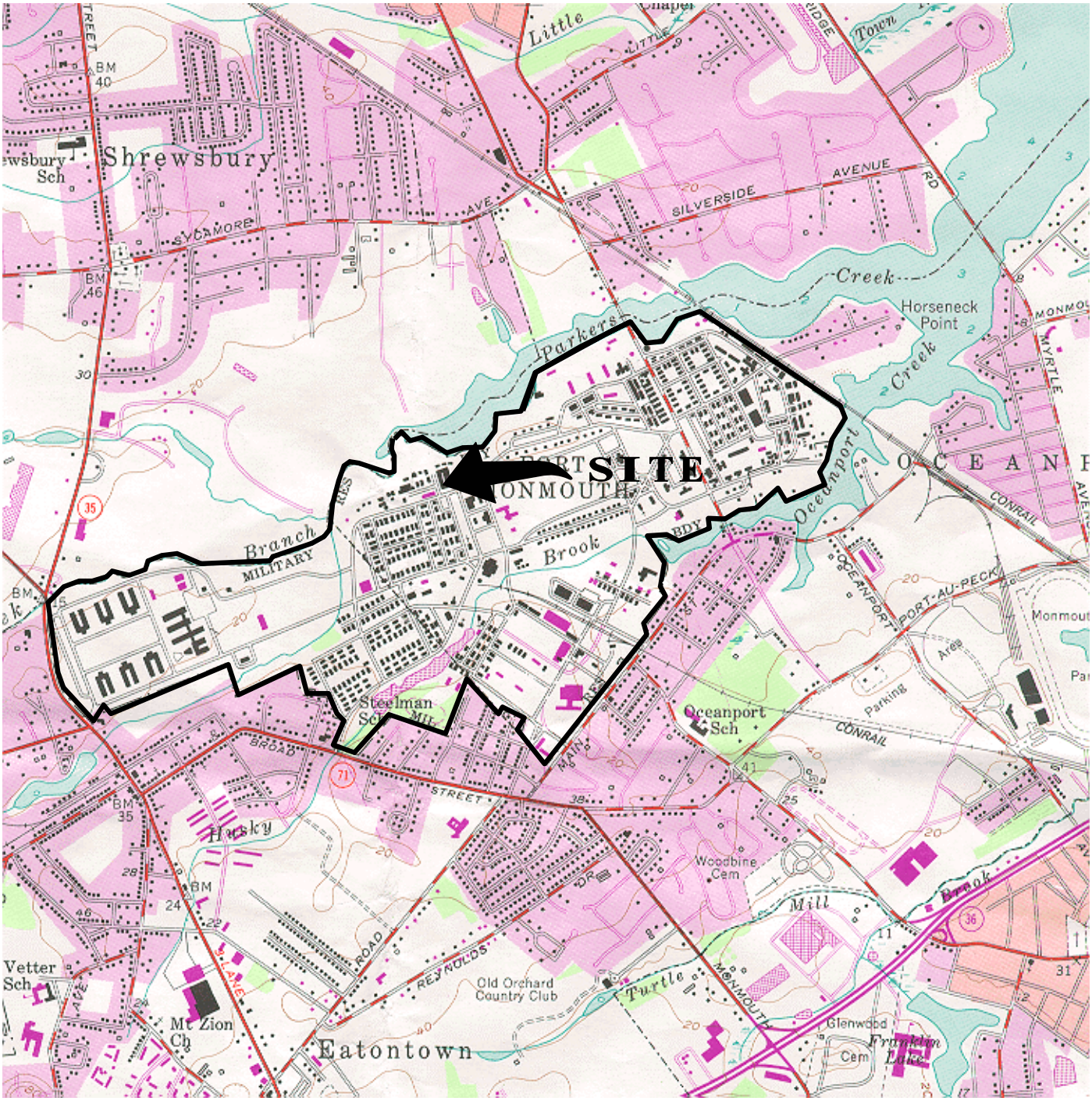
***Well Use Codes**
A - Unknown/Well Record Use Only
B - Boring
C - Commercial
D - Domestic (Potable)
E - Recovery/Decontamination Pollution Control/Leachate with Pump Capacity
F - Fire
G - Irrigation
H - Heat Pump/Geothermal (Return Well)
I - Industrial
J - Injection
K - Inclinometer
L - Livestock
M - 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

Notes:
Source: State of New Jersey Department of Environmental Protection - Well Permitting and Regulations Section of the Bureau of Water
Search date: 16 February 2001.

Well search was performed for a 1-mile radius surrounding the center point of the M18 landfill, U.S. Army Garrison Fort Monmouth, Fort Monmouth, New Jersey. The M18 Landfill is approximately 350 feet from Site 283.

M18 Location: latitude = North 40^{o} 18' 58", longitude = West 74^{o} 02' 48".
NA: Data Not Available

FIGURES



LONG BRANCH, N. J.

40073-C8-TF-024

1954

PHOTOREVISED 1981

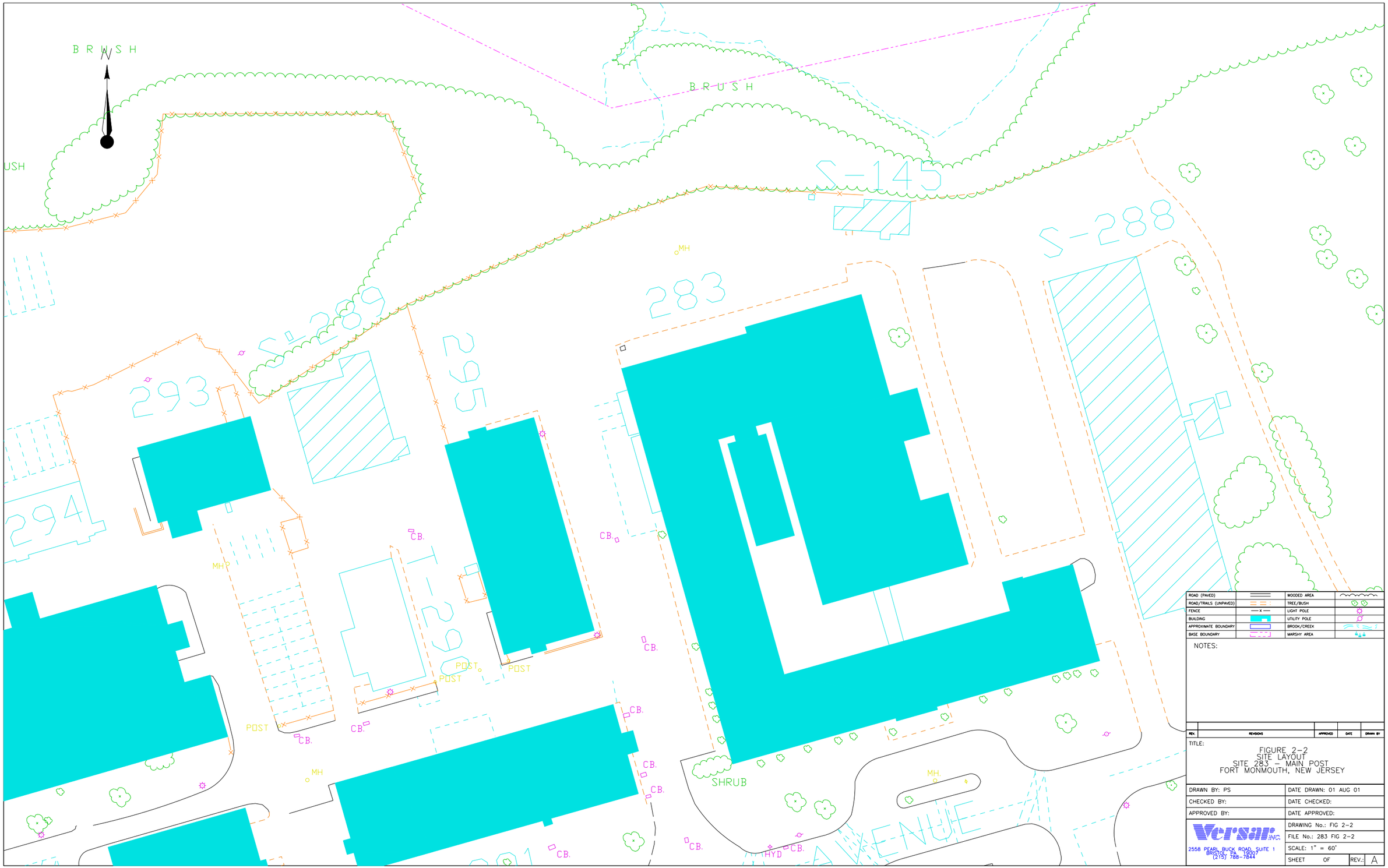
DMA 6164 I SE-SERIES V822

QUADRANGLE LOCATION

Mapped, edited and published by the Geological Survey

Figure 2-1
Site Location Map
Site 283
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:

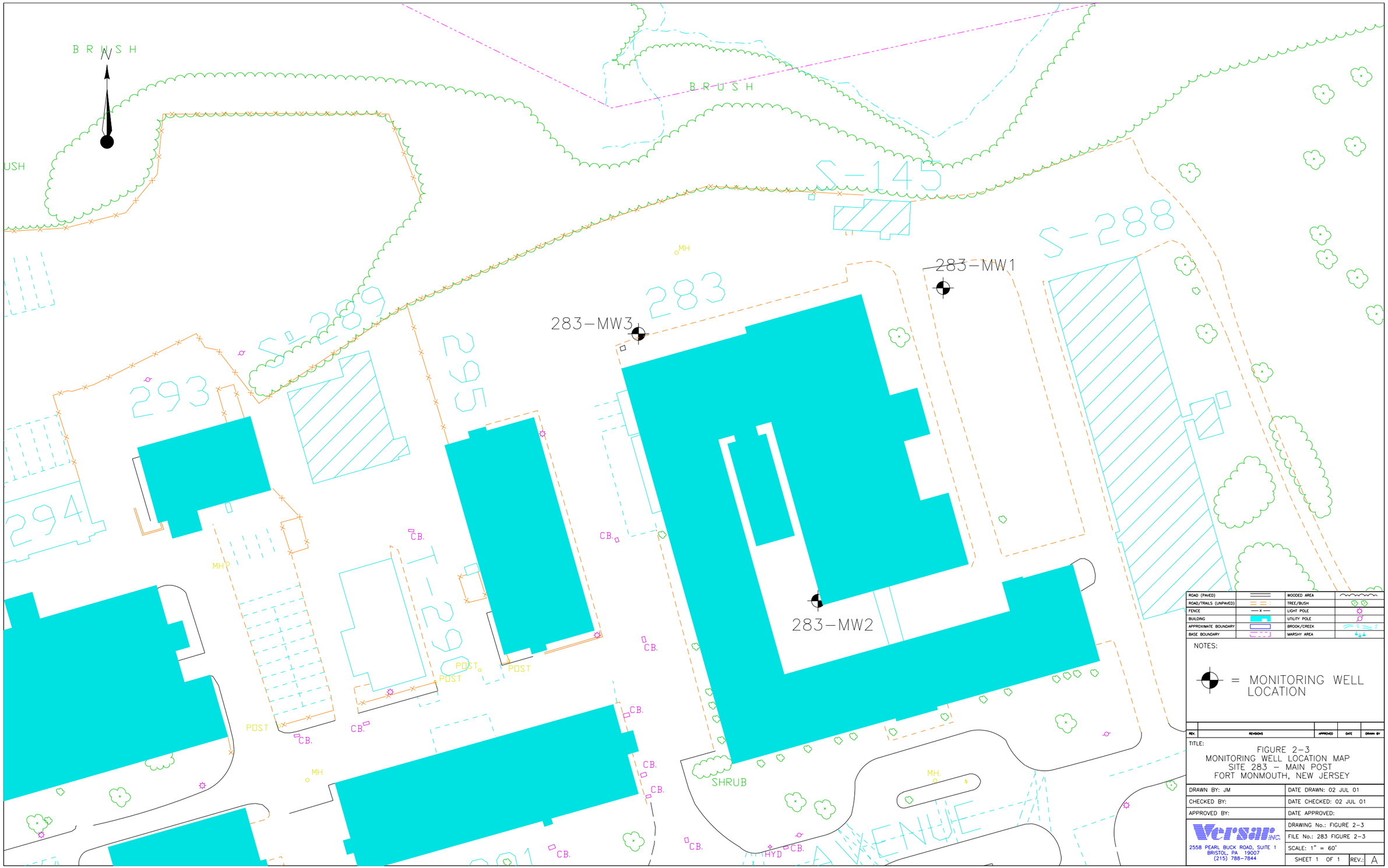
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 2-2
SITE LAYOUT
SITE 283 - 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.: 283 FIG 2-2
	SCALE: 1" = 60'
	SHEET OF REV.: A

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

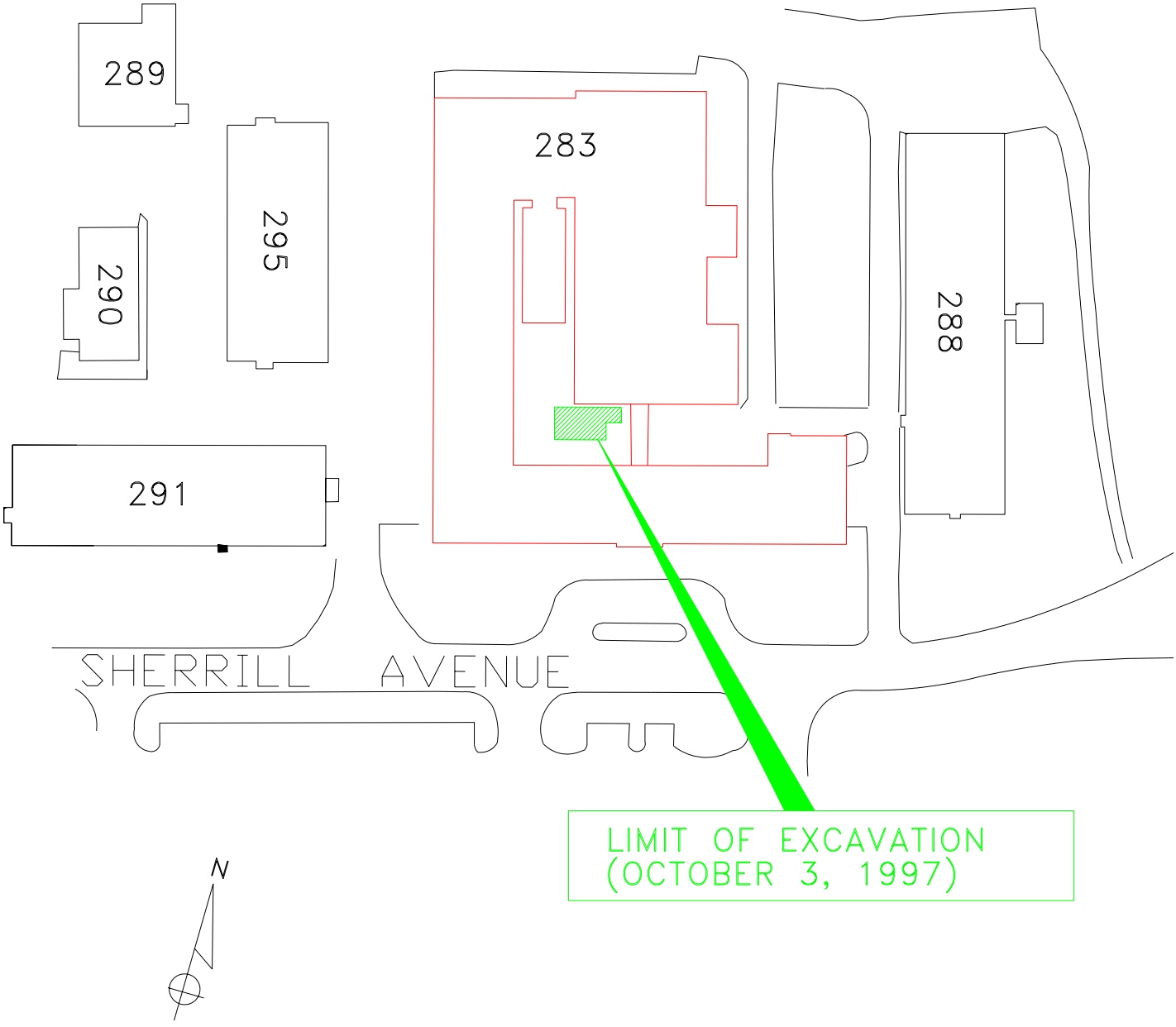
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 2-3
MONITORING WELL LOCATION MAP
SITE 283 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 02 JUL 01
CHECKED BY:	DATE CHECKED: 02 JUL 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 2-3
	FILE No.: 283 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



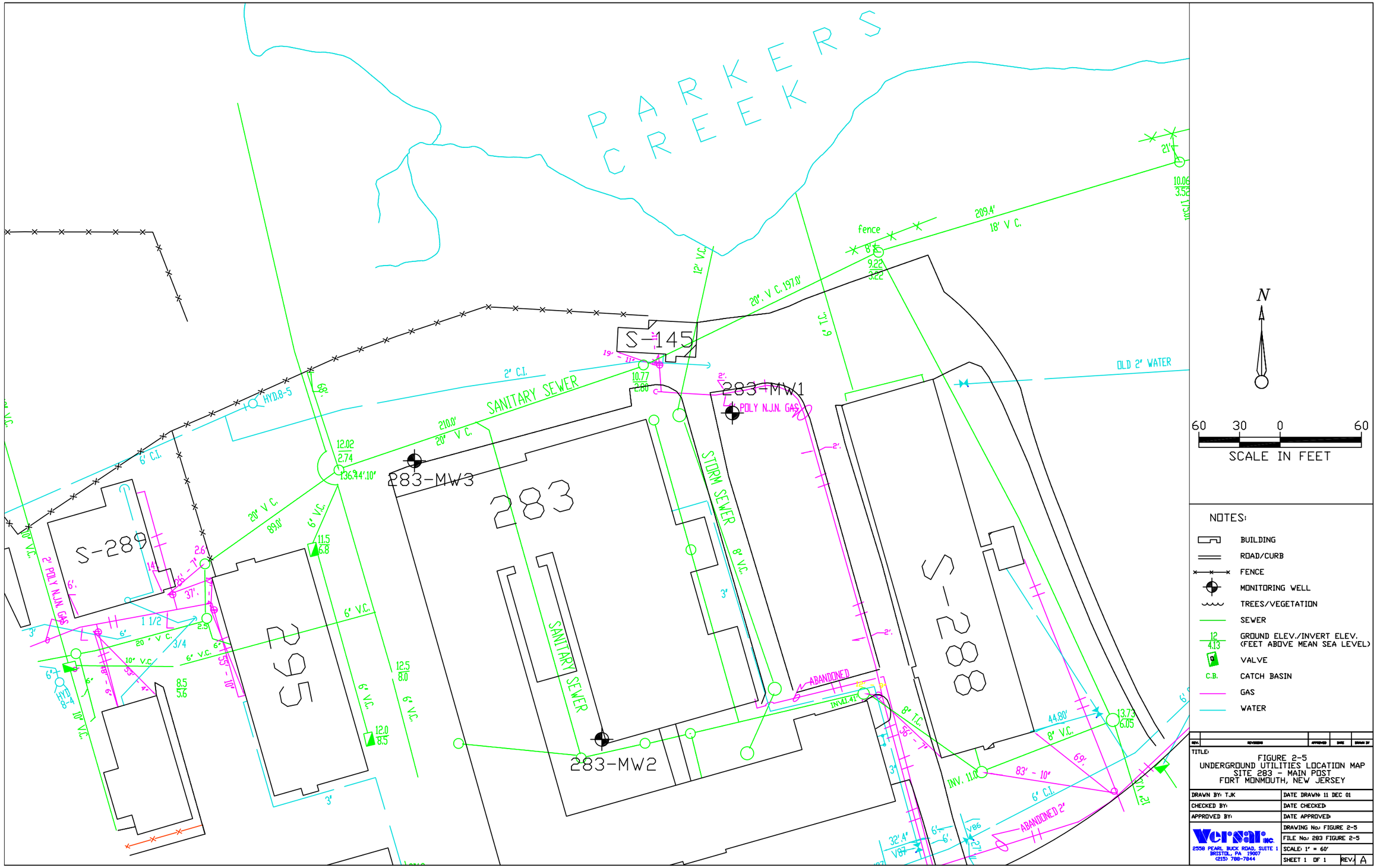
SOURCE: UNITED STATES ARMY – FORT MONMOUTH, NEW JERSEY, UNDERGROUND STORAGE TANK CLUSURE AND SITE INVESTIGATION REPORT BUILDING 283C, OCTOBER 2000

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:
FIGURE 2–4
SOIL EXCAVATION AREA DURING
UST CLOSURE
SITE 283 – MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 06 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: 283 FIG 2–4
	FILE No.: 283 FIG 2–4
	SCALE: 1" = 100'
	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
- 12 / 4.13 — GROUND ELEV./INVERT ELEV. (FEET ABOVE MEAN SEA LEVEL)
- VALVE
- C.B. — CATCH BASIN
- GAS
- WATER

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:
FIGURE 2-5
UNDERGROUND UTILITIES LOCATION MAP
SITE 283 - 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.: 283 FIGURE 2-5
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

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

Geologic Map of New Jersey

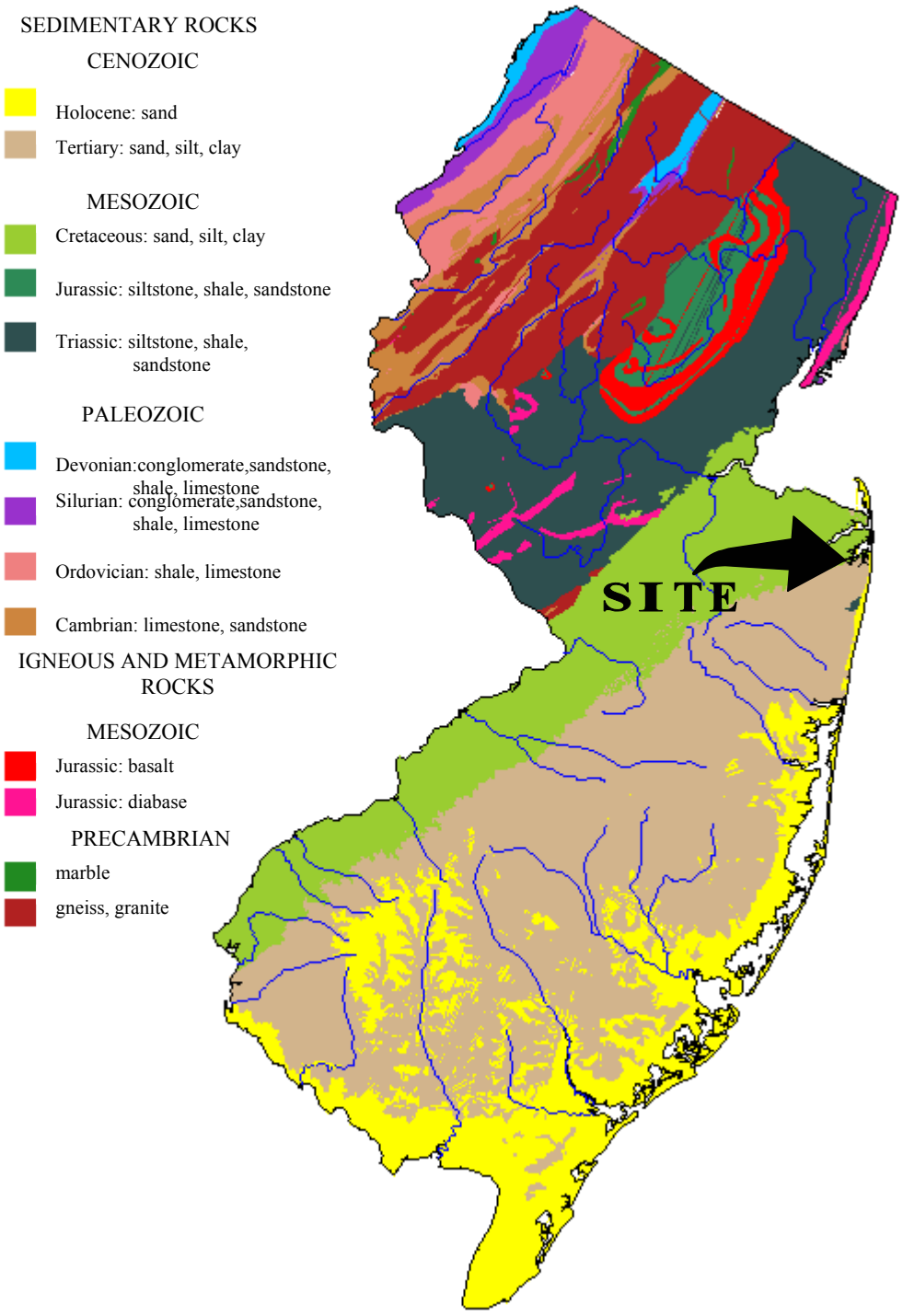
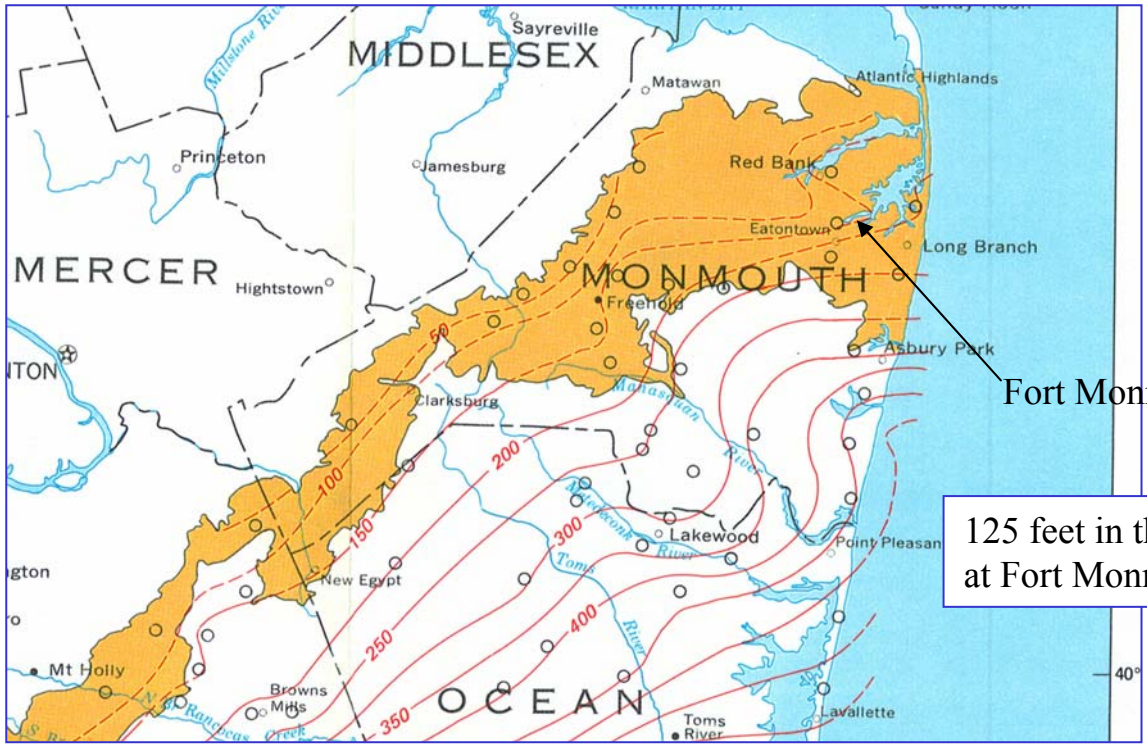


FIGURE 2-6
Geologic Map of New Jersey
Site 283 – Main Post
Fort Monmouth, New Jersey

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

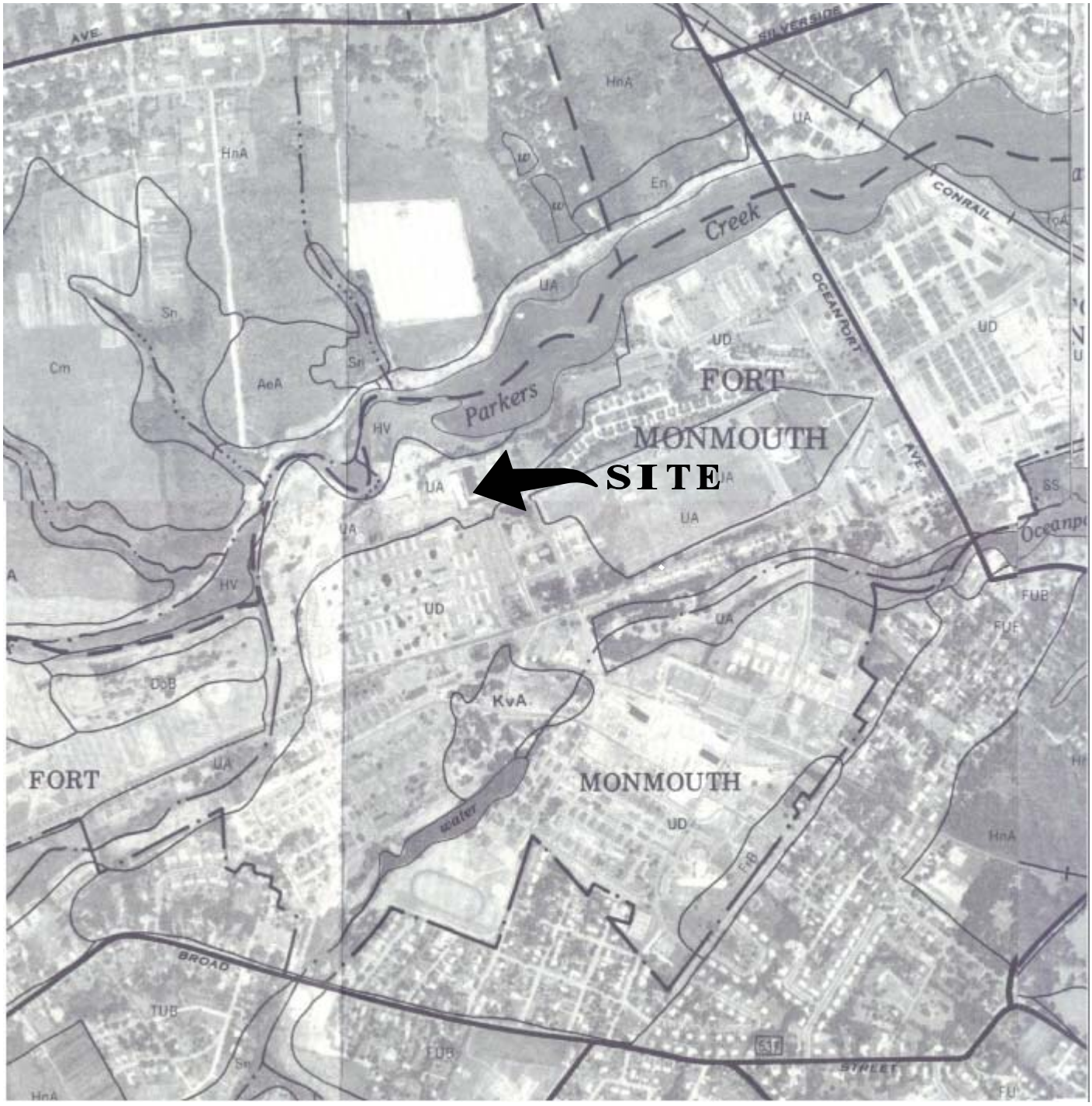
Well location

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 283 – Main Post
Fort Monmouth, New Jersey

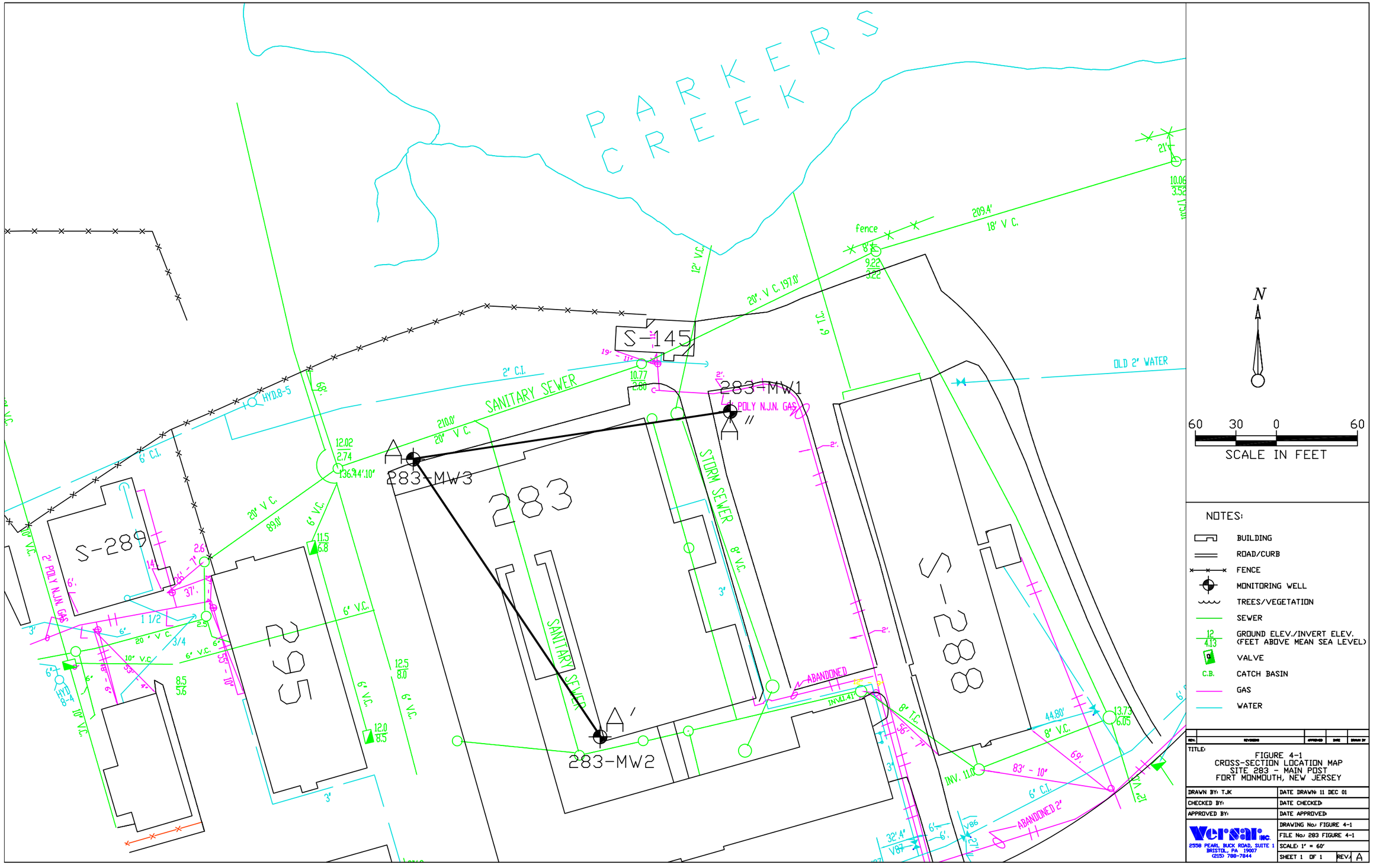
Versar INC.
2558 Pearl Buck Road, Suite 1
Bristol, PA 19007
(215) 788-7844



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

Figure 2-8
Soil Map of Monmouth County
Site 283
Fort Monmouth, New Jersey

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



NOTES:

- BUILDING
- ROAD/CURB
- FENCE
- MONITORING WELL
- TREES/VEGETATION
- SEWER
- 12 / 4.13 — GROUND ELEV./INVERT ELEV. (FEET ABOVE MEAN SEA LEVEL)
- VALVE
- C.B. — CATCH BASIN
- GAS
- WATER

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-1
CROSS-SECTION LOCATION MAP
SITE 283 - 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.: 283 FIGURE 4-1
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

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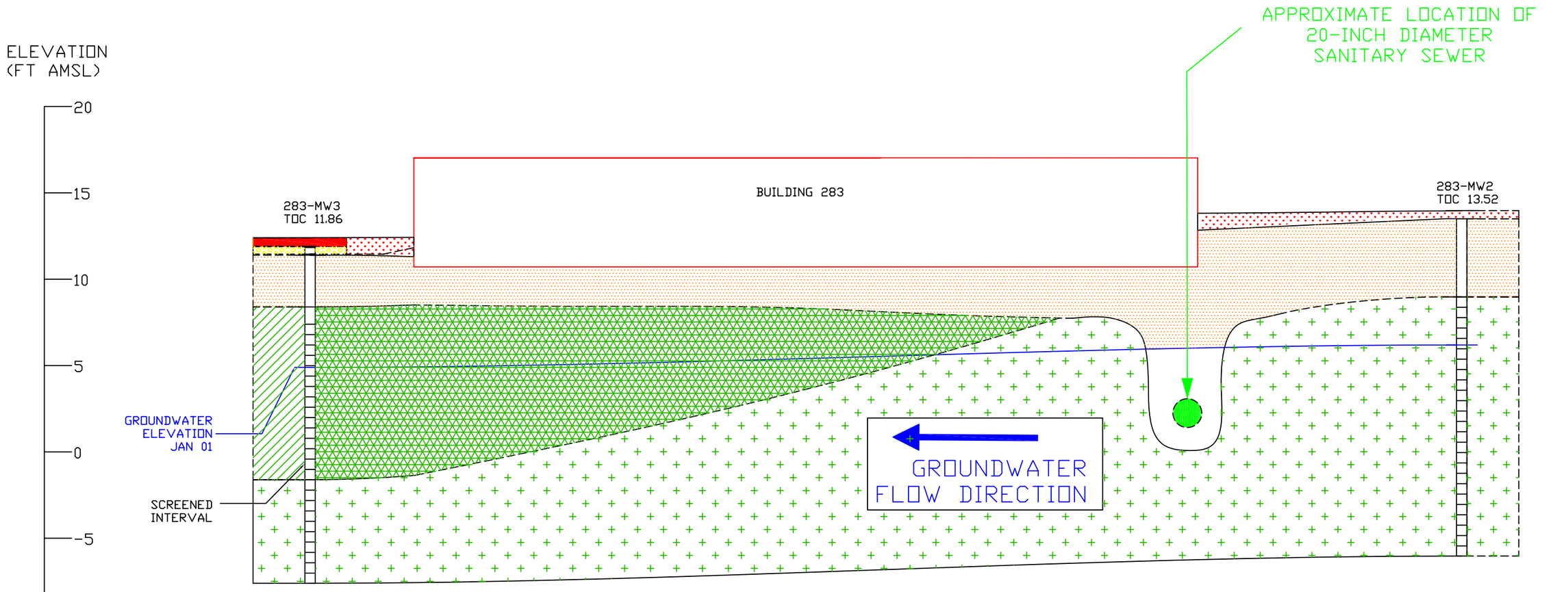

UNIT	SYMBOL	DESCRIPTION
(1)		ASPHALT
(2)		TOPSOIL
(3)		CINDERS, SLAP, COAL FRAGMENTS - FILL
(4)		BROWN COARSE MEDIUM FINE SAND SOME MEDIUM FINE GRAVEL
(5)		BROWN MEDIUM FINE SAND LITTLE SILT (FILL?)
(6)		BROWN-GREEN/BROWN MEDIUM FINE SAND AND SILTY CLAY
(7)		BROWN ORANGE/BROWN GREEN SILTY CLAY
(8)		GREEN SILTY CLAY, SOME BLACK FINE SAND

NOTES:

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

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

3) ELEV. = ELEVATION (FEET AMSL).

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.

6) THE SIZE OF THE UNDERGROUND UTILITY PIPES IS PORTRAYED IN THE VERTICAL SCALE (1"=6')

REV.	REVISIONS	APPROVED	DRAWN BY

TITLE:
FIGURE 4-2
GEOLOGIC CROSS SECTION A-A'
SITE 283 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: PS/TJK	DATE DRAWN: 10 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-2
	FILE No.: 283 FIG 4-2
	SCALE: 1" = 20' (VERT:1"=3')
	SHEET 1 OF 1 REV.: A

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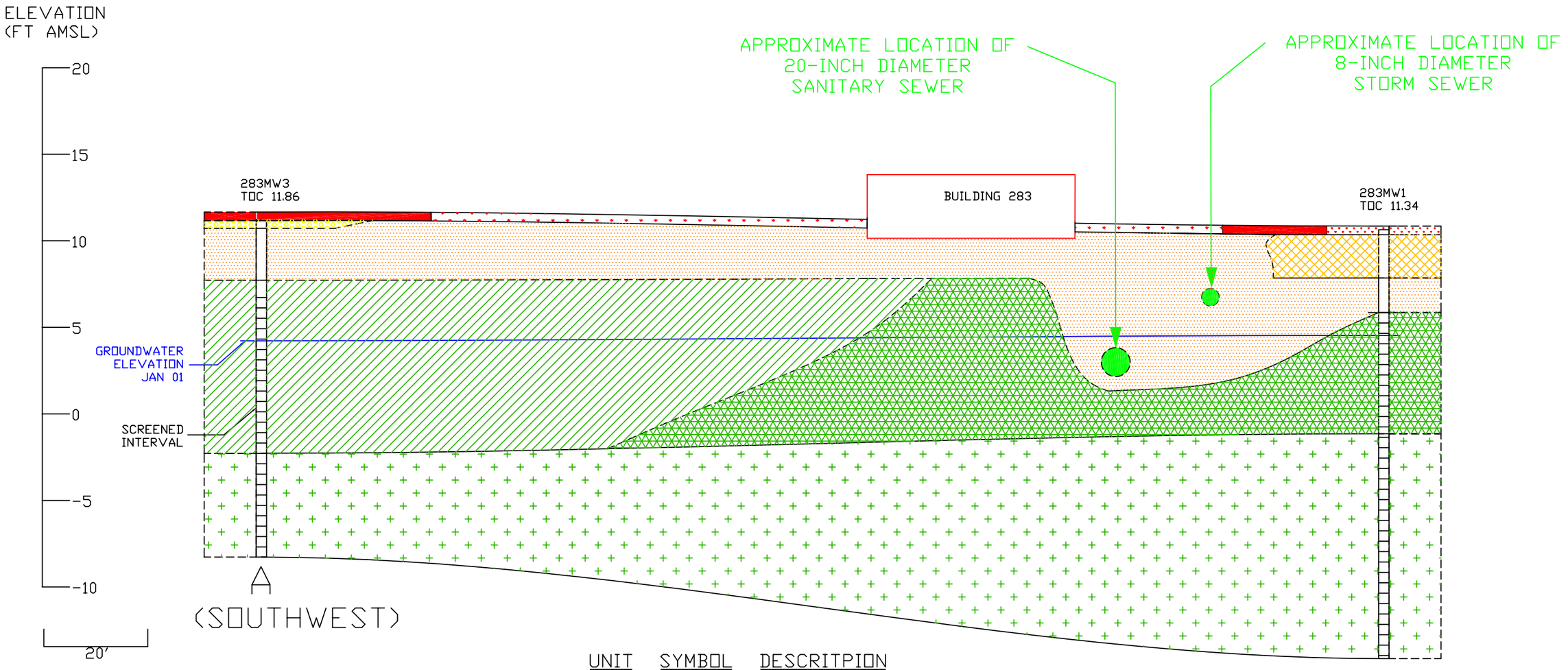

UNIT	SYMBOL	DESCRIPTION
(1)		ASPHALT
(2)		TOPSOIL
(3)		CINDERS, SLAP, COAL FRAGMENTS - FILL
(4)		BROWN COARSE MEDIUM FINE SAND SOME MEDIUM FINE GRAVEL
(5)		BROWN MEDIUM FINE SAND LITTLE SILT (FILL?)
(6)		BROWN-GREEN/BROWN MEDIUM FINE SAND AND SILTY CLAY
(7)		BROWN ORANGE/BROWN GREEN SILTY CLAY
(8)		GREEN SILTY CLAY, SOME BLACK FINE SAND

NOTES:

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

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

3) ELEV. = ELEVATION (FEET AMSL).

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.

6) THE SIZE OF THE UNDERGROUND UTILITY PIPES IS PORTRAYED IN THE VERTICAL SCALE (1"=6')

REV.	REVISIONS	APPROVED	DRAWN BY

TITLE:
FIGURE 4-3
GEOLOGIC CROSS SECTION A-A''
SITE 283- MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: PS/TJK	DATE DRAWN: 10 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-3
	FILE No.: 283 FIG. 4-3
	SCALE: 1" = 20' (VERT:1"=3')
	SHEET 1 OF 1 REV.: A

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PARKERS CREEK

PARKERS CREEK

HEAD WALL

296-MW4
MP18-MW24
MP18-MW25
0296-MW5
296-MW6
296-MW7
296-MW8
290-MW2
290-MW1
296-MW2
296-MW1
283-MW1
283-MW3
283-MW2

S-145
S-289
S-288
T-294
T-290
293
292
291
296
283
285

SHERRILL AVENUE

N

100 50 0 100
SCALE IN FEET

NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- FENCE
- SITE 283 MONITORING WELL
- M18 LANDFILL SITE MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:
FIGURE 4-4a
GROUNDWATER COUNTOUR MAP (28 JUN 00)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4a
	FILE No.: 283 FIGURE 4-4a
	SCALE: 1" = 100'
	SHEET 1 OF 1 REV.: A

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PARKERS CREEK

PARKERS CREEK

HEAD WALL

296-MW4

MP18-MW24

MP18-MW25

0296-MW3

296-MW6

296-MW7

296-MW8

290-MW2

290-MW1

296-MW2

296-MW1

283-MW3

283-MW1

283-MW2

S-145

S-289

S-288

T-294

T-290

293

292

291

296

283

295

3

3.5

SHERRILL AVENUE

N

100 50 0 100

SCALE IN FEET

NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- FENCE
- SITE 283 MONITORING WELL
- M18 LANDFILL SITE MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4b
GROUNDWATER COUNTOUR MAP (10 AUG 00)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4b
	FILE No.: 283 FIGURE 4-4b
	SCALE: 1" = 100'
	SHEET 1 OF 1 REV.: A

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PARKERS CREEK

PARKERS CREEK

HEAD WALL

296-MW4

MP18-MW24

MP18-MW25

0296-MW3

296-MW6

296-MW7

296-MW8

290-MW2

290-MW1

296-MW2

296-MW1

283-MW1

283-MW3

283-MW2

S-145

S-289

T-294

293

T-290

S-69

283

S-288

292

291

296

SHERRILL AVENUE

N

100 50 0 100

SCALE IN FEET

NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- FENCE
- SITE 283 MONITORING WELL
- M18 LANDFILL SITE MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4c
GROUNDWATER COUNTOUR MAP (17 OCT 00)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4c
	FILE No.: 283 FIGURE 4-4c
	SCALE: 1" = 100'
	SHEET 1 OF 1 REV.: A

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PARKERS CREEK

PARKERS CREEK

HEAD WALL

296-MW4

MP18-MW24

MP18-MW25

0296-MW3

296-MW6

296-MW7

296-MW8

290-MW2

290-MW1

296-MW2

296-MW1

283-MW1

283-MW3

283-MW2

S-145

S-289

S-288

T-294

T-290

293

292

291

296

256

283

SHERRILL AVENUE

N

100 50 0 100

SCALE IN FEET

NOTES:

- BUILDING
- ROAD/CURB
- RAILROAD
- BROOK/CREEK
- MARSHY AREA
- WOODED AREA
- FENCE
- SITE 283 MONITORING WELL
- M18 LANDFILL SITE MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4d
GROUNDWATER COUNTOUR MAP (5 JAN 01)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 4-4d
	FILE No.: 283 FIGURE 4-4d
	SCALE: 1" = 100'
	SHEET 1 OF 1 REV.: A

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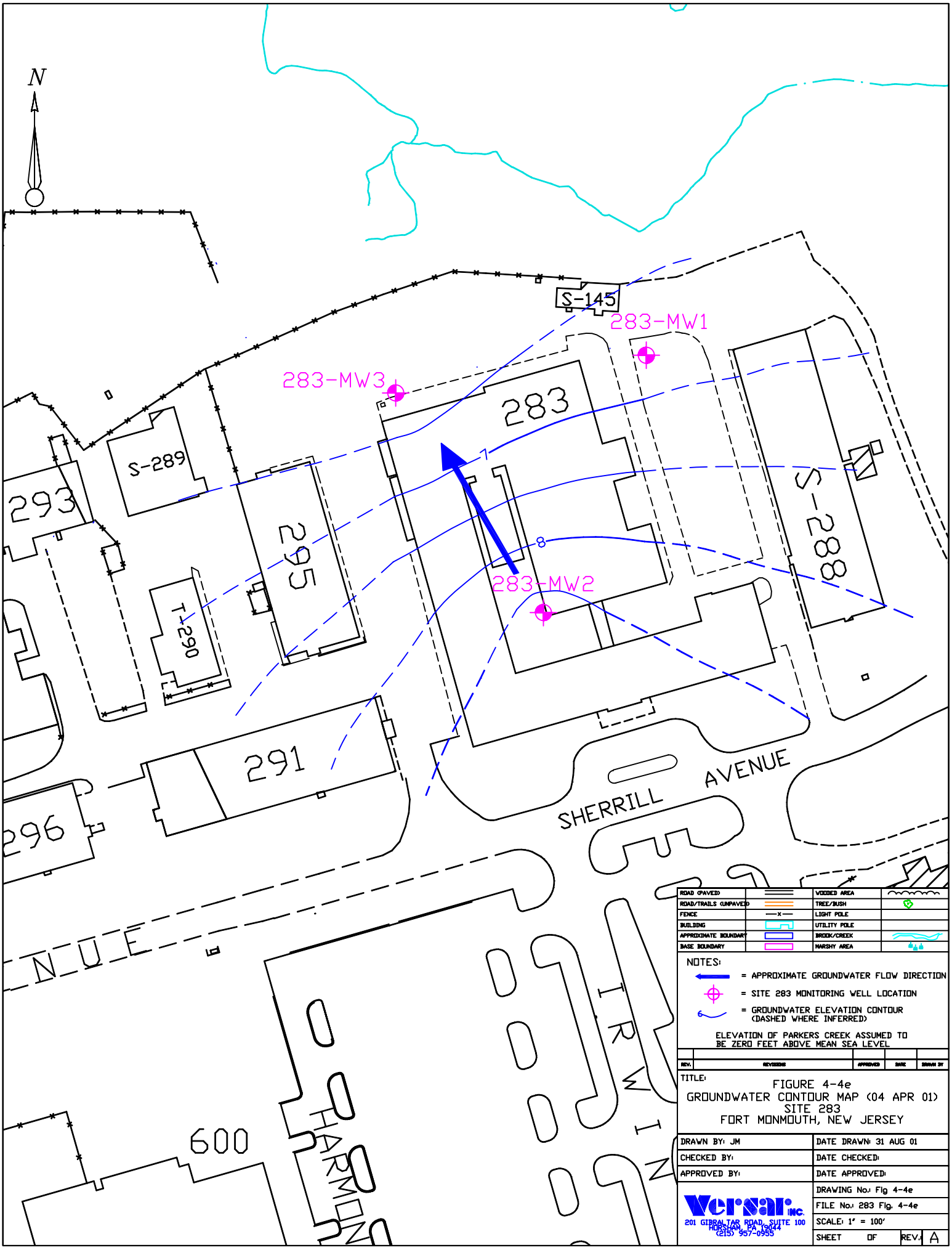
N
S-145
283-MW1
283-MW3
283
S-289
293
S-285
T-290
283-MW2
S-288
291
296
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV. REVISIONS APPROVED DATE DRAWN BY
TITLE:
FIGURE 4-4e
GROUNDWATER CONTOUR MAP (04 APR 01)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4e
FILE No.: 283 Fig. 4-4e
SCALE: 1" = 100'
SHEET OF REV.: A
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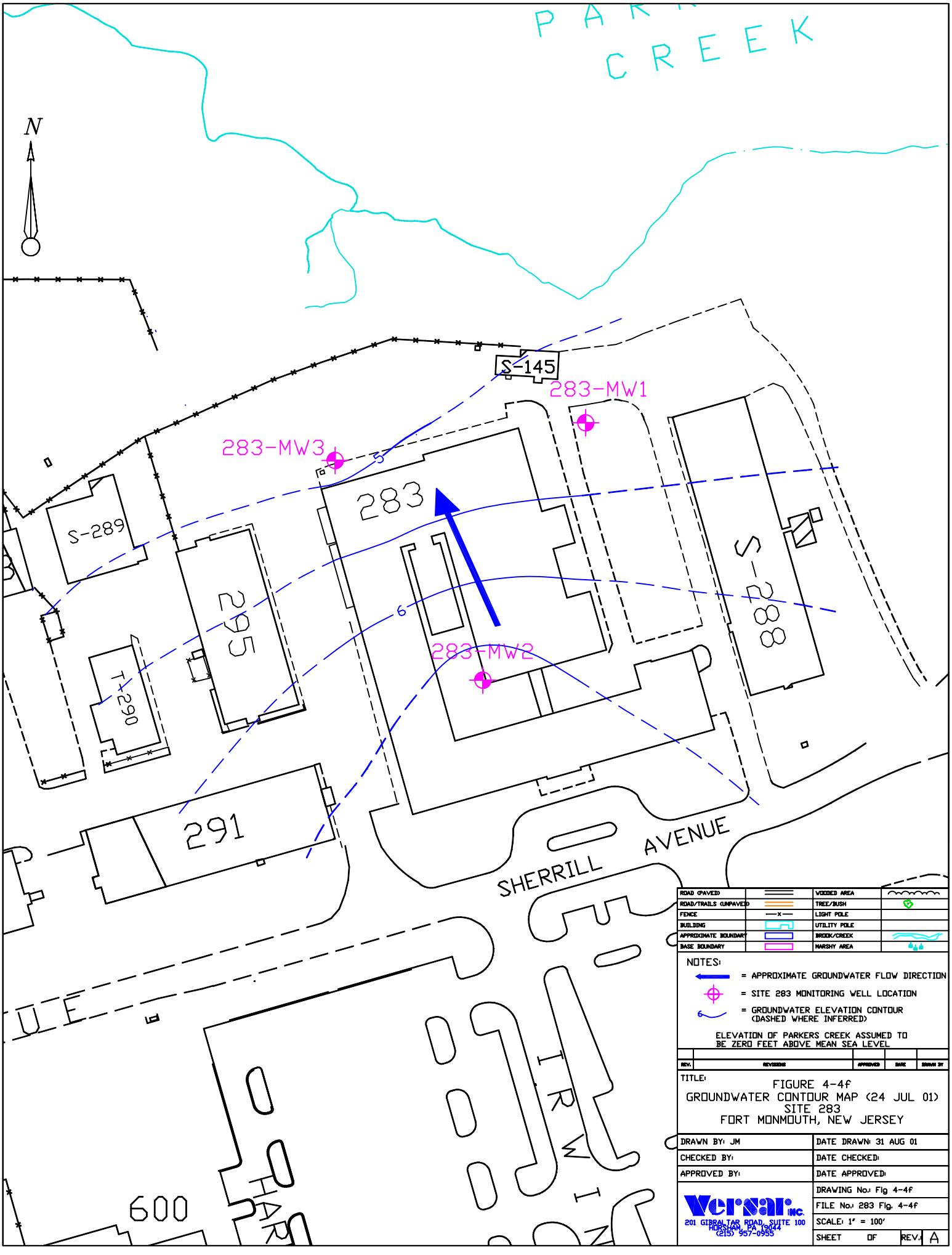

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

= APPROXIMATE GROUNDWATER FLOW DIRECTION

= SITE 283 MONITORING WELL LOCATION

= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4f
GROUNDWATER CONTOUR MAP (24 JUL 01)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: Fig 4-4f
	FILE No.: 283 Fig. 4-4f
	SCALE: 1" = 100'
	SHEET OF REV.: A

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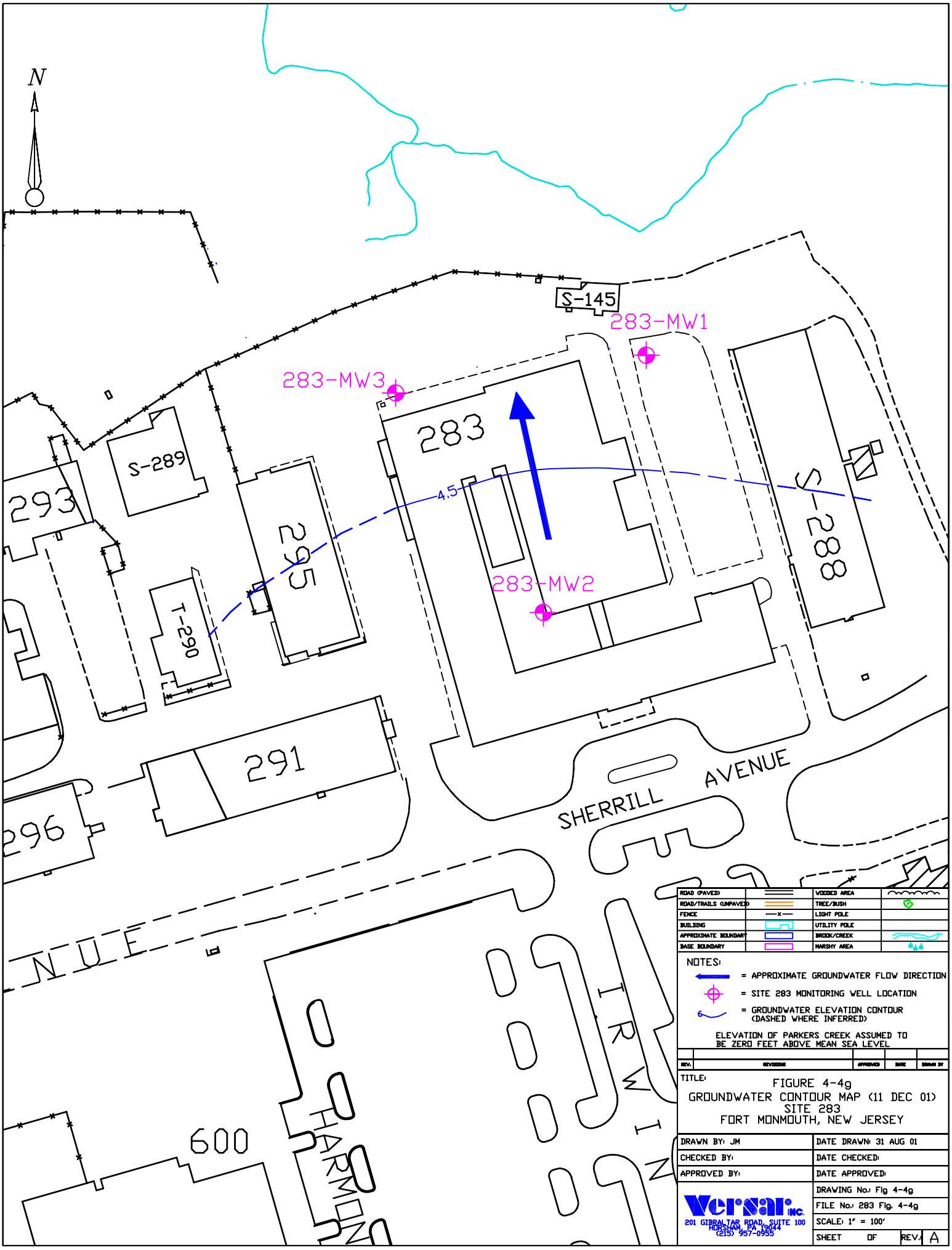
N
S-145
283-MW1
283-MW3
283
4.5
S-289
293
T-290
S-288
283-MW2
291
296
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV.
REVISIONS
APPROVED
DATE
DRAWN BY
TITLE:
FIGURE 4-4g
GROUNDWATER CONTOUR MAP (11 DEC 01)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4g
FILE No.: 283 Fig. 4-4g
SCALE: 1" = 100'
SHEET OF
REV.: A
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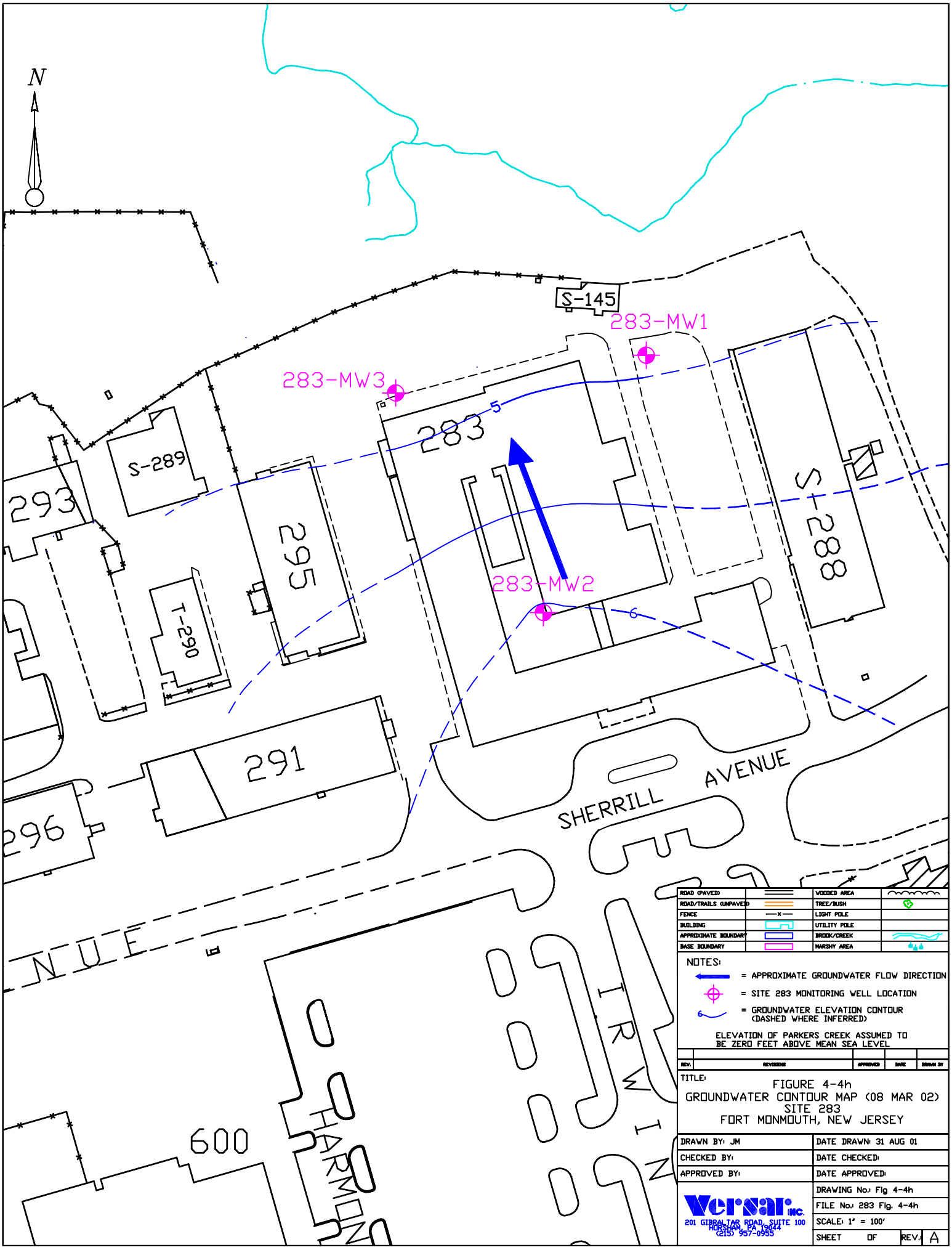
N
S-145
283-MW1
283-MW3
283
5
S-289
293
295
T-290
283-MW2
6
S-288
291
296
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV.
REVISIONS
APPROVED
DATE
DRAWN BY
TITLE:
FIGURE 4-4h
GROUNDWATER CONTOUR MAP (08 MAR 02)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4h
FILE No.: 283 Fig. 4-4h
SCALE: 1" = 100'
SHEET OF
REV.: A
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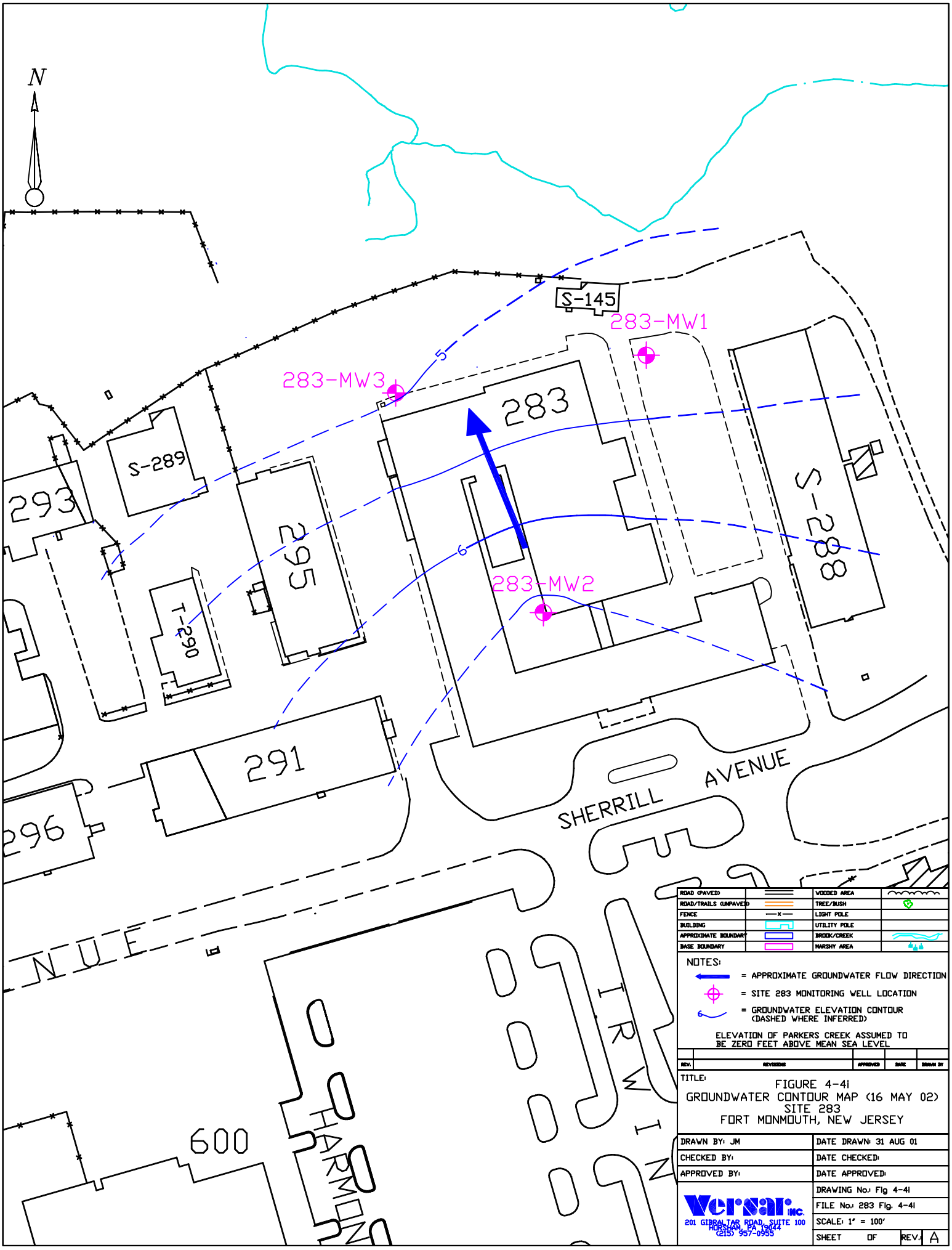

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

= APPROXIMATE GROUNDWATER FLOW DIRECTION

= SITE 283 MONITORING WELL LOCATION

= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4I
GROUNDWATER CONTOUR MAP (16 MAY 02)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: Fig 4-4I
	FILE No.: 283 Fig. 4-4I
	SCALE: 1" = 100'
	SHEET OF REV.: A

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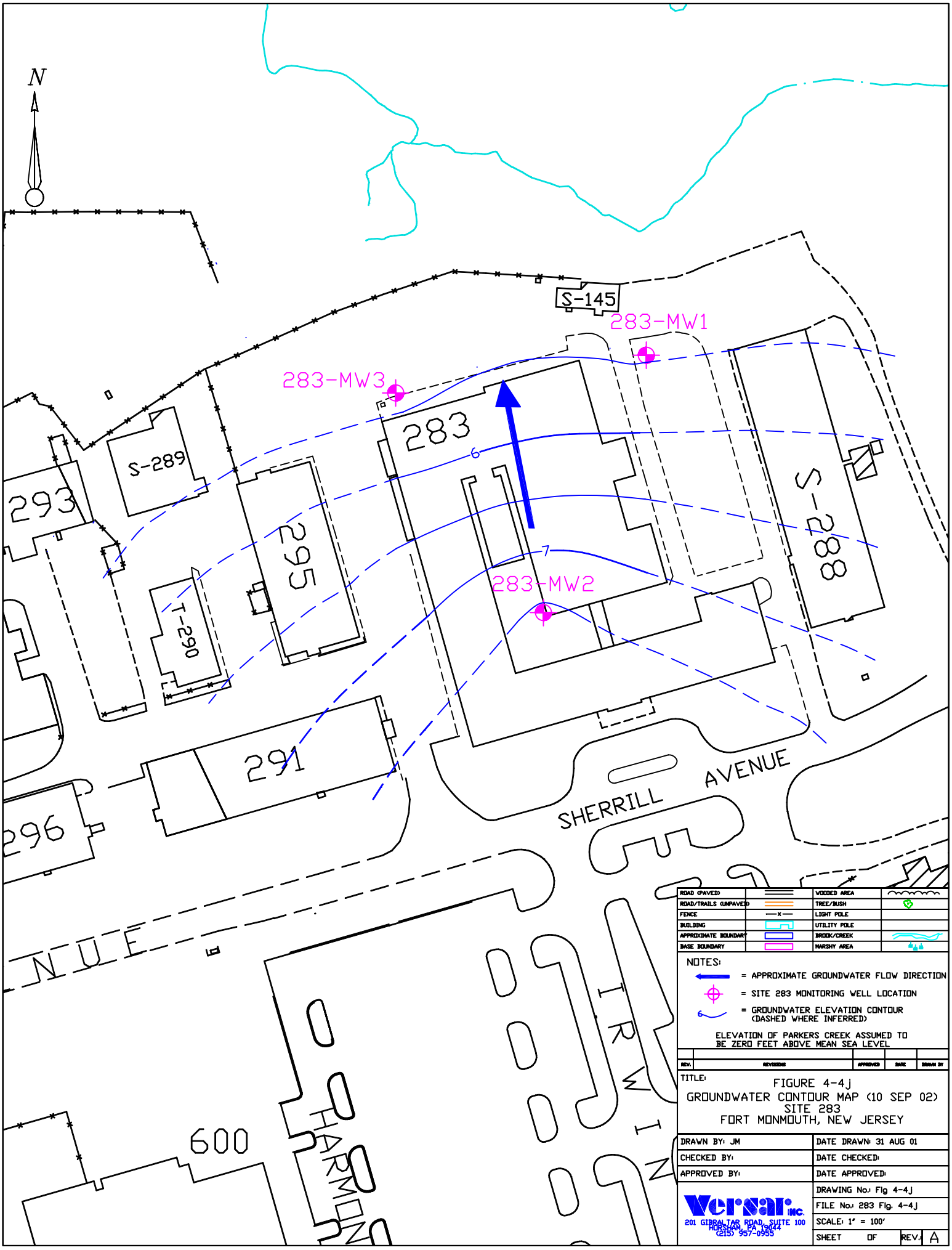

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

= APPROXIMATE GROUNDWATER FLOW DIRECTION

= SITE 283 MONITORING WELL LOCATION

= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4j
GROUNDWATER CONTOUR MAP (10 SEP 02)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: Fig 4-4j
	FILE No.: 283 Fig. 4-4j
	SCALE: 1" = 100'
	SHEET OF REV.: A

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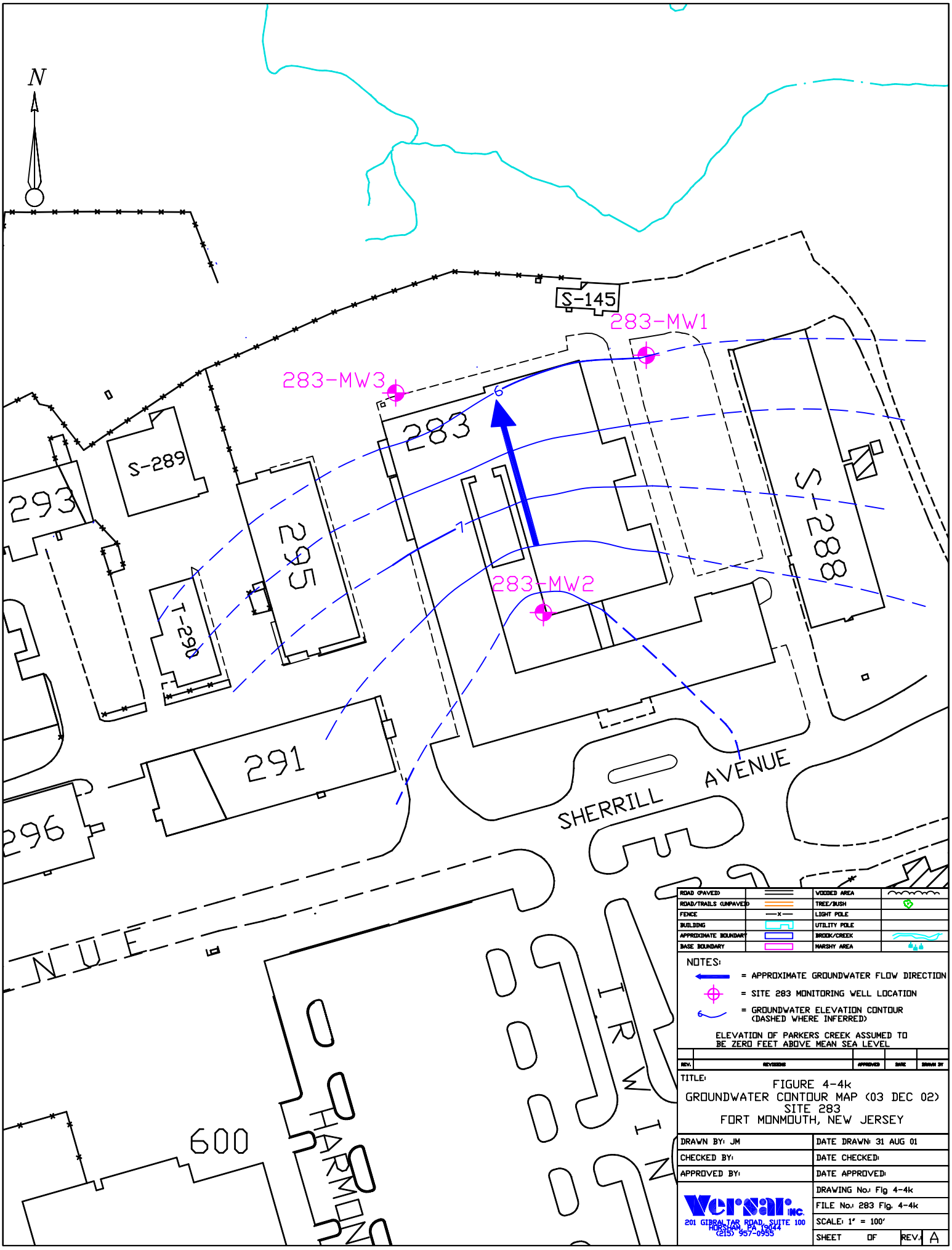
N
S-145
283-MW1
283-MW3
283-MW2
283
S-289
293
S-290
T-290
291
S-288
296
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV.
REVISIONS
APPROVED
DATE
DRAWN BY
TITLE:
FIGURE 4-4k
GROUNDWATER CONTOUR MAP (03 DEC 02)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4k
FILE No.: 283 Fig. 4-4k
SCALE: 1" = 100'
SHEET OF
REV.: A
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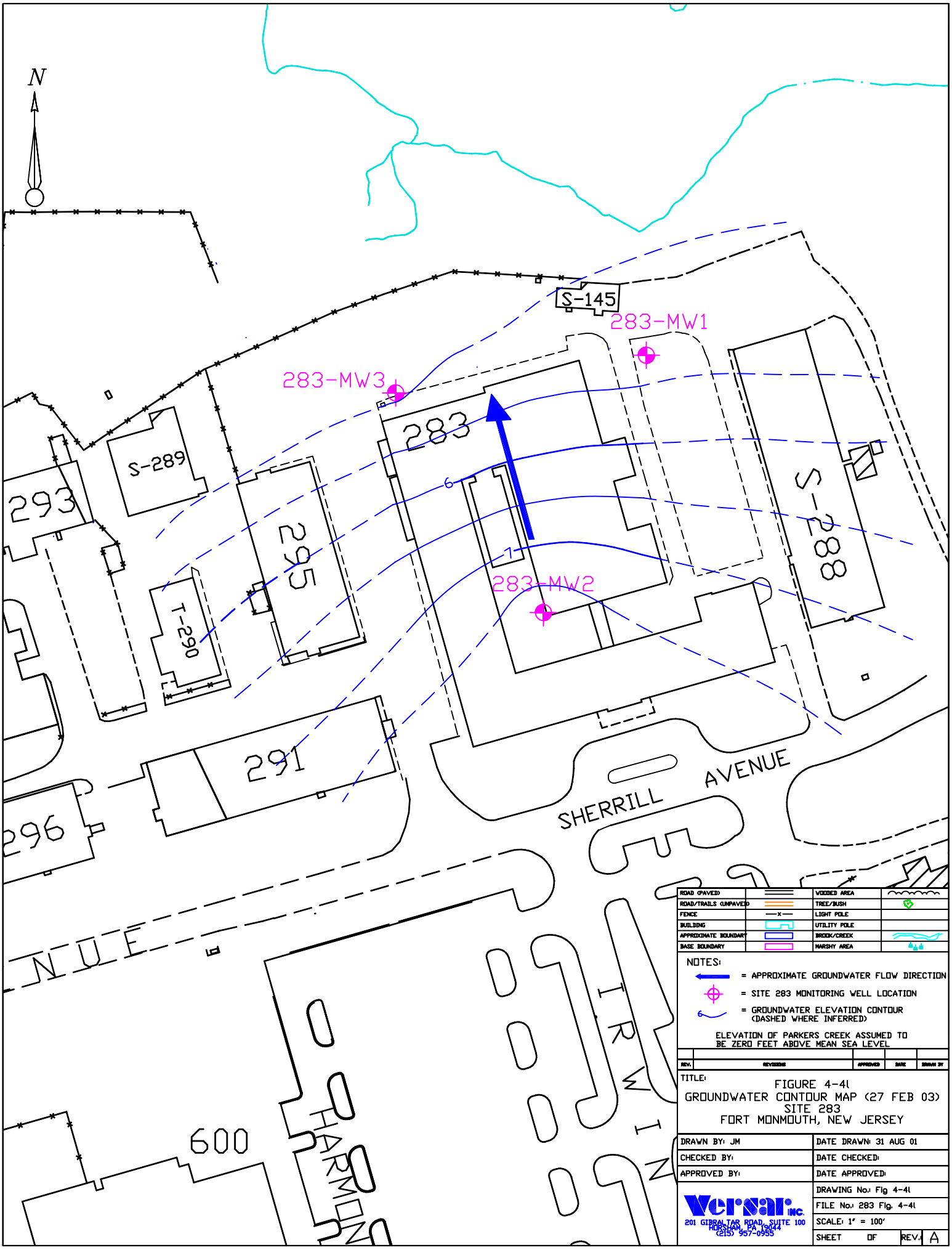

ROAD (PAVED)		WOODED AREA	
ROAD/TRAILS (UNPAVED)		TREE/BUSH	
FENCE	—x—	LIGHT POLE	
BUILDING		UTILITY POLE	
APPROXIMATE BOUNDARY		BROOK/CREEK	
BASE BOUNDARY		MARSHY AREA	

NOTES:

= APPROXIMATE GROUNDWATER FLOW DIRECTION

= SITE 283 MONITORING WELL LOCATION

= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 4-4l
GROUNDWATER CONTOUR MAP (27 FEB 03)
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 31 AUG 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: Fig 4-4l
	FILE No.: 283 Fig. 4-4l
	SCALE: 1" = 100'
	SHEET OF REV.: A

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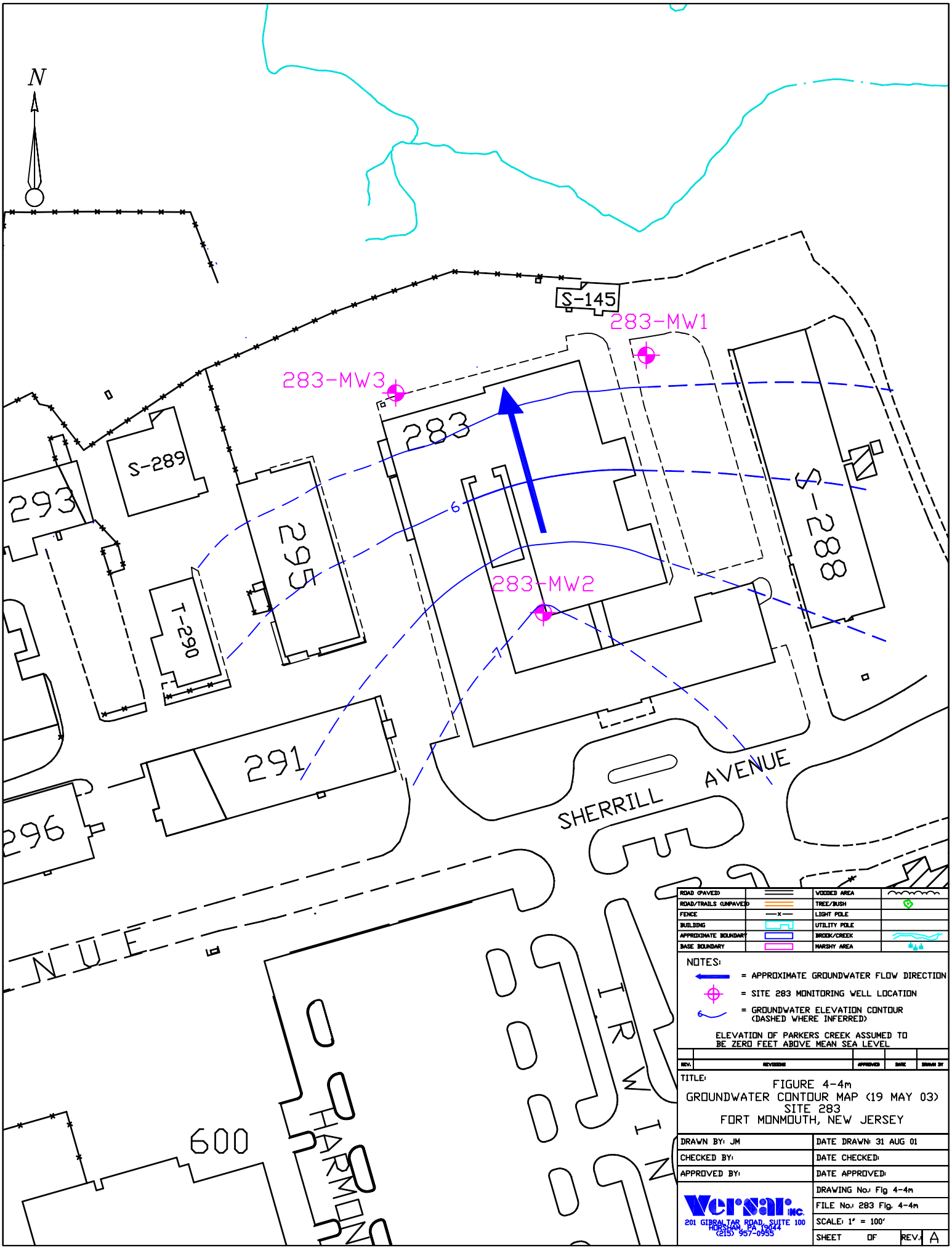
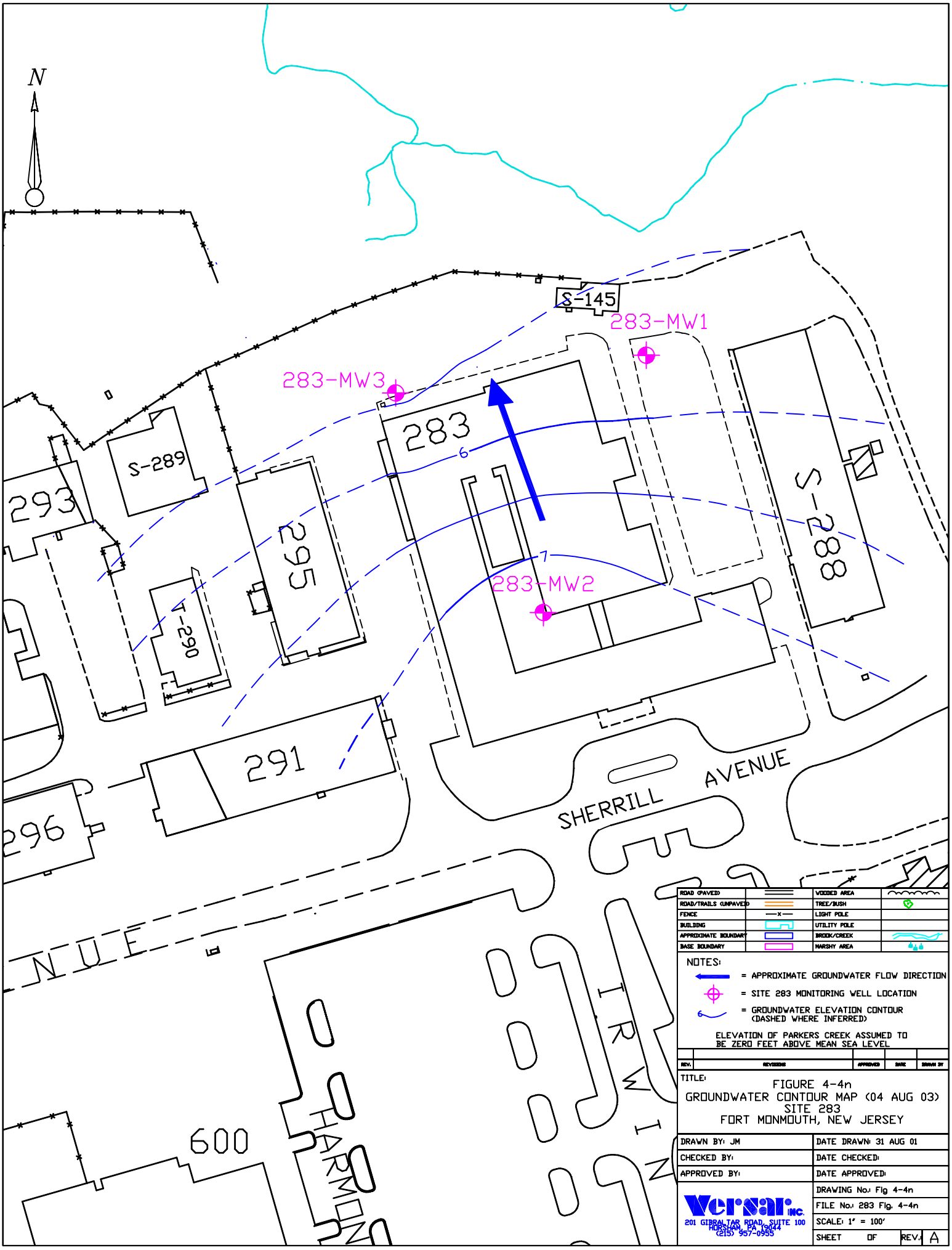

N
S-145
283-MW1
283-MW3
283
S-289
293
292
T-290
283-MW2
288
291
296
SHERRILL AVENUE
600
6
7
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV. REVISIONS APPROVED DATE DRAWN BY
TITLE:
FIGURE 4-4m
GROUNDWATER CONTOUR MAP (19 MAY 03)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4m
FILE No.: 283 Fig. 4-4m
SCALE: 1" = 100'
SHEET OF REV.: A
Versar INC.
201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044
(215) 957-0955


N
S-145
283-MW1
283-MW3
283
6
7
283-MW2
S-289
293
295
S-290
291
296
S-288
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV.
REVISIONS
APPROVED
DATE
DRAWN BY
TITLE:
FIGURE 4-4n
GROUNDWATER CONTOUR MAP (04 AUG 03)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4n
FILE No.: 283 Fig. 4-4n
SCALE: 1" = 100'
SHEET OF
REV.: A
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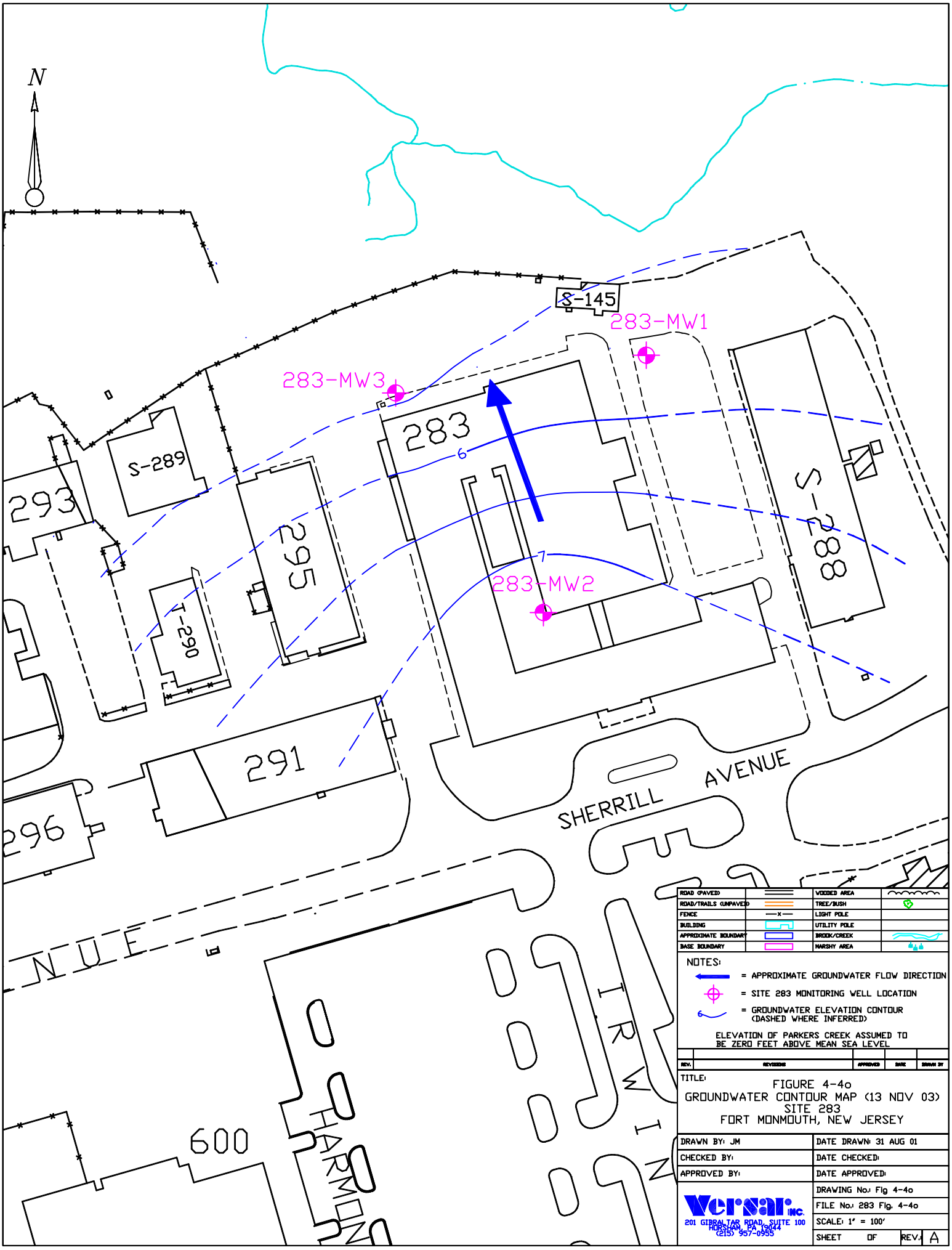
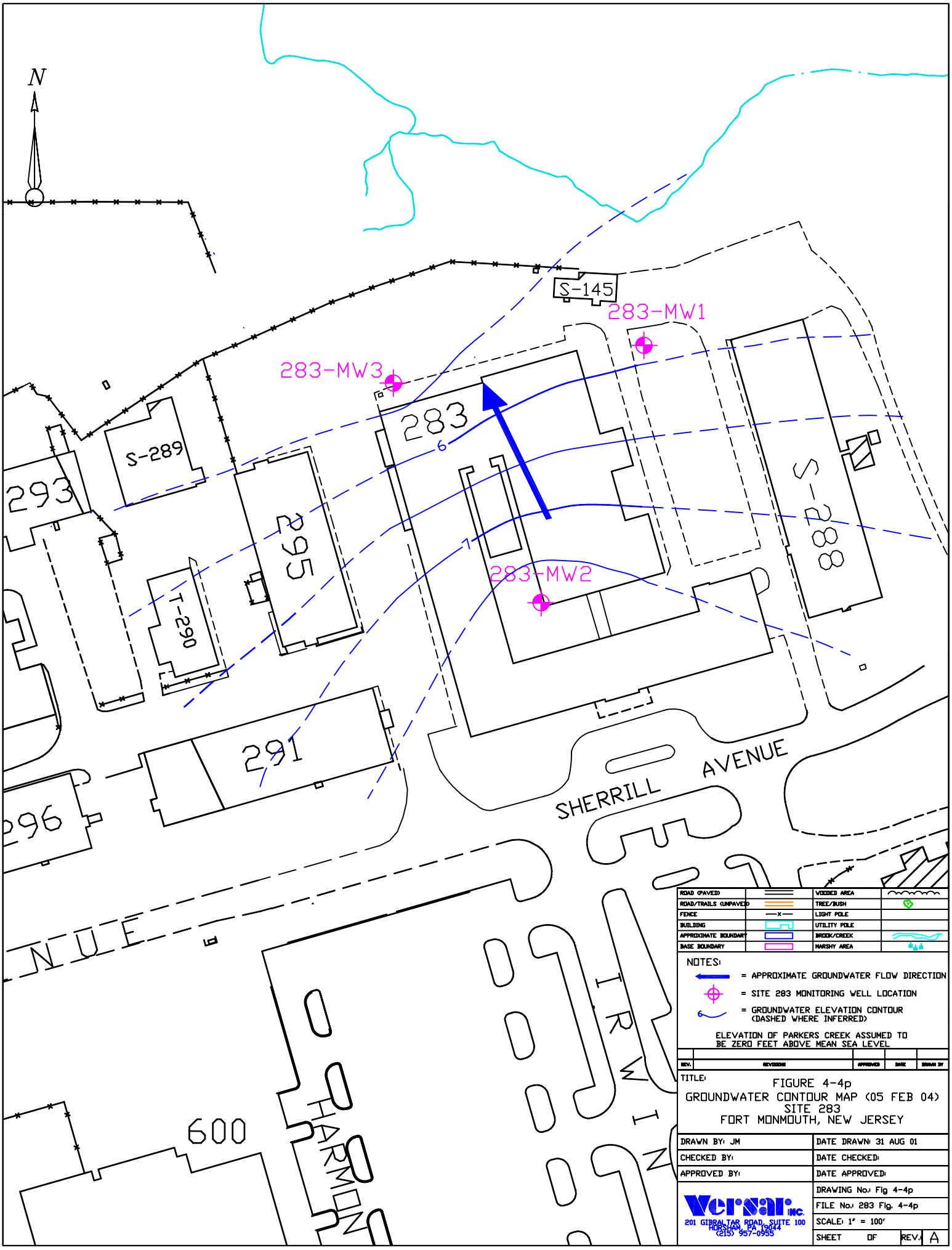

N
S-145
283-MW1
283-MW3
283
6
S-289
293
295
290
283-MW2
288
291
296
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV.
REVISIONS
APPROVED
DATE
DRAWN BY
TITLE:
FIGURE 4-4o
GROUNDWATER CONTOUR MAP (13 NOV 03)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4o
FILE No.: 283 Fig. 4-4o
SCALE: 1" = 100'
SHEET OF
REV.: A
Versar INC.
201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044
(215) 957-0955


N
S-145
283-MW1
283-MW3
283
6
7
8
283-MW2
S-289
293
S-290
S-288
291
SHERRILL AVENUE
600
ROAD (PAVED)
ROAD/TRAILS (UNPAVED)
FENCE
BUILDING
APPROXIMATE BOUNDARY
BASE BOUNDARY
WOODED AREA
TREE/BUSH
LIGHT POLE
UTILITY POLE
BROOK/CREEK
MARSHY AREA
NOTES:
= APPROXIMATE GROUNDWATER FLOW DIRECTION
= SITE 283 MONITORING WELL LOCATION
= GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
ELEVATION OF PARKERS CREEK ASSUMED TO BE ZERO FEET ABOVE MEAN SEA LEVEL
REV. REVISIONS APPROVED DATE DRAWN BY
TITLE:
FIGURE 4-4p
GROUNDWATER CONTOUR MAP (05 FEB 04)
SITE 283
FORT MONMOUTH, NEW JERSEY
DRAWN BY: JM
DATE DRAWN: 31 AUG 01
CHECKED BY:
DATE CHECKED:
APPROVED BY:
DATE APPROVED:
DRAWING No.: Fig 4-4p
FILE No.: 283 Fig. 4-4p
SCALE: 1" = 100'
SHEET OF REV.: A
Versar INC.
201 GIBRALTAR ROAD, SUITE 100
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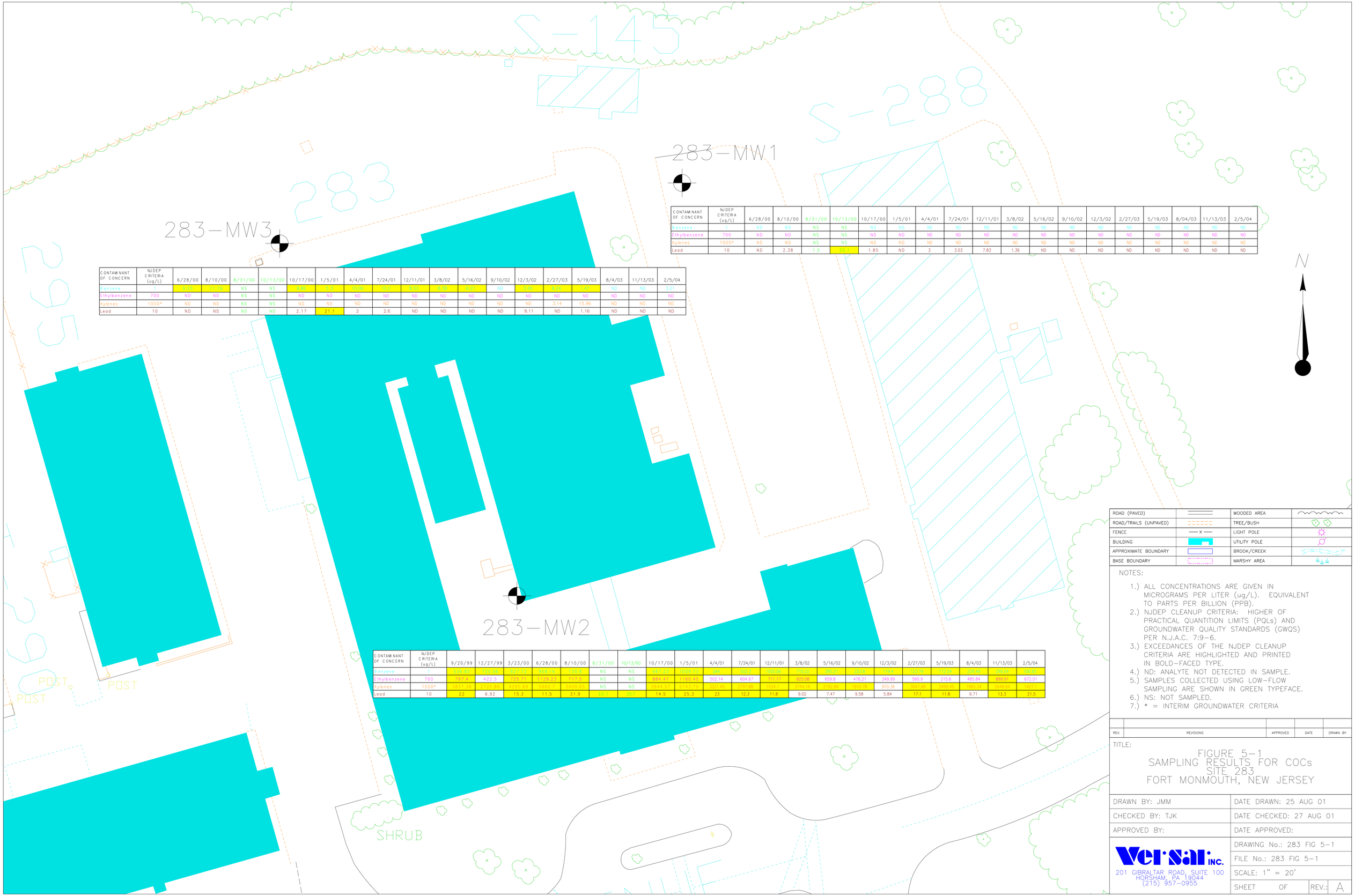

283-MW3

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	6/28/00	8/10/00	8/31/00	10/13/00	10/17/00	1/5/01	4/4/01	7/24/01	12/11/01	3/8/02	5/16/02	9/10/02	12/3/02	2/27/03	5/19/03	8/4/03	11/13/03	2/5/04
Benzene	1	9.85	11.75	NS	NS	9.86	9.3	10.08	10.2	9.53	9.39	6.21	ND	7.63	8.24	7.47	ND	ND	3.21
Ethylbenzene	700	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	1000*	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.14	15.96	ND	ND	ND
Lead	10	ND	ND	ND	ND	2.17	21.1	2	2.6	ND	ND	ND	ND	9.11	ND	1.16	ND	ND	ND

283-MW1

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	6/28/00	8/10/00	8/31/00	10/13/00	10/17/00	1/5/01	4/4/01	7/24/01	12/11/01	3/8/02	5/16/02	9/10/02	12/3/02	2/27/03	5/19/03	8/4/03	11/13/03	2/5/04
Benzene	1	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	1000*	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	10	ND	2.38	1.5	20.1	1.85	ND	3	3.03	7.83	1.36	ND	ND	ND	ND	ND	ND	ND	ND

283-MW2

CONTAMINANT OF CONCERN	NJDEP CRITERIA (ug/L)	9/20/99	12/27/99	3/23/00	6/28/00	8/10/00	8/31/00	10/13/00	10/17/00	1/5/01	4/4/01	7/24/01	12/11/01	3/8/02	5/16/02	9/10/02	12/3/02	2/27/03	5/19/03	8/4/03	11/13/03	2/5/04
Benzene	1	516.85	210.58	857.22	409.18	190.8	NS	NS	447.27	1009.73	284	302.7	1005.06	210.25	190.31	203.6	118.4	137.9	112.64	256.48	290.61	106.61
Ethylbenzene	700	787.4	422.5	725.71	1129.23	717.5	NS	NS	884.47	1168.45	502.14	604.67	711.17	925.08	659.8	476.21	349.99	560.9	215.6	485.84	899.81	672.01
Xylenes	1000*	3811.36	2125.86	4295.89	5986.7	3400.65	NS	NS	3944.57	5143.75	3021.45	2797.86	3524.1	3744.16	2192.84	1910.78	970.36	3067.89	2499.45	1985.34	2648.84	1427.1
Lead	10	22	6.92	15.3	11.5	31.9	33.1	25.7	14.5	25.3	23	12.3	11.8	9.02	7.47	9.58	5.84	17.1	11.8	9.71	13.3	21.5

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:

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 N.J.A.C. 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.
7.) * = INTERIM GROUNDWATER CRITERIA

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 5-1
SAMPLING RESULTS FOR COCs
SITE 283
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.: 283 FIG 5-1
	FILE No.: 283 FIG 5-1
	SCALE: 1" = 20'
	SHEET OF REV.: A

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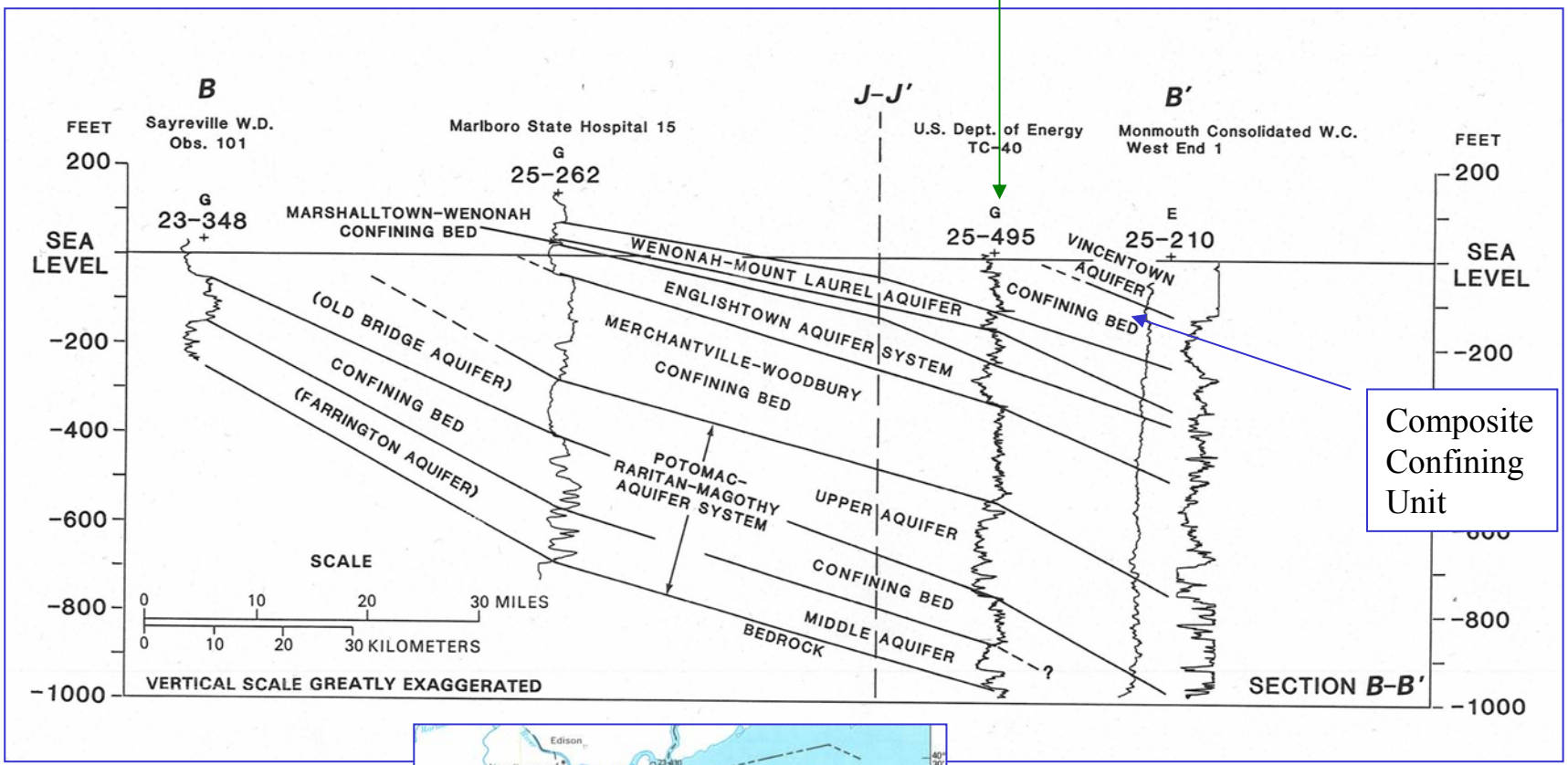
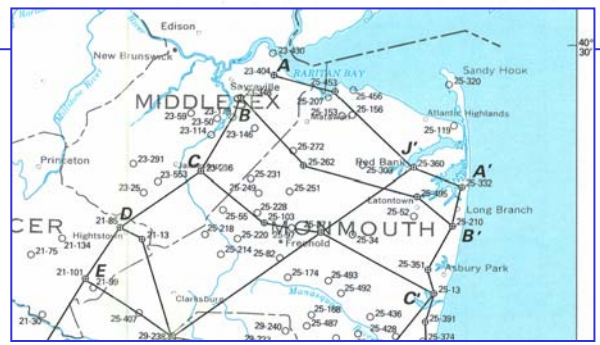
201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044
(215) 957-0955

Fort Monmouth



Composite Confining Unit



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-283
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 283.
2) Monitoring wells at Site 283 are shown in purple. Other monitoring wells are shown in green.
3) Topographic contours for the ground surface are shown as brown lines. The contour interval is 2 feet.
3) Parkers Creek shown in solid blue, represents river boundary with constant head of zero feet (mean sea level).
4) Groundwater recharge in yellow-shaded areas is 0 inches/year. Elsewhere, recharge = 13.28 inches/year.
5) Coordinates shown represent NAD-83 survey feet.

FIGURE 6-2

MODFLOW Boundaries and Grid
Site 283
Fort Monmouth, New Jersey

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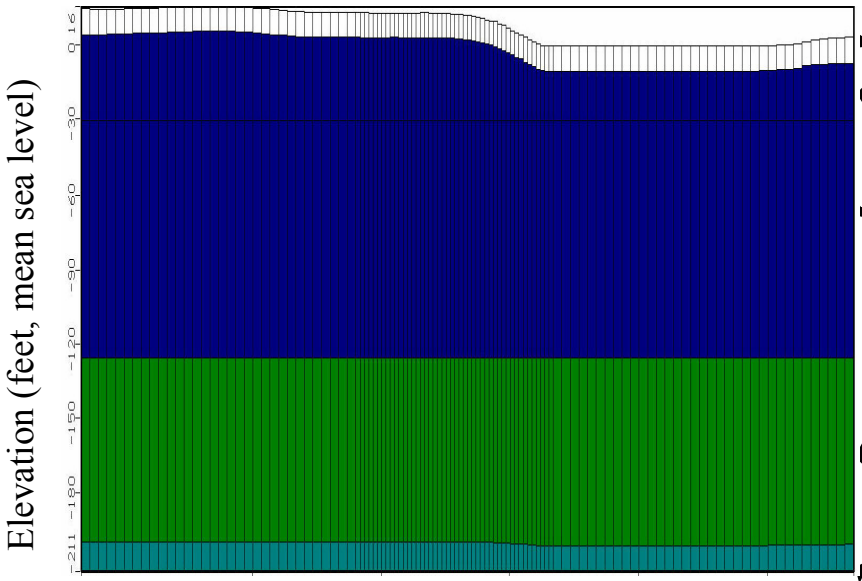
Bristol, PA 19007
(215) 788-7844



Layer 1: Fill

Thickness = 10 feet

K = 3.5 ft/day

(geometric mean from slug test at Site 283)

Layers 2 and 3: Navesink-Hornerstown Confining Unit

Thickness = 125 feet

K = 0.12 ft/day

Layer 4: Wenonah-Mount Laurel Aquifer

Thickness = 75 feet

K = 15.96 ft/day

Layer 5: Marshaltown-Wenonah Confining Unit

Thickness = 10 feet

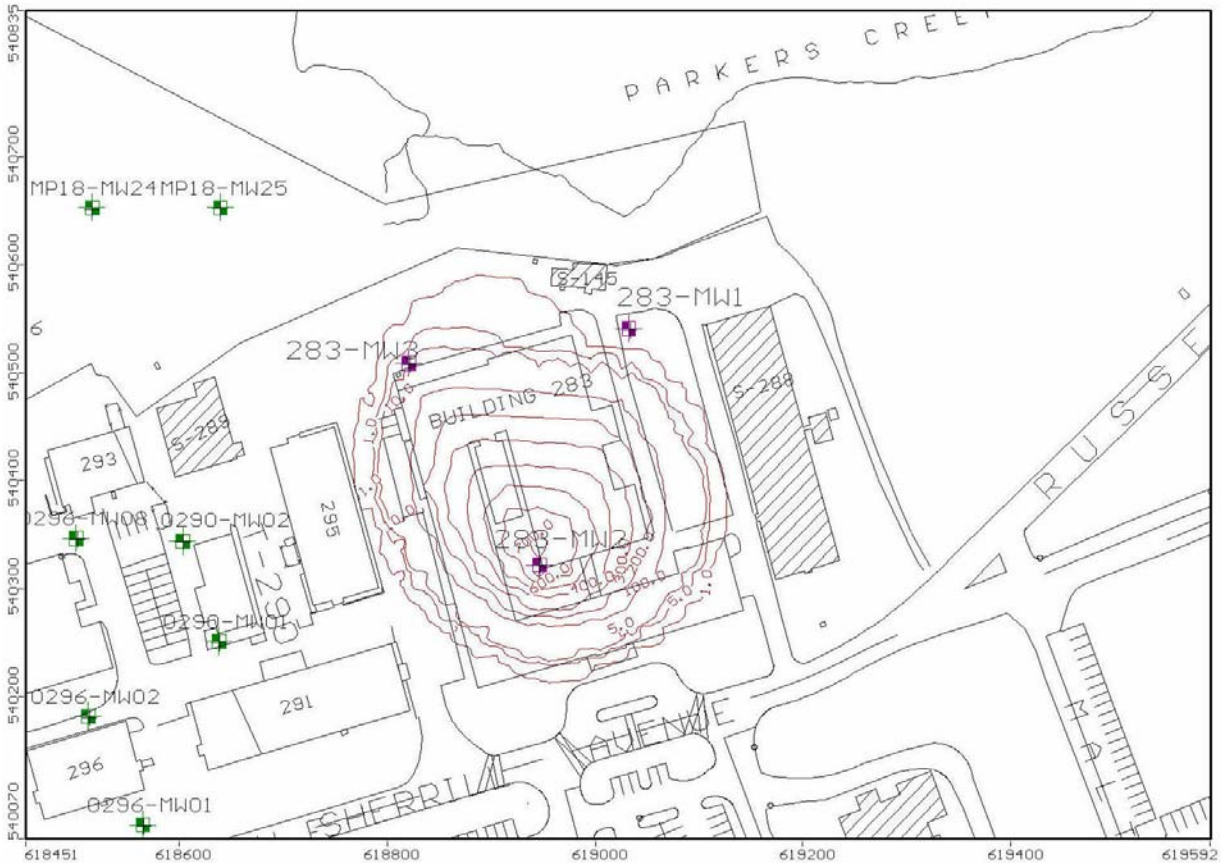
K = 0.00018 ft/day

FIGURE 6-3

Cross Section of MODFLOW Area
Site 283
Fort Monmouth, New Jersey

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

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



Notes:

1) Isoconcentration lines represent initial concentrations of benzene in groundwater as used in the MODFLOW simulation.
2) The NJDEP groundwater quality criteria for benzene is 1 ug/L.
3) Monitoring wells for Site 283 are shown in purple. Other monitoring wells are shown in green.
4) Initial Concentrations based on from average of two most recent concentrations (10/17/00 and 01/05/01).
5) Coordinates shown represent NAD-83 survey feet.

FIGURE 6-4

Initial Concentration of Benzene
In MODFLOW Simulation
Site 283
Fort Monmouth, New Jersey

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Bristol, PA 19007
(215) 788-7844

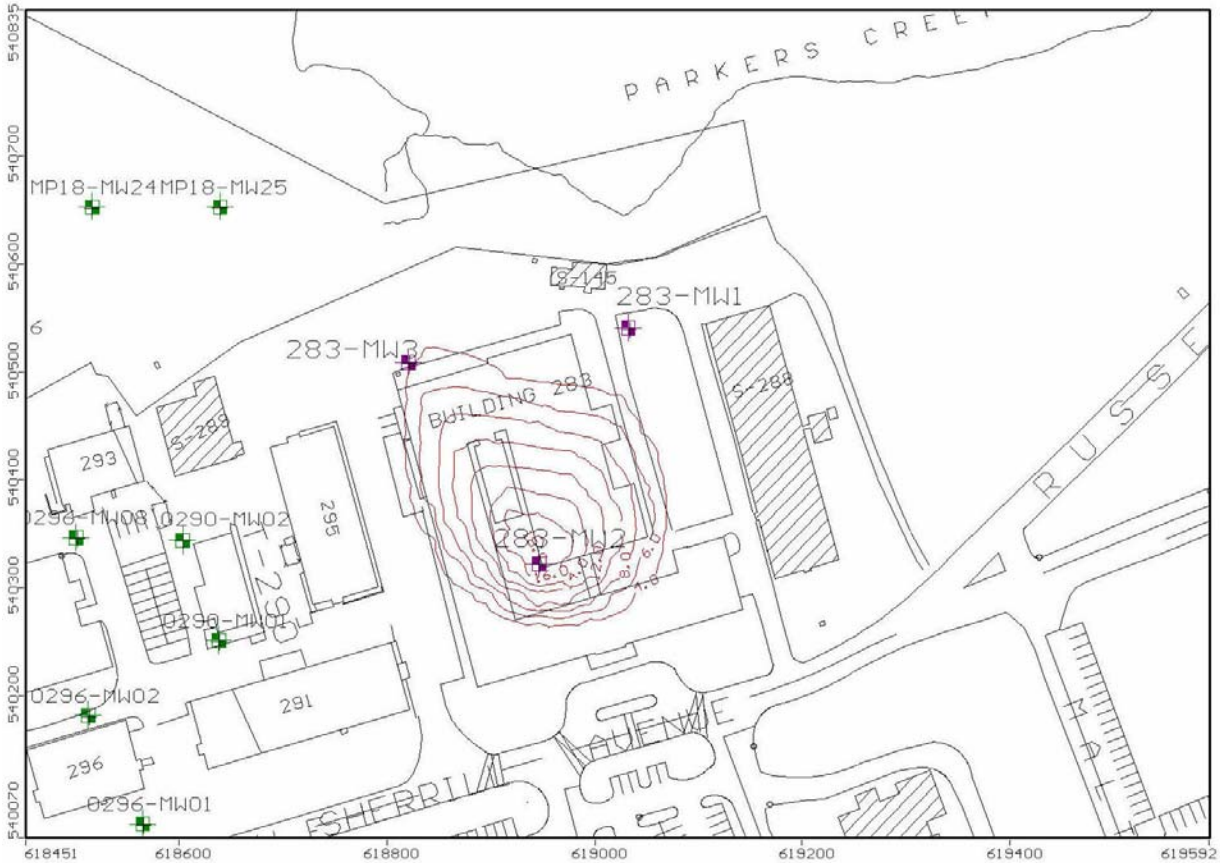

FIGURE 6-5

Initial Concentration of Lead
In MODFLOW Simulation
Site 283
Fort Monmouth, New Jersey

Notes:

1) Isoconcentration lines represent initial concentrations of lead in groundwater as used in the MODFLOW simulation.
2) The NJDEP groundwater quality criteria for lead is 10 ug/L.
3) Monitoring wells for Site 283 are shown in purple. Other monitoring wells are shown in green.
4) Initial Concentrations were were derived from average of groundwater sample results between 09/20/99 and 01/05/99 (See Table 6-3).
5) Coordinates shown represent NAD-83 survey feet.

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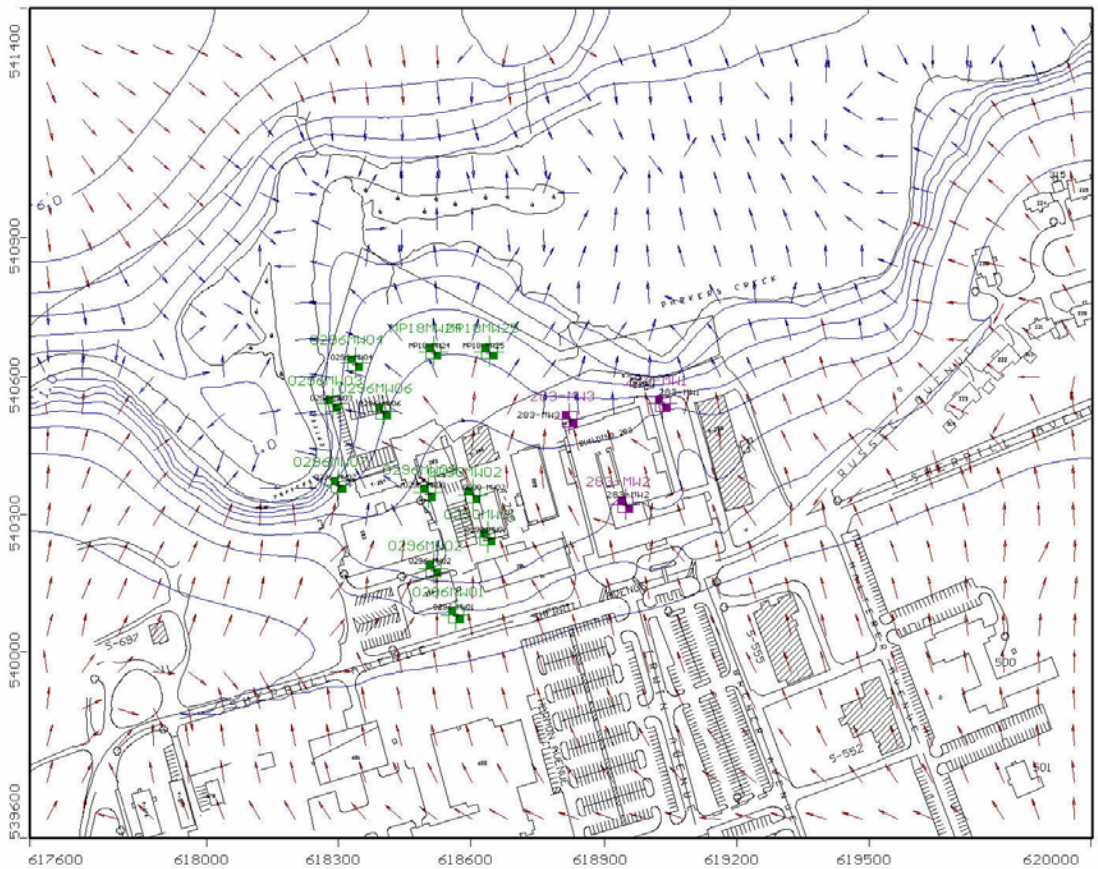

Notes:

1) Brown arrows indicate downward groundwater flow direction. Blue arrows indicate upward groundwater flow direction.
2) Monitoring wells for Site 283 are shown in purple. Other monitoring wells shown in green.
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 – Map View
Site 283
Fort Monmouth, New Jersey

Versar INC.
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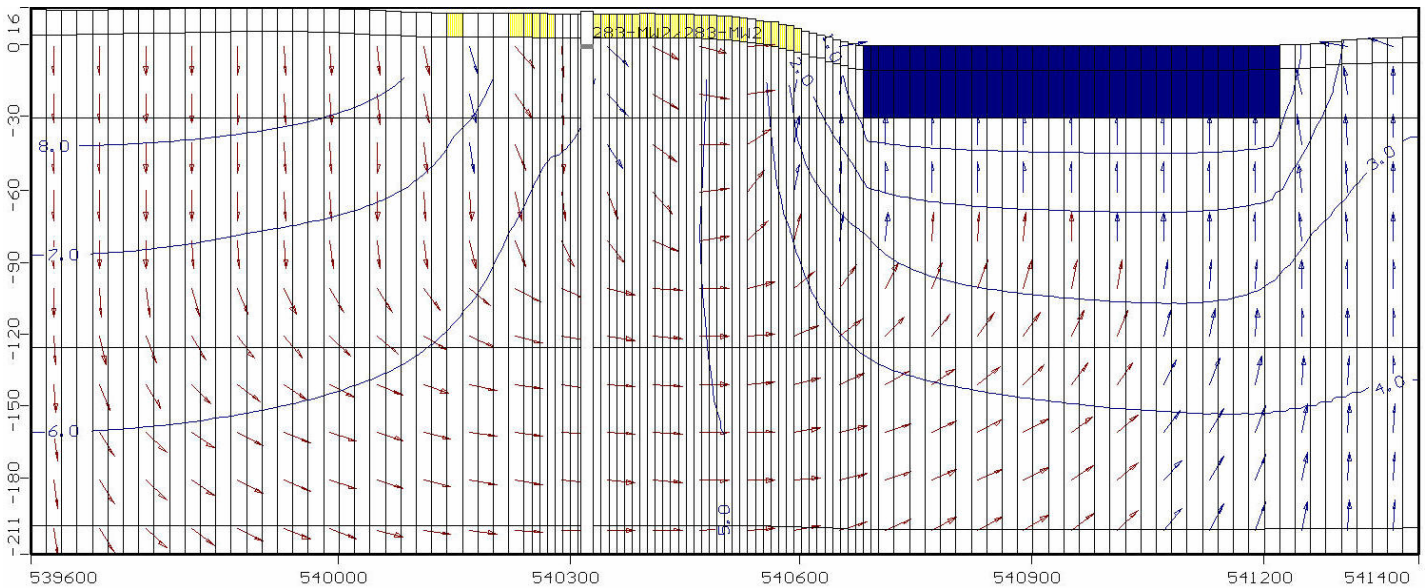
Bristol, PA 19007
(215) 788-7844



Notes:
1) Arrows indicate groundwater flow direction.
2) Cross Section runs from South to North through monitoring well 283-MW2.
3) Contour lines indicate groundwater elevation contours. Contour Interval = 1 ft.
4) Areas highlighted in yellow represent areas of with groundwater recharge of 0 inches/year.
5) Grid cells representing Parkers Creek shown in blue.
6) Coordinates shown represent NAD-83 survey feet.
7) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-7

Flow Directions and Groundwater Elevation Contours – Cross Section Site 283
Fort Monmouth, New Jersey

Versar INC.
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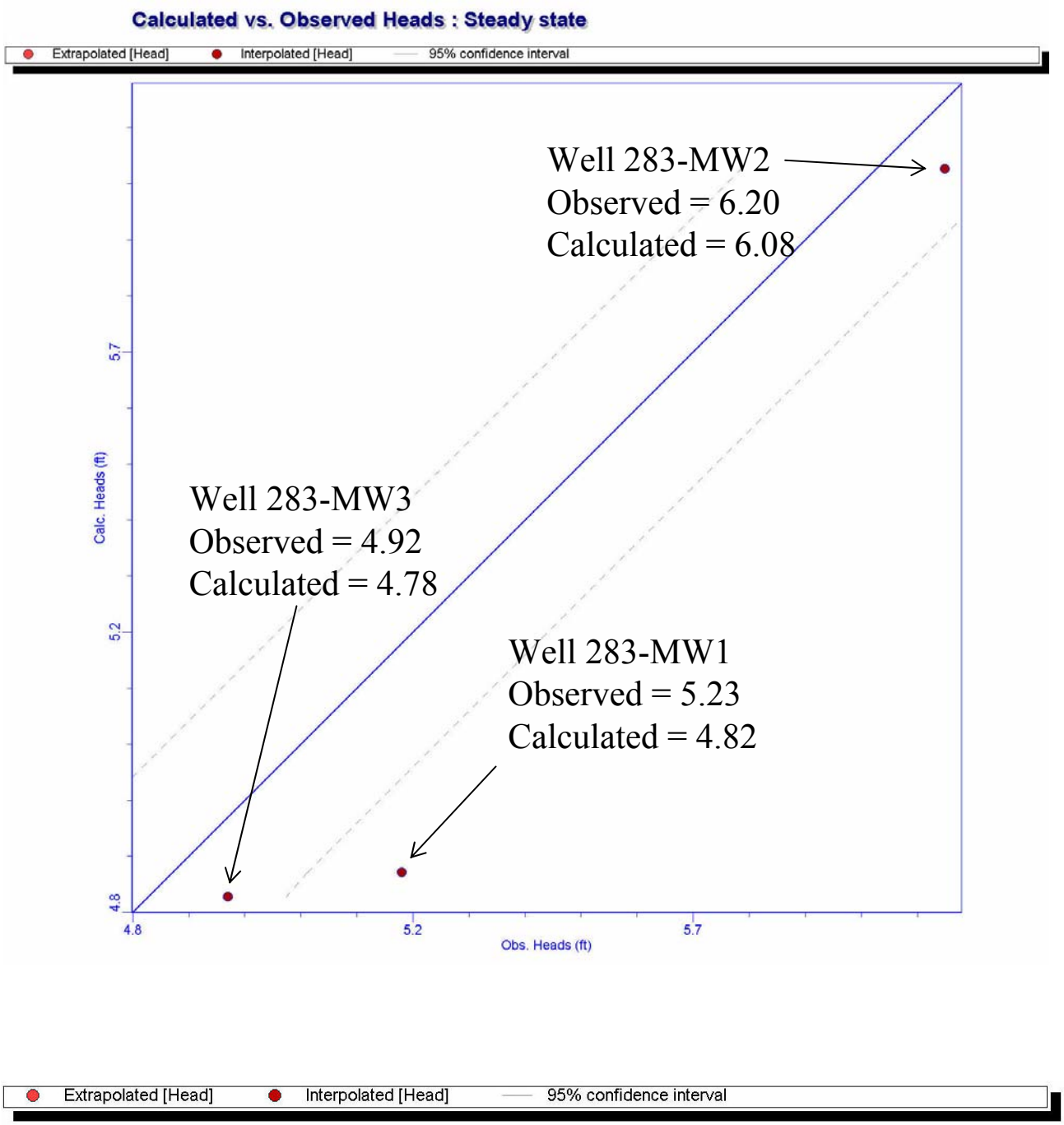
Bristol, PA 19007
(215) 788-7844



Notes:
1) This graph represents a comparison between heads calculated in the model with heads observed in monitoring wells at Site 283 in January 2001.
2) Measurements shown in feet above mean sea level (msl).
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-8

MODFLOW Calibration:
Calculated Versus Observed Head
Site 283
Fort Monmouth, New Jersey

Versar INC.
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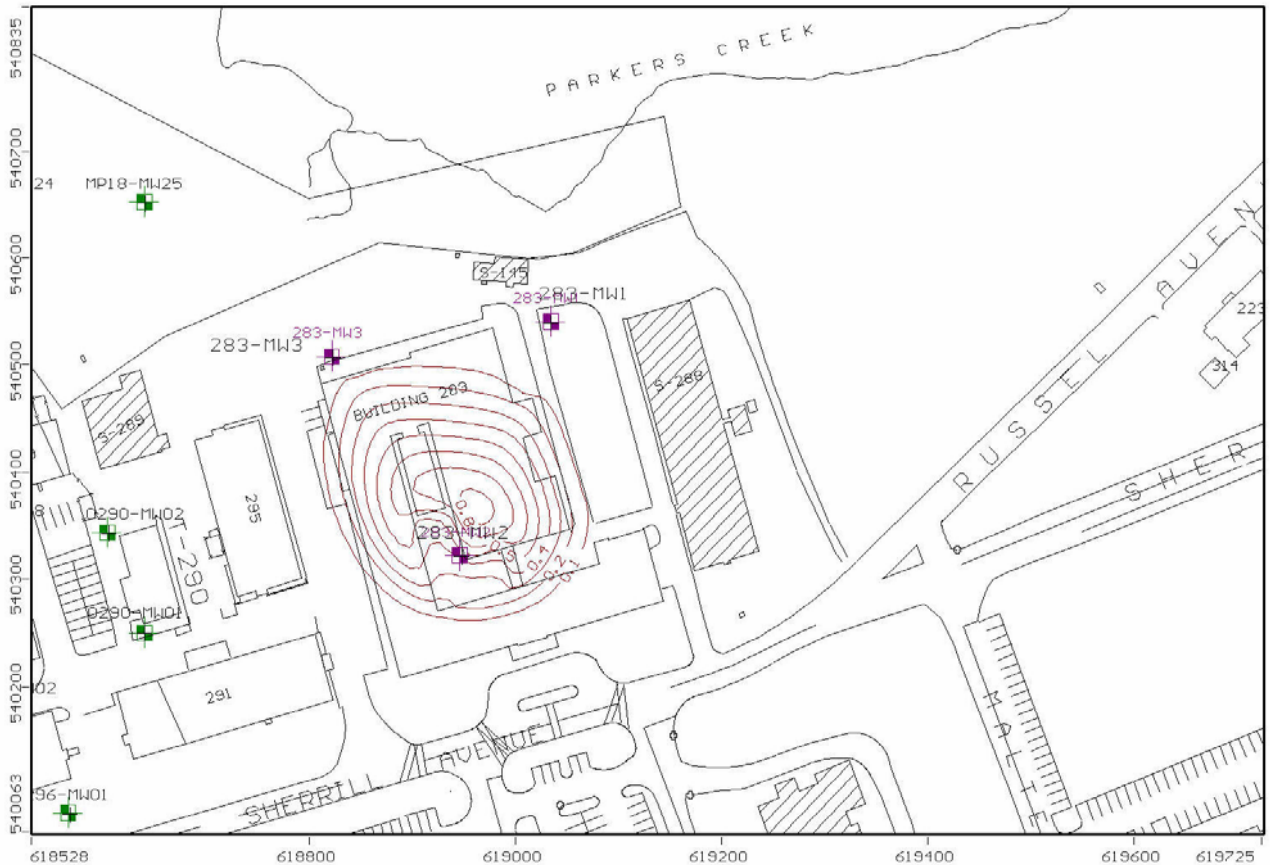
Bristol, PA 19007
(215) 788-7844



Notes:

1) Isoconcentration contours represent predicted benzene concentrations at 19 years for Layer 2 (depth of 10 feet below ground surface).
2) The NJDEP groundwater quality criteria for benzene is 1 ug/L.
3) Monitoring wells for Site 283 are shown in purple. Other monitoring wells are shown in green.
4) Coordinates shown represent NAD-83 survey feet.
5) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-9

Predicted Benzene Concentration
19 Years – Map View
Site 283
Fort Monmouth, New Jersey

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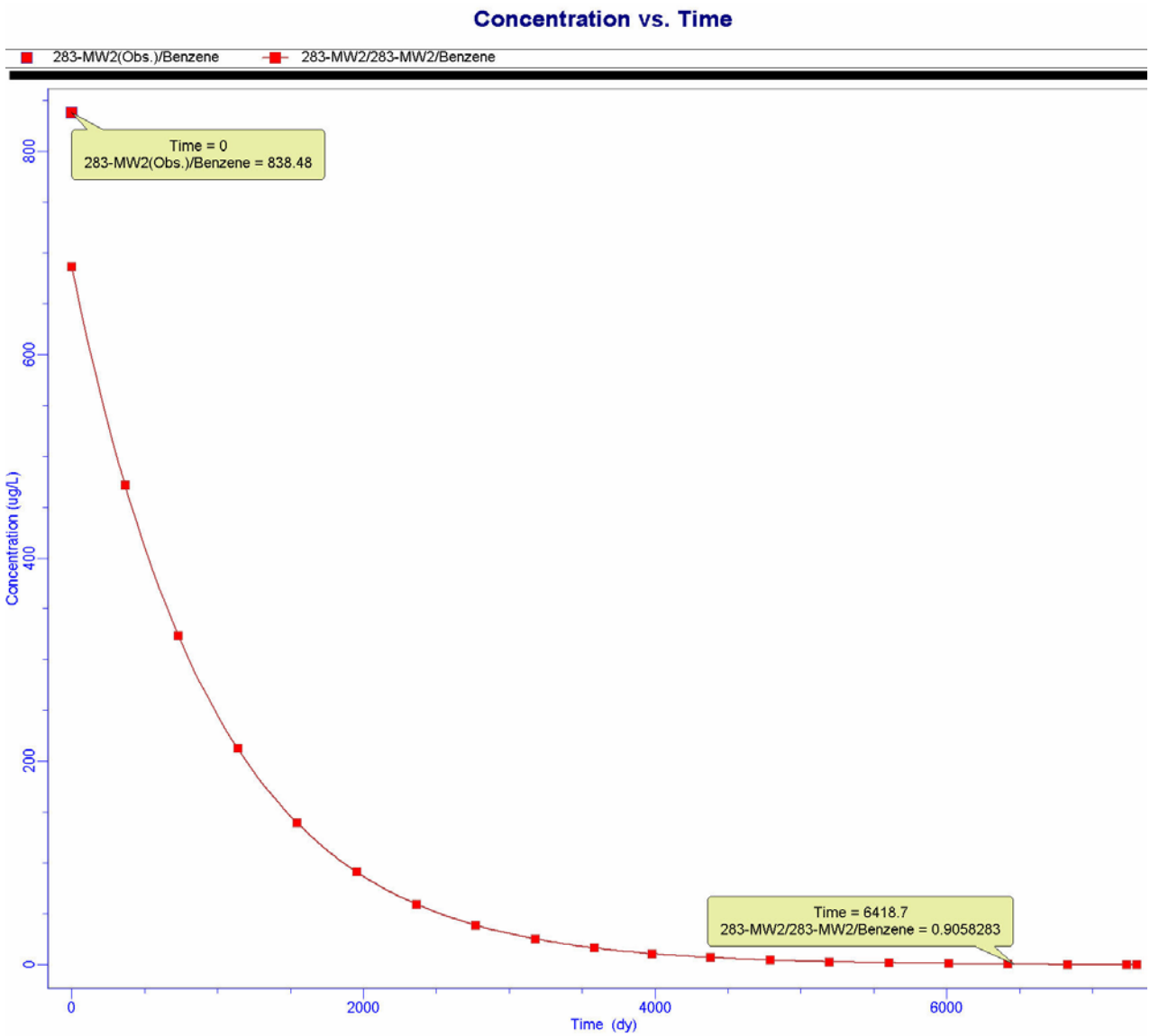

Notes:
1) NJDEP groundwater criteria for benzene is 1 ug/L.
2) Time for compliance is estimated from this graph to be approximately 17.6 years.
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-10

Predicted Benzene Concentration Versus Time at Well 283-MW2
Site 283
Fort Monmouth, New Jersey

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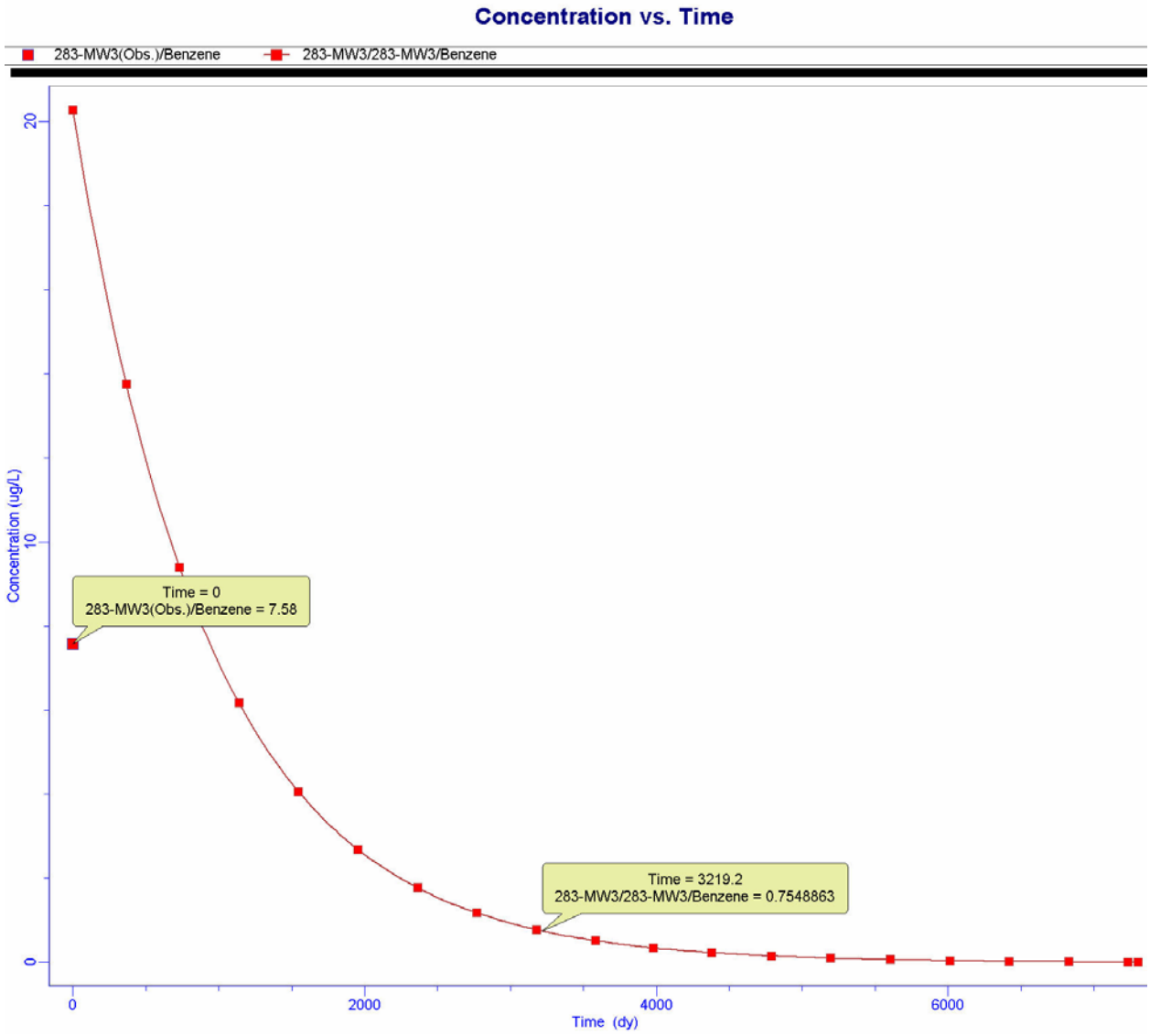

Notes:
1) NJDEP groundwater criteria for benzene is 1 ug/L.
2) Time for compliance at well 283-MW3 was estimated to be approximately 8.8 years.
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-11

Predicted Benzene Concentration Versus Time at Well 283-MW3
Site 283
Fort Monmouth, New Jersey

Versar INC.
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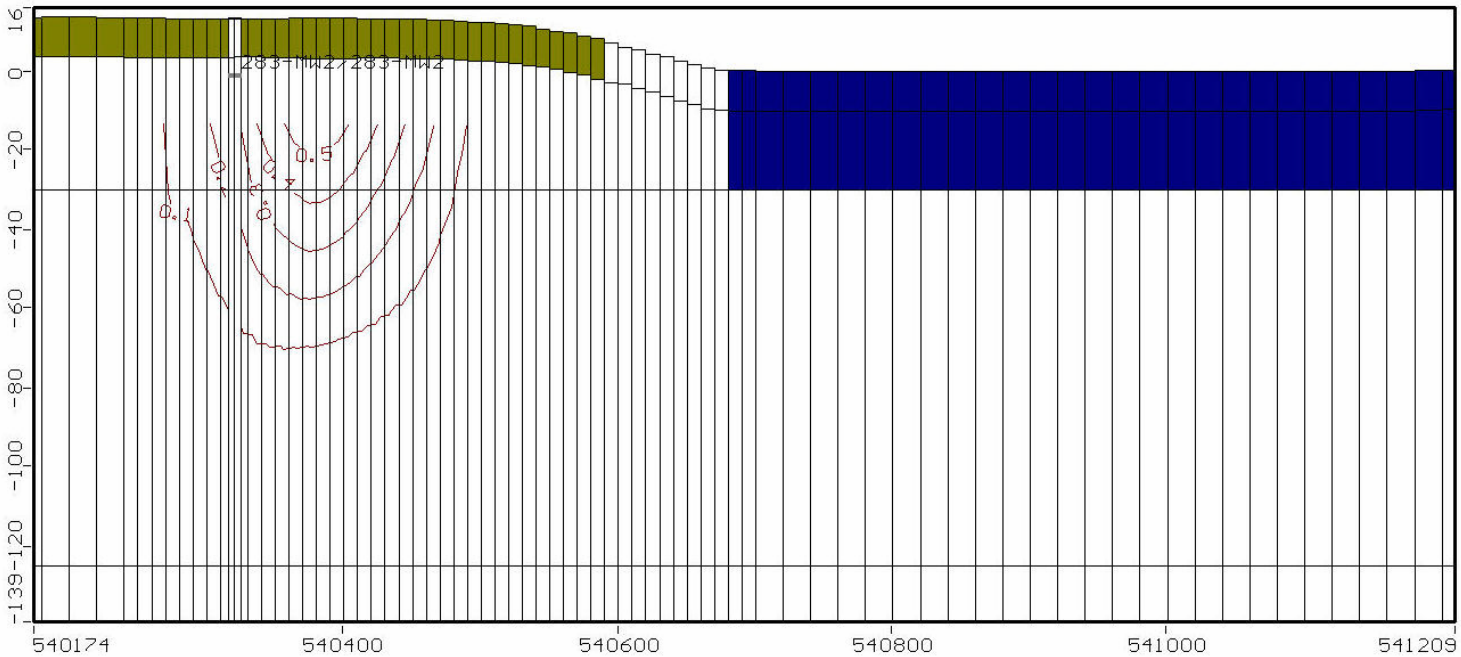


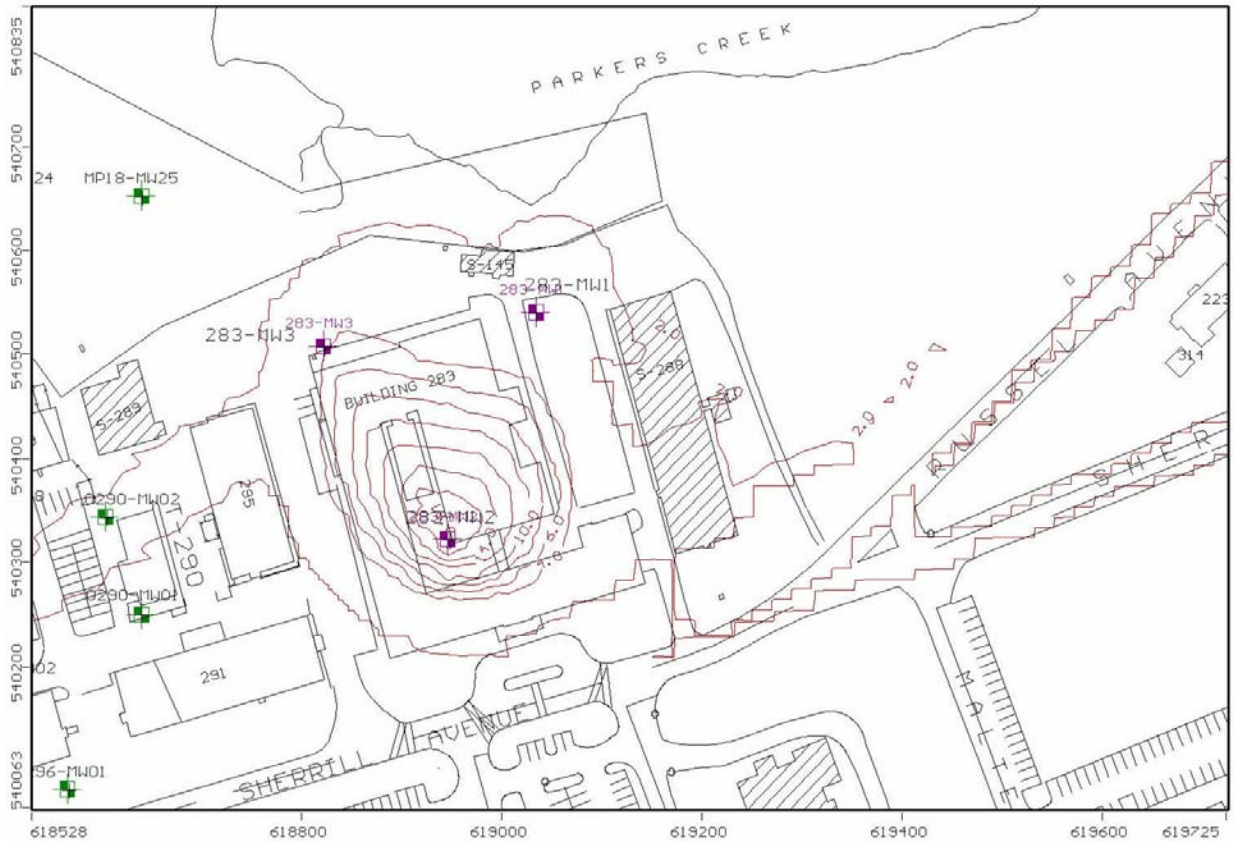
Notes:

1) Isoconcentration contours represent predicted benzene concentrations at 19 years in cross-section view (through well 283-MW2).
2) The NJDEP groundwater quality criteria for benzene is 1 ug/L.
3) Grid cells representing Parkers Creek shown in blue.
4) Grid cells that are dry are shown as olive-green.
5) Coordinates shown represent NAD-83 survey feet.
6) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-12

Predicted Benzene Concentration
19 Years – Cross Section View
Site 283
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.
2) The NJDEP groundwater quality criteria for lead is 10 ug/L.
3) Monitoring wells for Site 283 are shown in purple. Other monitoring wells are shown in green.
4) Coordinates shown represent NAD-83 survey feet.
5) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

FIGURE 6-13

Predicted Lead Concentration
20 Years
Site 283
Fort Monmouth, New Jersey

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

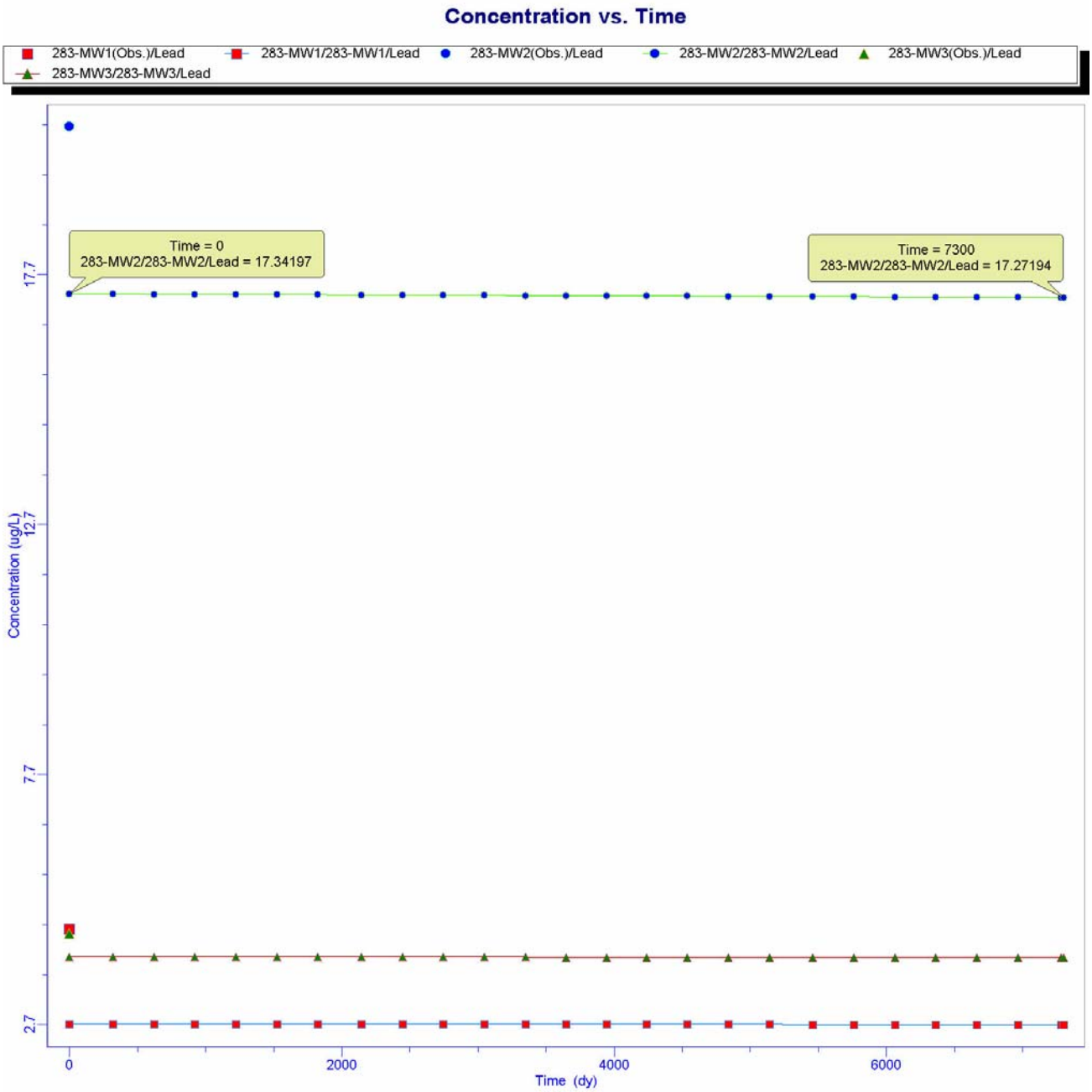
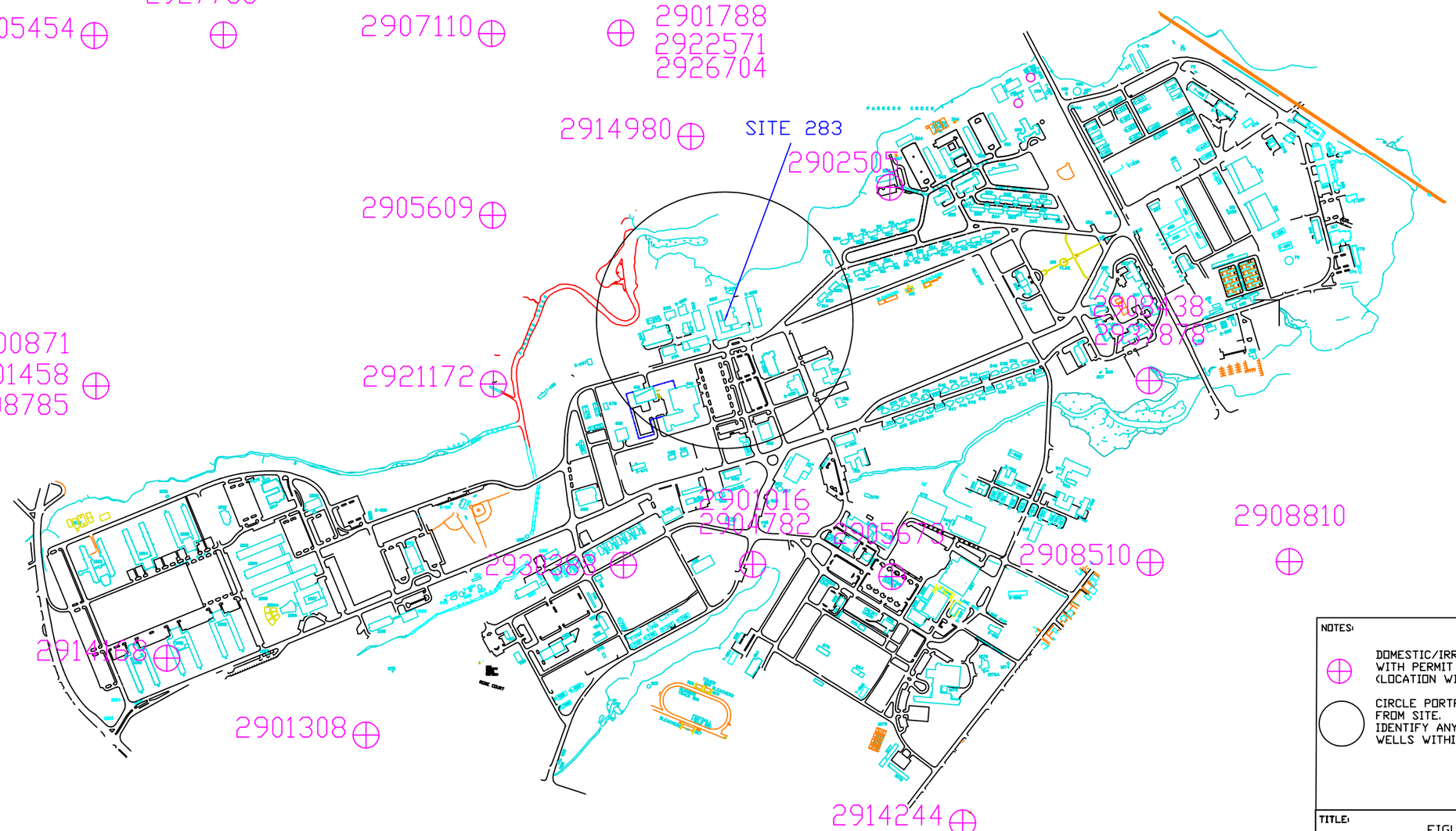


FIGURE 6-14

Predicted Lead Concentration Versus Time at Well 283-MW2
Site 283
Fort Monmouth, New Jersey

Notes:
1) NJDEP groundwater criteria for lead is 10 ug/L.
2) Time for compliance at well 283-MW2 was undetermined in the MODFLOW simulation (greater than 1,000 years).
3) Modeling Software: *Visual MODFLOW Version 2.8.2*, Waterloo Hydrogeologic, Inc., 2000.

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)

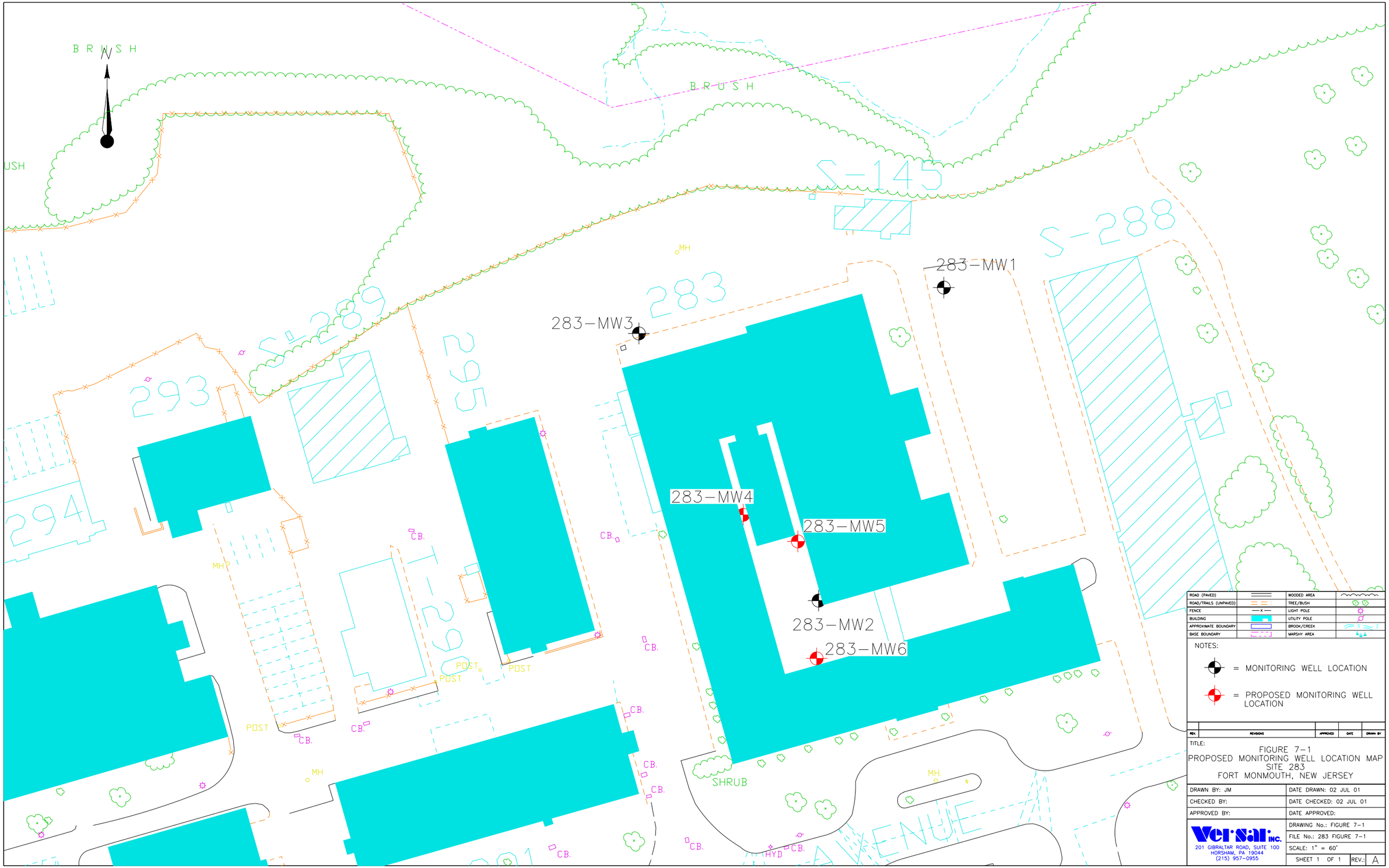
○ CIRCLE PORTRAYS 1000 FOOT DISTANCE FROM SITE. THE WELL SEARCH DID NOT IDENTIFY ANY DOMESTIC OR IRRIGATION WELLS WITHIN 1000 FT OF THE 283 SITE.

TITLE:

FIGURE 6-15
DOMESTIC AND IRRIGATION WELLS
SITE 283 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: TJK	DATE DRAWN: 30 AUGUST 01
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIG. 6-15
	FILE No.: 283 FIG. 6-15
	SCALE: 1" = 1000'
	SHEET OF REV.: A

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

= PROPOSED MONITORING WELL LOCATION

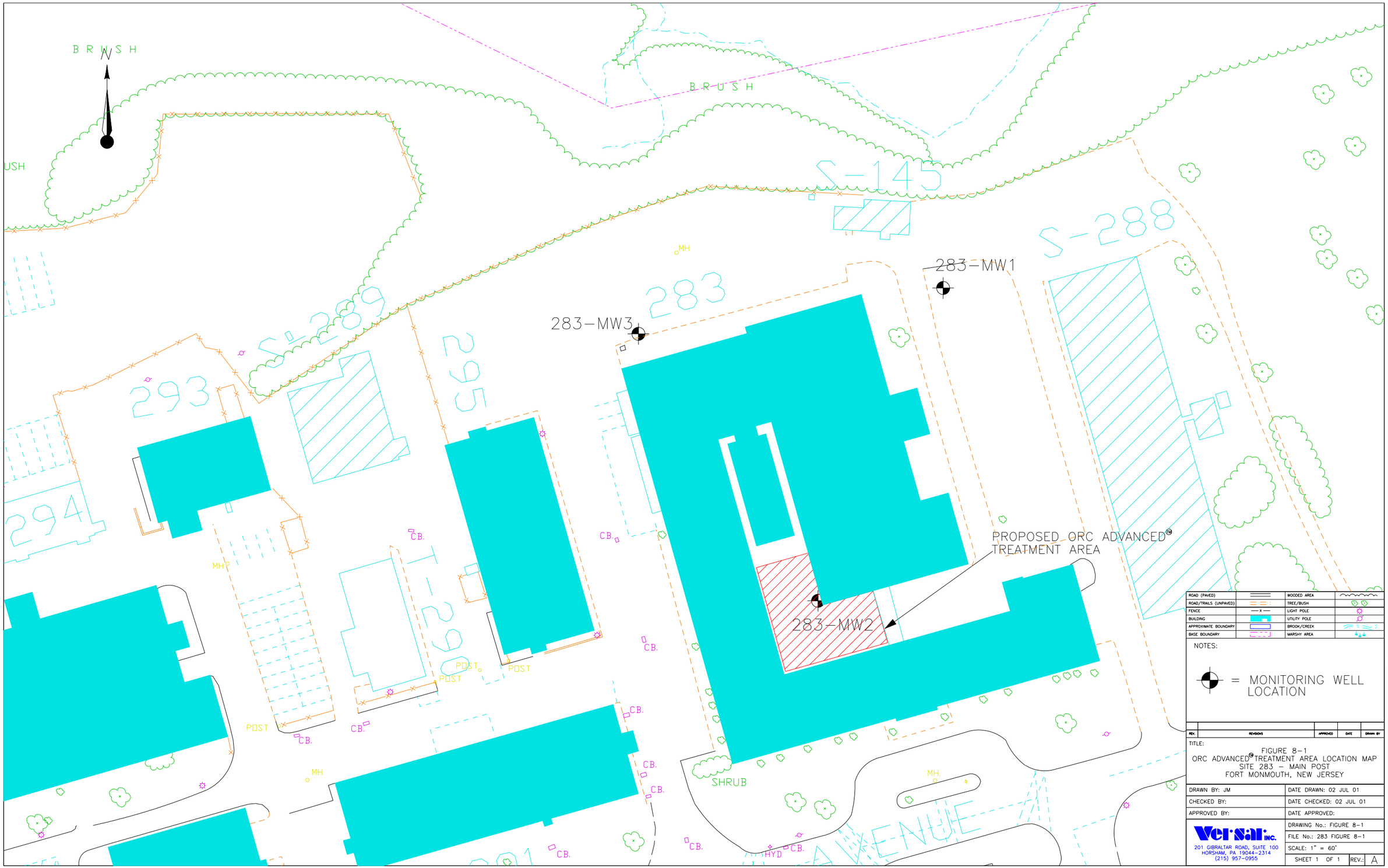
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 7-1
PROPOSED MONITORING WELL LOCATION MAP
SITE 283
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 02 JUL 01
CHECKED BY:	DATE CHECKED: 02 JUL 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 7-1
	FILE No.: 283 FIGURE 7-1
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Ver-Sal 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:

= MONITORING WELL LOCATION

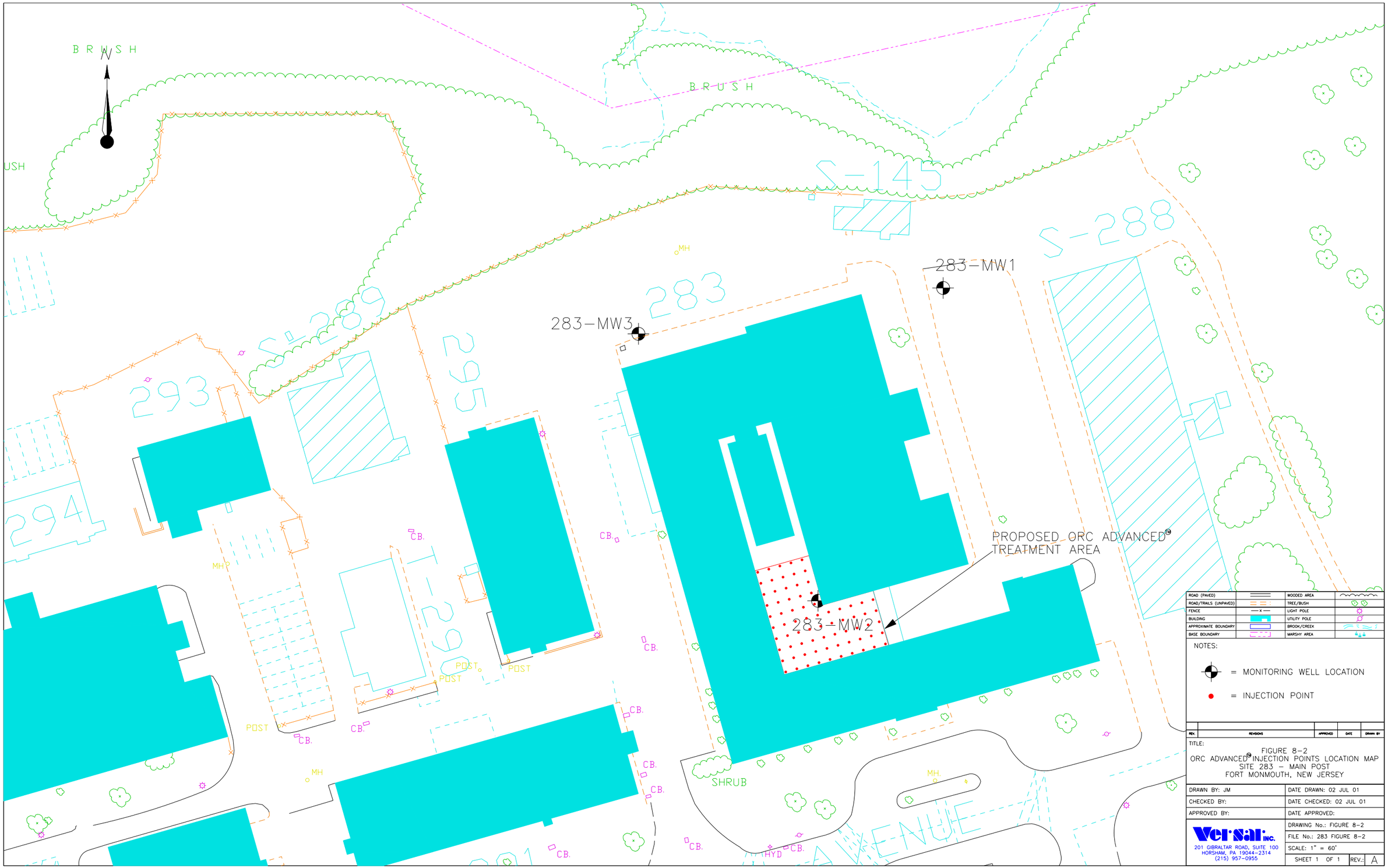
REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 8-1
ORC ADVANCED® TREATMENT AREA LOCATION MAP
SITE 283 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 02 JUL 01
CHECKED BY:	DATE CHECKED: 02 JUL 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 8-1
	FILE No.: 283 FIGURE 8-1
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Ver-Sal INC.
201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044-2314
(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:

= MONITORING WELL LOCATION

= INJECTION POINT

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE:

FIGURE 8-2
ORC ADVANCED® INJECTION POINTS LOCATION MAP
SITE 283 - MAIN POST
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JM	DATE DRAWN: 02 JUL 01
CHECKED BY:	DATE CHECKED: 02 JUL 01
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 8-2
	FILE No.: 283 FIGURE 8-2
	SCALE: 1" = 60'
	SHEET 1 OF 1 REV.: A

Versar, Inc.
201 GIBRALTAR ROAD, SUITE 100
HORSHAM, PA 19044-2314
(215) 957-0955

APPENDICES

APPENDIX A

UST Closure and Site Investigation Report, Building 283B, NJDEP Registration No. 0081533-59, SMC Environmental Services Group, September 1998

United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 283B
Main Post-West Area

NJDEP UST Registration No. 0081533-59

SEPTEMBER 1998

UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 283B

MAIN POST-WEST AREA
NJDEP UST REGISTRATION NO. 0081533-59

SEPTEMBER 1998

PREPARED FOR:

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

PREPARED BY:

SMC ENVIRONMENTAL SERVICES GROUP
501 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406

PROJECT NO. 2491-308

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Appendix B	Site Assessment Summary
Appendix C	Waste Manifest
Appendix D	UST Disposal Certificate
Appendix E	Soil Analytical Data Package
Appendix F	Photographs

EXECUTIVE SUMMARY

UST Closure

On August 11, 1997, a tar-coated steel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) underground storage tank procedures at the Main Post-West area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 0081533-59 (Fort Monmouth ID No. 283B), was located north of Building 283B. UST No. 0081533-59 was a 10,000-gallon No. 2 fuel oil UST.

Site Assessment

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.* The sampling and laboratory analysis conducted during the site assessment were performed in accordance with Section 7:26E-2.1 of the *Technical Requirements for Site Remediation.* 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 or punctures. No holes or punctures were noted in the UST. Groundwater was not encountered. No evidence of potentially contaminated soil or groundwater was observed surrounding the tank. Soil samples contained TPHC concentrations ranging from non-detect to 232.54 mg/kg.

Site Restoration

Following receipt of all post-excavation soil sampling results, the excavation was backfilled with crushed stone, sand, and native backfill to grade and restored to its original condition.

Conclusions and Recommendations

Based on the post-excavation soil 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.

No further action is proposed in regard to the closure and site assessment of UST No. 0081533-59 at Building 283B.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 0081533-59, was closed at Building 283B at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on August 11, 1997. Refer to site location map on Figure 1. This report presents the results of the Department of Public Works= (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP. The UST was a tar-coated steel 10,000-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 0081533-59 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 onsite for inspection. The decommissioning activities were conducted by DPW personnel who are registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 0081533-59 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The Standard Reporting Form and signed Site Assessment Summary form for UST No. 0081533-59 are included in Appendices A and B, respectively.

Based on inspecting the UST, field screening of subsurface soils and groundwater, and reviewing analytical results of collected soil samples, the DPW has concluded that no significant historical discharges are associated with the UST or associated piping.

This UST Closure and Site Investigation Report has been prepared by SMC Environmental Services Group, to assist the United States Army Directorate of Public Works (DPW) in complying with the 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. October 1990 and revisions dated November 1, 1991).

This report was prepared using information collected 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 283B is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 0081533-59 was located north of Building 283B and appurtenant copper piping ran approximately seven (7) feet southwest from the excavation to Building 283B. 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 283B. 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.

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

X tidal influence (based on proximity to the Atlantic Ocean, rivers, and tributaries)
X topography
X nature of the fill material within the Main Post area
X presence of clay and silt lenses in the natural overburden deposits
X local groundwater recharge areas (i.e., streams, lakes)

Due to the fluvial nature of the overburden deposits (i.e., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. This is consistent with lithologies observed in borings installed within the Main Post area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of gravel silt and/or clay.

Building 283B located approximately 200 feet south of Parkers Creek, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 283B is anticipated to be to the north.

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 involved 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

- X All underground obstructions (utilities, etc.) were identified by the contractor performing the closure prior to excavation activities.
- X All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- X 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.
- X 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.
- X 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 the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, 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 962 gallons of liquid from the UST and its associated piping were transported by Lionetti Oil Recovery Co. Inc to the Lionetti Oil Recovery Co. Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifest.

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. No evidence of contamination was observed. Soil screening was also performed along the piping run associated with the UST closure. No contamination was noted anywhere along the piping length. Groundwater was not encountered. See Figure 3 for a cross-sectional view of the excavated area.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported to Mazza and Sons, Inc., Metal Recyclers. See Appendix D for a copy of the UST disposal certificate and Appendix F for photographs of the UST. The transportation of the UST was in compliance with all applicable regulations and laws.

The UST was labeled prior to transport with the following information:

- X Site of origin
- X Contact person
- X NJDEP UST Facility ID number
- X Former contents

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on OVA air monitoring and TPHC analysis results from the post-excavation soil samples, no soils exhibited signs of contamination. Therefore, the excavated soils 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 the NJDEP-BUST document *Interim Closure Requirements for Underground Storage Tank Systems* (October 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:

- X Subsurface Evaluator: Dinker De Sai
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908) 532-0989
  NJDEP Certification No.: 0010173

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

- X Hazardous Waste Hauler: Lionetti Oil Recovery Co. Inc
  Contact Person: Charles Clayton
  Phone Number: (908) 721-0900
  NJDEP Hazardous Waste Hauler No.: S6247

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. Soil excavated from around the tank and appurtenant piping, as well as the UST excavation sidewalls and bottom, did not exhibit any evidence of potential contamination. Groundwater was not encountered.

2.3 SOIL SAMPLING

On August 11, 1997, following the removal of the UST, post-excavation soil samples A, B, C, D, E, F, and DUP B were collected from a total of six (6) locations of the UST excavation. All samples were collected along the excavation floor at a depth of 11.0 feet bgs. On August 12, sample G was collected along the excavation floor at a depth of 8.0 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC) and total solids.

U.S. Army personnel in accordance with the NJDEP Technical Requirements and the NJDEP Field Sampling Procedures Manual performed the site assessment. A summary of sampling activities including parameters analyzed is provided in Table 1. The post-excavation soil samples were collected using NJDEP *Field Sampling Procedures Manual* (1992) standard sampling procedures. 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.

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 on August 11 and 12, 1997, from a total of seven (7) locations. All samples were analyzed for TPHC and total solids. 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 locations are shown on Figure 4. The analytical data package is provided in Appendix E.

All post-excavation soil samples collected on August 11 and 12, 1997, from the UST excavation and from below piping associated with the UST contained concentrations of TPHC below the NJDEP soil cleanup criteria. Samples contained levels of TPHC ranging in concentration from non-detect to 232.54 mg/kg.

3.2 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 283B 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.

No further action is proposed in regard to the closure and site assessment of UST No. 0081533-59 at Building 283B.

TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283B, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
A	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
B	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
C	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
D	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
E	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
F	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
DUP B	8/11/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
G	8/12/97	8/13/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283B, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Method Used	Method Detection Limit (mg/kg)	Compound of Concern	Result (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/11.0=	2893.01	8/11/97	8/13/97	Total Solid	--	--	73.40	--	--
				TPHC	205	yes	ND	10,000	No
B/11.0=	2893.02	8/11/97	8/13/97	Total Solid	--	--	72.52	--	--
				TPHC	217	yes	ND	10,000	No
C/11.0=	2893.03	8/11/97	8/13/97	Total Solid	--	--	71.55	--	--
				TPHC	219	yes	232.54	10,000	No
D/11.0=	2893.04	8/11/97	8/13/97	Total Solid	--	--	71.37	--	--
				TPHC	211	yes	ND	10,000	No
E/11.0=	2893.05	8/11/97	8/13/97	Total Solid	--	--	74.92	--	--
				TPHC	207	yes	ND	10,000	No
F/11.0=	2893.06	8/11/97	8/13/97	Total Solid	--	--	74.19	--	--
				TPHC	201	yes	ND	10,000	No
DUP B/11.0=	2893.07	8/11/97	8/13/97	Total Solid	--	--	73.38	--	--
				TPHC	205	yes	ND	10,000	No
G/8.0=	2895.01	8/12/97	8/13/97	Total Solid	--	--	79.00	--	--
				TPHC	185	yes	223.45	10,000	No

Note:
* Total Solid results are expressed as a percentage.
** NJDEP Residential Direct Contact soil cleanup criteria for total organics
-- Not detected above stated sample quantitation limit
TPHC Total Petroleum Hydrocarbons

FIGURES

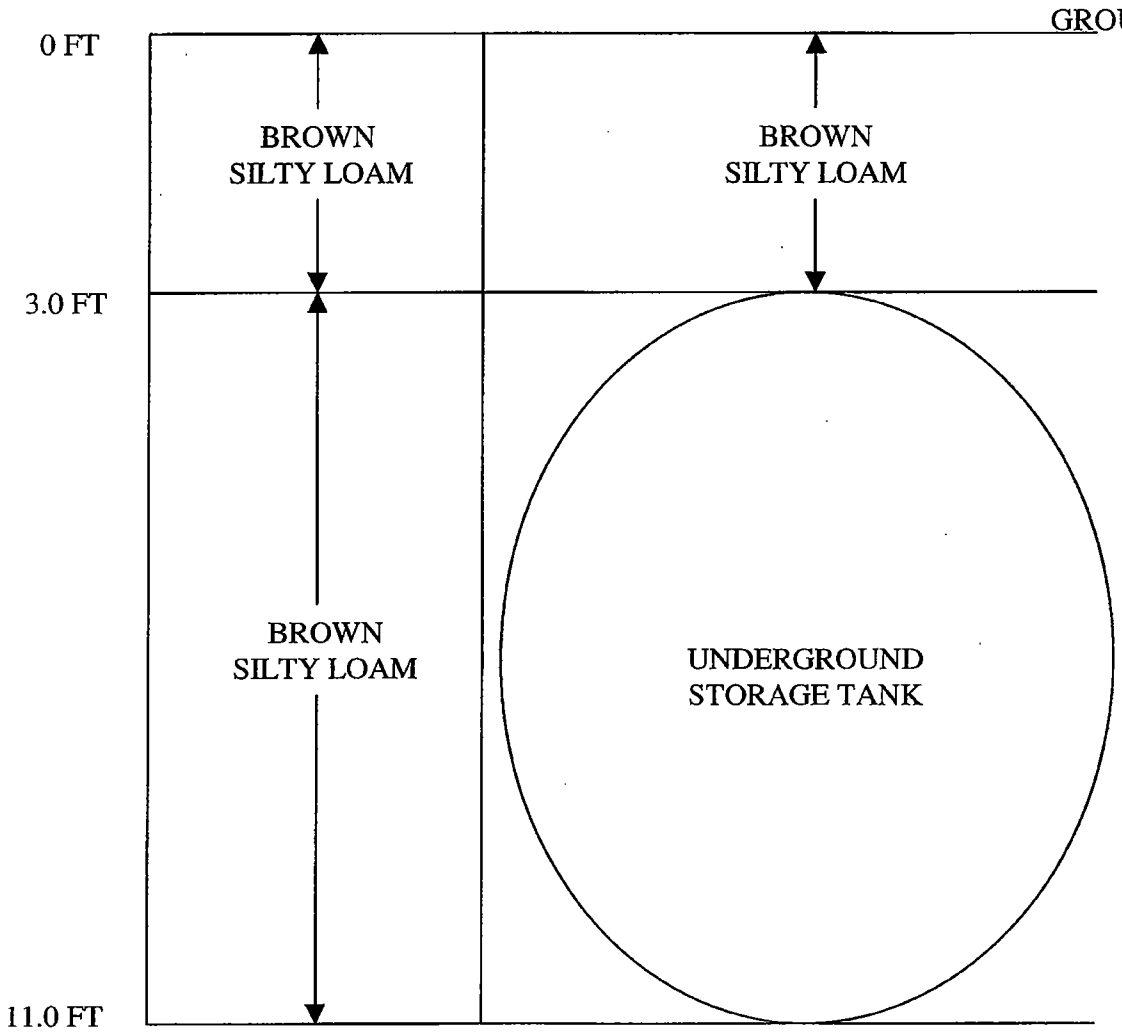

FIGURE 3
CROSS SECTIONAL VIEW
BUILDING 283B
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

SMC ENVIRONMENTAL SERVICES GROUP
Engineers, Managers, Scientists & Planners
VALLEY FORGE, PA.

SCALE: NTS | DATE: AUGUST 1998

Date Rec'd.	
Auth	
Routing	
UST NO.	

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625
ATTN: BUST Program
(609) 984-3156

STANDARD REPORTING FORM
for the:
Installation/Abandon/Remove/Sale-Transfer/Substantial Modification
Circle Only One — Use One Form Per Activity

(More than one tank can be listed per tank activity)

Answer questions 1 through 5 and others as applicable:

1. Company name and address: (as it appears on registration questionnaire)

U.S. Army
DEH Bldg. #167
Attn: SELFM-EH
Fort Monmouth, NJ 07703

2. Facility name and location: (if different from above)

U.S. Army Fort Monmouth
Main Post West

3. Contact person for this activity:

Mr. Joseph M. Fallon

Telephone Number: (908) 532-6223

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire: Tank No. 58, 88, 95, 104, 110, 113, 146, 148, 158, + 163
Bldgs. 283A, 614, 622, 676, 692, 701A, 906, 910, 1004, 1103

5. Registration Number (if known): UST - # 0081533

(OVER)

FORT MONMOUTH UST DATA ENTRY FORM

FCID:		RESIDENTIAL:	NO	LOCATION:	283	LOC 2:	A
DEPREGID:	81533	TANKID:	58	DIGAR:			
SIZEGAL:	1000	CONST:	STEEL	STATUS:	REMOVED CASE CLOSED		
PRODUCT:	#2 FUEL OIL	DATEINS:	1958				
YEAR DETECTION:							
REGISTRATION COMMENTS:	SRF AND SITE ASSESS. SENT TO NJDEPE 11/22/91						
DATE REMOVED:	5/28/90	CLOSURE CONTRACTOR:					
CLOSURE VMS:		SRF SENT:		SE:	D. DESAI		
SAS DONE:							
REMMEDIATION COMMENTS:	NONE OBSERVED no samples taken , recommend soil sampling TPHC to confirm						
LONGITUDE:		MWS ON SITE:	0	MWS NEEDED:	geo-soil		
LATITUDE:		CASE STATUS:	CLOSED	ENV CONSULTANT:	DPW-EV		

FCID:		RESIDENTIAL:	NO	LOCATION:	283	LOC 2:	B
DEPREGID:	81533	TANKID:	59	DIGAR:			
SIZEGAL:	10000	CONST:	STEEL	STATUS:	REMOVED CLEAN SITE SAS REQ		

PRODUCT	#2 FUEL OIL	DATE INS	1961
LEAK DETECTION	REMOVAL SCHED. 1383-FM0089F007		
REGISTRATION COMMENTS			
DATE REMOVED	8/11/97	CLOSURE CONTRACTOR	BASOPS-TVS
CLOSURE TMS#		SPRSENT	SSE	D. DESAI
SAS DONE	NO		
REMEDIATION COMMENTS	11/16/94 SAI REMOVED 4955 GAL OIL, LEFT 333 GAL WASTE IN TANK. SITE IS CLEAN. TPHC<1K		
LONGITUDE		MWS ON SITE	0	MW'S NEEDED	
LATITUDE		CLOSE STATUS	OPEN	ENV. CONSULTANT	

TCID		RESIDENTIAL	NO	LOCATION	283	LOC 2	C
DEPREGID	81533	TANKID	229	DIGAR	97-08-28-1330-33		
SIZECAL	3000	CONST	STEEL	STATUS	REMOVED RI ON-GOING		
PRODUCT	GASOLINE	DATE INS					
LEAK DETECTION	NONE						
REGISTRATION COMMENTS	found non-reg. GASOLINE ust, reg. w/njdep 10/01/97 ca.						
DATE REMOVED	8/28/97	CLOSURE CONTRACTOR	TVS				
CLOSURE TMS#	FED CASE MGR.	SPRSENT	SIGNATUR	SSE	E. LESINSKI		

CAP DONE:	NO				
REMEDIATION COMMENTS:	UST HAD NUMEROUS HOLES. BACKFILL COMPLETE.10/2/97CA.				
LONGITUDE:		MWS ON SITE:		MWS NEEDED:	GEO-GW+SOI
LATITUDE:		CASE STATUS:	OPEN	ENV. CONSULTANT:	DPW-EV

APPENDIX B

UST Closure and Site Investigation Report, Building 283B, NJDEP Registration No. 0081533-229, VERSAR, Inc., Fort Monmouth, New Jersey, October 2000

United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 283C
Main Post-West Area

NJDEP UST Registration No. 81533-229
DICAR No. 97-08-28-1330-33

October 2000

UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 283C

MAIN POST-WEST AREA
NJDEP UST REGISTRATION NO. 81533-229

OCTOBER 2000

PREPARED FOR:

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

PREPARED BY:

Versar INC.
1900 FROST ROAD
SUITE 110
BRISTOL, PA 19007

PROJECT NO. 4435-043

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EXECUTIVE SUMMARY

UST Closure

On August 28, 1997, a steel underground storage tank (UST) was closed by removal in accordance with New Jersey Department of Environmental Protection (NJDEP) closure procedures at the Main Post-West Area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 0081533-229 (Fort Monmouth ID No. 283C), was located south of Building 283C. UST No. 0081533-229 was a 3,000-gallon tank containing gasoline.

Site Assessment-Soil

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*. The sampling and laboratory analyses conducted during the site assessment were performed in accordance with Section 7:26E-2.1 of the *Technical Requirements for Site Remediation*. 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. Numerous holes were noted in the UST. Soils at the location of the holes were dark in color and appeared to be contaminated. Based on the inspection of the UST, Directorate of Public Works (DPW) concluded that a discharge of petroleum products was associated with this UST. The NJDEP hotline was notified and the case was assigned DICAR No. 97-08-28-1330-33. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater.

On September 3, 1997, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, L, and DUP D were collected from twelve (12) locations within the UST excavation area. Excavation floor samples A, B, C, D, and DUP D were collected at a depth of 10.0 feet bgs. Sidewall samples E, F, G, H, I, J, K, and L were collected at a depth of 6.5 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC), total solids, lead, and Volatile Organic Compounds (VOCs).

On September 9,1997, following the removal of 84 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, and DUP D were collected from eleven (11) locations within the UST excavation. Excavation floor samples A, C, D, H, I, J, K, and DUP D were collected at a depth of 13.0 feet bgs. Sidewall samples B, E, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 15,1997, following the removal of 60 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, and DUP B were collected from four (4) locations within the UST excavation. Excavation floor samples A, B, and DUP B were collected at a depth of 13.0 feet bgs. Sidewall samples

C and D were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 22,1997, following the removal of 54 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, and DUP A were collected from seven (7) locations within the UST excavation area. Excavation floor samples A, B, E, and DUP A were collected at a depth of 13.0 feet bgs. Sidewall samples C, D, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 26,1997, following the removal of 56 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, and DUP A were collected along the excavation floor at a depth of 14.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On October 3,1997, post-excavation soil samples A, B, C, and DUP A were collected along the former piping length of the excavation. The piping samples were collected at a depth of 1.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On July 1,1998, Geoprobe soil sample B1 was collected at a depth of 7.5 feet bgs. The sample was analyzed for TPHC, total solids, lead, and VOCs.

Site Assessment-Findings

Analytical results of post-excavation soil samples collected between September 3, 1997, and October 3, 1997, contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC).

Site Assessment-Groundwater

In response to the observation of potentially contaminated soil near the shallow water table, one (1) groundwater sample was collected at Building 283C. On July 1, 1998, Building 283C was analyzed for VOCs calibrated for xylene plus 15 tentatively identified compounds (TICs), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), and lead. Sampling and analyses were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements for Site Remediation.*

All groundwater analytical results were either below the method detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC) with the exception of benzene and toluene. Benzene was detected at a concentration of 2,238.10 ug/L, above the GWQC of 1.0 ug/L. Toluene was detected at a concentration of 1,084.57 ug/L, above the GWQC of 1,000 ug/L.

Based on the analytical results of the groundwater sample collected on July 1, 1998, one shallow overburden monitoring well (MW-2) was installed at the Building 283C area on July 28, 1999. The well was installed approximately 5 feet south of the southwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground

surface.

A second shallow overburden monitoring well (MW-1) was installed at the Building 283C area on March 28, 2000. It was installed approximately 35 feet east of the northeastern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 25.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

A third shallow overburden monitoring well (MW-3) was installed at the Building 283C area on March 28, 2000. It was installed approximately 50 feet east of the northwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below grade surface.

Monitoring well MW-2 was sampled on September 20, 1999, December 27, 1999, March 23, 1999, June 28, 2000, and August 10, 2000. Monitoring well MW-2 was analyzed for VOCs calibrated for xylene plus 15 TICs, semivolatile organic compounds (SVOCs) plus 15 TICs, pesticide/PCB, and Target Analyte List (TAL) metals.

Monitoring well MW-1 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

Monitoring well MW-3 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

All sampling and analyses were performed in accordance with the NJDEP *Field Sampling Procedures Manual*, and the *Technical Requirements for Site Remediation*, N.J.A.C. 7:26E (*Technical Requirements*).

Findings-Groundwater

A review of the historical groundwater analytical results indicates that concentrations of benzene, ethyl benzene, xylenes, aluminum, iron, and lead have been detected during these sampling events at concentrations that exceed the respective NJDEP GWQS. The highest concentrations historically have been detected in samples collected from MW-2. The groundwater analytical data is summarized in Table 5.

Conclusion and Recommendations

Based on the analytical results of the post-excavation soil samples collected between September 3, 1997, and October 3, 1997, soil quality at the Building 283C UST closure site does not exceed the NJDEP NRDCSCC. Therefore, no further action is warranted.

Based on the analytical results of the groundwater samples collected from MW-1, MW-2, and MW-3, groundwater quality at the Building 283C UST closure site exceeds the New Jersey Groundwater Quality Standard for benzene, ethyl benzene, xylenes, aluminum, iron, and lead. Continued collection of groundwater samples on a quarterly basis from MW-1, MW-2, and MW-3 is recommended. The data will determine if the previously detected contaminant concentrations are declining or if further delineation and remediation activities are necessary. The need for additional actions to address groundwater contamination should be evaluated following receipt of the additional groundwater monitoring data. This may include the performance of additional remedial investigations and/or the preparation of a Remedial Action Work Plan for the site.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-229, was closed at Building 283C at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on August 28, 1997. Refer to the Site Location Map, Figure 1. This report presents the results of the Department of Public Works' (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP. The UST was a steel 3,000-gallon tank containing gasoline.

Decommissioning activities for UST No. 81533-229 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 and 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted onsite for inspection. The decommissioning activities were conducted by DPW personnel who are registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 81533-229 proceeded under the approval of the NJDEP Bureau of Federal Case Management (NJDEP-BFCM). The Standard Reporting Form and signed Site Assessment Summary form for UST No. 81533-229 are included in Appendices A and B, respectively.

This UST Closure and Site Investigation Report has been prepared by Versar, to assist the U.S. Army DPW in complying with the NJDEP regulations. The applicable NJDEP 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. October 1990 and revisions dated November 1, 1991).

This report was prepared using information collected 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 and groundwater investigation, are presented in the final section of this report.

1.2 SITE DESCRIPTION

Building 283C is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 0081533-229 was located southwest of Building 283C and appurtenant steel piping ran approximately forty-three (43) feet north from the excavation to Building 283C. A Site Map is provided as Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 283C. 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. 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 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 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.

Shallow groundwater is 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)

Due to the fluvial nature of the overburden deposits (i.e., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. This is consistent with lithologies observed in borings installed within the Main Post area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of gravel silt and/or clay.

Building 283C is located approximately 200 feet south of Parkers Creek, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 283C is anticipated to be to the north.

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 involved 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

- The contractor performing the closure prior to excavation activities identified all underground obstructions (utilities, etc.).
- 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 Organic Vapor Analyzer (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 Subsurface 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 the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was cut in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 3,000 gallons of liquid from the UST and associated piping were transported by Lionetti Oil Recovery Co., Inc to the Lionetti Oil Recovery Co., Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifest.

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. Numerous holes were observed during the inspection by the Subsurface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Soils were stained and appeared to be contaminated. Approximately 398 cubic yards of potentially contaminated soils were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area. Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater. See Figure 3 for a cross-sectional view of the excavation area.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported in compliance with all applicable regulations and laws to Mazza & Sons, Inc. Please refer to Appendix D for the UST Disposal Certificate.

The UST was labeled prior to transport with the following information:

- Site of origin
- Contact person
- NJDEP UST Facility ID number
- Former contents
- Destination site
- Date

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on OVA air monitoring and TPHC analysis results from the post-excavation soil samples, approximately 398 cubic yards of potentially contaminated soil were removed from the UST excavation. All 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 the soil staging area. Soils that did not exhibit signs of contamination were used as backfill following the removal of the UST. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater.

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 Subsurface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with the NJDEP document, *Interim Closure Requirements for Underground Storage Tank Systems* (October 1990 and revisions dated November 1, 1991), which was the applicable regulation at the date of the closure. The Fort Monmouth DPW Environmental Office maintains all records of the Site Investigation activities.

The following Parties participated in Closure and Site Investigation Activities:

- Subsurface Evaluator: Gene Lesinski
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908) 532-0989
  NJDEP Certification No.: 0014537

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

- Hazardous Waste Hauler: Lorco Petroleum Services
  Contact Person: Chuck Clayton
  Phone Number: (732) 721-0900

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Subsurface Evaluator using an OVA and visual observations to identify potentially contaminated material. Approximately 398 cubic yards of potentially petroleum-contaminated soils were removed from the excavation area and transported to the Fort Monmouth petroleum contaminated soil holding area. Soils were removed from the excavation until no evidence of contamination remained. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater.

2.3 SOIL SAMPLING

On September 3, 1997, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, L, and DUP D were collected from twelve (12) locations within the UST excavation. Excavation floor samples A, B, C, D, and DUP D were collected at a depth of 10.0 feet bgs. Sidewall samples E, F, G, H, I, J, K, and L were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 9,1997, following the removal of 84 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, and DUP D were collected from a total of eleven (11) locations within the UST excavation. Excavation floor samples A, C, D, H, I, J, K, and DUP D were collected at a depth of 13.0 feet bgs. Sidewall samples B, E, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 15,1997, following the removal of 60 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, and DUP B were collected from a total of four (4) locations within the UST excavation. Excavation floor samples A, B, and DUP B were collected at a depth of 13.0 feet bgs. Sidewall samples C and D were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 22,1997, following the removal of 54 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, and DUP A were collected from a total of seven (7) locations within the UST excavation. Excavation floor samples A, B, E, and DUP A were collected at a depth of 13.0 feet bgs. Sidewall samples C, D, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 26,1997, following the removal of 56 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, and DUP A were collected along the excavation floor at a depth of 14.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On October 3,1997, post-excavation soil samples A, B, C, and DUP A were collected along the former piping length of the excavation. The piping samples were collected at a depth of 1.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On July 1,1998, geoprobe soil sample B1 was collected at a depth of 7.5 feet bgs. The sample was analyzed for TPHC, total solids, lead, and VOCs.

U.S. Army personnel performed the site assessment 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 NJDEP *Field Sampling Procedures Manual* (1992) standard sampling procedures. 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

One shallow overburden monitoring well (MW-2) was installed at the Building 283C area on July 28, 1999. The well was installed approximately 5 feet south of the southwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

A second shallow overburden monitoring well (MW-1) was installed at the Building 283C area on March 28, 2000. The well was installed approximately 35 feet east of the northeastern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 25.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

A third shallow overburden monitoring well (MW-3) was installed at the Building 283C area on March 28, 2000. The well was installed approximately 50 feet east of the northwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

The three wells were constructed in accordance with NJDEP's well construction protocols outlined in its May 1992 *Field Sampling Procedures Manual.* The NJDEP well permits and well construction logs are presented in Appendix G.

2.4.2 Monitoring Well Sampling

Monitoring well MW-2 was sampled on September 20, 1999, December 27, 1999, March 23, 1999, June 28, 2000, and August 10, 2000. Monitoring well MW-2 was analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

Monitoring well MW-1 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

Monitoring well MW-3 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

All sampling and analyses were performed in accordance with the NJDEP *Field Sampling Procedures Manual*, and the *Technical Requirements for Site Remediation*, N.J.A.C. 7:26E (*Technical Requirements*).

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST and associated soils, forty (40) post-excavation sample results were compared to NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) (N.J.A.C. 7:26D and revisions dated May 12, 1999). Summaries of analytical results for soils are presented in Tables 1 to 4 and the associated soil sampling locations are shown on Figure 4. The analytical data package is provided in Appendix E.

Excavation of potentially contaminated soil from the area surrounding the UST was performed between August 28, 1997, and October 3, 1997. Approximately 398 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area.

Analytical results of post-excavation soil samples collected between September 3, 1997, and October 3, 1997, contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP NRDCSCC.

3.2 GROUNDWATER SAMPLING RESULTS

A review of the historical groundwater analytical results indicates that concentrations of benzene, ethyl benzene, xylenes, aluminum, iron, and lead have been detected during these sampling events above the NJDEP GWQS. The highest concentrations have historically been detected in samples collected from MW-2. The groundwater analytical data is summarized in Table 5 and the groundwater sampling locations are shown on Figure 5. Refer to Appendix F for the groundwater analytical data package.

3.3 CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical results of the post-excavation soil samples collected between September 3, 1997, and October 3, 1997, soil quality at the Building 283C UST closure site does not exceed the NJDEP NRDCSCC. Therefore, no further action is warranted.

Based on the analytical results of the groundwater samples collected from MW-1, MW-2, and MW-3, groundwater quality at the Building 283C UST closure site exceeds the New Jersey GWQS for benzene, ethyl benzene, xylenes, aluminum, iron, and lead. Continued collection of groundwater samples on a quarterly basis from MW-1, MW-2, and MW-3 is recommended. The analysis will determine if the previously detected contaminant concentrations are declining. The need for additional actions to address groundwater quality should be evaluated following receipt of the additional groundwater monitoring data. This may include the performance of further remedial investigations and/or the preparation of a Remedial Action Work Plan for the site.

TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
**A	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**B	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**C	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
E	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
F	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
G	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
H	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**I	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**J	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**K	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
L	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP D	9/3/97	9/4/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:
* TPHC Total Petroleum Hydrocarbons
** Sample location further remediated and resampled

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
E	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
F	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
G	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
H	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
I	9/10/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
J	9/10/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
K	9/10/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP D	9/10/97	9/11/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP B	9/15/97	9/17/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
E	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
F	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
G	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP A	9/15/97	9/17/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/26/97	9/29/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/26/97	9/29/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP A	9/26/97	9/29/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP A	10/3/97	10/6/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
B1	7/1/98	7/7/98	Soil	Post-Excavation	VO+15,Lead	Geoprobe

Note:
* TPHC Total Petroleum Hydrocarbons

TABLE 2
POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
***A/10.0'=	2957.01	9/3/97	9/4/97	Total Solid	--	--	74.56 %	--	--
				TPHC	202	Yes	717.16	10,000	No
***B/10.0'=	2957.02	9/3/97	9/4/97	Total Solid	--	--	67.94 %	--	--
				TPHC	220	Yes	325.83	10,000	No
***C/10.0'=	2957.03	9/3/97	9/4/97	Total Solid	--	--	70.81 %	--	--
				TPHC	214	Yes	363.79	10,000	No
D/10.0'=	2957.04	9/3/97	9/4/97	Total Solid	--	--	71.47 %	--	--
				TPHC	214	Yes	314.25	10,000	No
E/6.5'=	2957.05	9/3/97	9/4/97	Total Solid	--	--	72.45 %	--	--
				TPHC	210	Yes	ND	10,000	No
F/6.5'=	2957.06	9/3/97	9/4/97	Total Solid	--	--	73.25 %	--	--
				TPHC	206	Yes	377.63	10,000	No
G/6.5'=	2957.07	9/3/97	9/4/97	Total Solid	--	--	73.19 %	--	--
				TPHC	213	Yes	ND	10,000	No
H/6.5'=	2957.08	9/3/97	9/4/97	Total Solid	--	--	75.98 %	--	--
				TPHC	200	Yes	272.56	10,000	No
***I/6.5'=	2957.09	9/3/97	9/4/97	Total Solid	--	--	75.28 %	--	--
				TPHC	191	Yes	1175.59	10,000	No
***J/6.5'=	2957.10	9/3/97	9/4/97	Total Solid	--	--	76.08 %	--	--
				TPHC	197	Yes	822.61	10,000	No

Note:

*	Total Solid results are expressed as a percentage.
**	NJDEP Residential Direct Contact soil cleanup criteria for total organics
***	Sample location further remediated and resampled
ND	Not detected above stated method detection limit
TPHC	Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
***K/8.5'=	2957.11	9/3/97	9/4/97	Total Solid	--	--	73.05 %	--	--
				TPHC	211	Yes	4351.68	10,000	No
L/6.5'=	2957.12	9/3/97	9/4/97	Total Solid	--	--	77.42 %	--	--
				TPHC	189	Yes	293.95	10,000	No
DUPD/6.5'=	2957.13	9/3/97	9/4/97	Total Solid	--	--	73.11 %	--	--
				TPHC	206	Yes	263.38	10,000	No

Note:

*	Total Solid results are expressed as a percentage.
**	NJDEP Residential Direct Contact soil cleanup criteria for total organics
***	Sample location further remediated and resampled
ND	Not detected above stated method detection limit
TPHC	Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/12.0'=	2980.01	9/9/97	9/11/97	Total Solid	--	--	73.63 %	--	--
				TPHC	203	Yes	206.50	10.000	No
B/6.5'=	2980.02	9/9/97	9/11/97	Total Solid	--	--	75.07 %	--	--
				TPHC	203	Yes	756.60	10.000	No
C/13.0'=	2980.03	9/9/97	9/11/97	Total Solid	--	--	76.53 %	--	--
				TPHC	194	Yes	ND	10.000	No
D/13.0'=	2980.04	9/9/97	9/11/97	Total Solid	--	--	72.38 %	--	--
				TPHC	205	Yes	ND	10.000	No
E/6.5'=	2980.05	9/9/97	9/11/97	Total Solid	--	--	73.18 %	--	--
				TPHC	209	Yes	1919.13	10.000	No
F/6.5'=	2980.06	9/9/97	9/11/97	Total Solid	--	--	74.68 %	--	--
				TPHC	195	Yes	1939.40	10.000	No
G/6.5'=	2980.07	9/9/97	9/11/97	Total Solid	--	--	75.38 %	--	--
				TPHC	200	Yes	ND	10.000	No
H/13.0'=	2980.08	9/9/97	9/11/97	Total Solid	--	--	76.13 %	--	--
				TPHC	191	Yes	ND	10.000	No
I/13.0'=	2980.09	9/10/97	9/11/97	Total Solid	--	--	75.79 %	--	--
				TPHC	203	Yes	ND	10.000	No
J/13.0'=	2980.10	9/10/97	9/11/97	Total Solid	--	--	74.93 %	--	--
				TPHC	197	Yes	ND	10.000	No

Note:
* Total Solid results are expressed as a percentage.
** NJDEP Residential Direct Contact soil cleanup criteria for total organics
ND Not detected above stated method detection limit
TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
K/13.0'=	2980.11	9/10/97	9/11/97	Total Solid	--	--	75.66 %	--	--
				TPHC	206	Yes	ND	10.000	No
DUPD/13.0'=	2980.12	9/10/97	9/11/97	Total Solid	--	--	76.12 %	--	--
				TPHC	201	Yes	ND	10.000	No

Note:

*	Total Solid results are expressed as a percentage.
**	NJDEP Residential Direct Contact soil cleanup criteria for total organics
ND	Not detected above stated method detection limit
TPHC	Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/13.0'=	2992.01	9/15/97	9/17/97	Total Solid	--	--	76.19 %	--	--
				TPHC	206	Yes	ND	10.000	No
B/13.0'=	2992.02	9/15/97	9/17/97	Total Solid	--	--	75.05 %	--	--
				TPHC	201	Yes	ND	10.000	No
C/6.5'=	2992.03	9/15/97	9/17/97	Total Solid	--	--	71.45 %	--	--
				TPHC	206	Yes	ND	10.000	No
D/6.5'=	2992.04	9/15/97	9/17/97	Total Solid	--	--	73.97 %	--	--
				TPHC	201	Yes	226.76	10.000	No
DUPB/13.0'=	2992.05	9/15/97	9/17/97	Total Solid	--	--	76.64 %	--	--
				TPHC	201	Yes	226.20	10.000	No

Note:
* Total Solid results are expressed as a percentage.
** NJDEP Residential Direct Contact soil cleanup criteria for total organics
ND Not detected above stated method detection limit
TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/13.0'=	3008.01	9/22/97	9/24/97	Total Solid	--	--	74.50 %	--	--
				TPHC	201	Yes	ND	10,000	No
B/13.0'=	3008.02	9/22/97	9/24/97	Total Solid	--	--	73.98 %	--	--
				TPHC	204	Yes	ND	10,000	No
C/6.5'=	3008.03	9/22/97	9/24/97	Total Solid	--	--	72.11 %	--	--
				TPHC	203	Yes	ND	10,000	No
D/6.5'=	3008.04	9/22/97	9/24/97	Total Solid	--	--	71.13 %	--	--
				TPHC	220	Yes	221.18	10,000	No
E/13.0'=	3008.05	9/23/97	9/24/97	Total Solid	--	--	72.72 %	--	--
				TPHC	208	Yes	ND	10,000	No
F/6.5'=	3008.06	9/23/97	9/24/97	Total Solid	--	--	73.43 %	--	--
				TPHC	212	Yes	247.98	10,000	No
G/6.5'=	3008.07	9/23/97	9/24/97	Total Solid	--	--	73.37 %	--	--
				TPHC	199	Yes	ND	10,000	No
DUPA/13.0'=	3008.08	9/23/97	9/24/97	Total Solid	--	--	75.34 %	--	--
				TPHC	204	Yes	ND	10,000	No

Note:

* Total Solid results are expressed as a percentage.

** NJDEP Residential Direct Contact soil cleanup criteria for total organics

ND Not detected above stated method detection limit

TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/14.0'=	3014.01	9/26/97	9/29/97	Total Solid	--	--	75.35 %	--	--
				TPHC	197	Yes	ND	10,000	No
B/14.0'=	3014.02	9/26/97	9/29/97	Total Solid	--	--	74.34 %	--	--
				TPHC	200	Yes	ND	10,000	No
DUPA/14.0'=	3014.03	9/26/97	9/29/97	Total Solid	--	--	75.39 %	--	--
				TPHC	198	Yes	ND	10,000	No

Note:

* Total Solid results are expressed as a percentage.

** NJDEP Residential Direct Contact soil cleanup criteria for total organics

ND Not detected above stated method detection limit

TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/1.0'=	3032.01	10/3/97	10/6/97	Total Solid	--	--	82.99 %	--	--
				TPHC	180	Yes	ND	10,000	No
B/1.0'=	3032.02	10/3/97	10/6/97	Total Solid	--	--	84.85 %	--	--
				TPHC	185	Yes	ND	10,000	No
C/1.0'=	3032.03	10/3/97	10/6/97	Total Solid	--	--	84.66 %	--	--
				TPHC	185	Yes	ND	10,000	No
D/1.0'=	3032.04	10/3/97	10/6/97	Total Solid	--	--	86.26 %	--	--
				TPHC	176	Yes	ND	10,000	No
DUPA/1.0'=	3032.05	10/3/97	10/6/97	Total Solid	--	--	82.50 %	--	--
				TPHC	184	Yes	ND	10,000	No

Note:
* Total Solid results are expressed as a percentage.
** NJDEP Residential Direct Contact soil cleanup criteria for total organics
ND Not detected above stated method detection limit
TPHC Total Petroleum Hydrocarbons

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
*A	2957.01	09/03/97	U	U	21	56	41	147
*B	2957.02	09/03/97	U	U	8.7	6.7	1.6	7.7
*C	2957.03	09/03/97	56	U	10	16	3.2	19
D	2957.04	09/03/97	U	U	U	U	U	U
E	2957.05	09/03/97	U	U	0.61	U	.32 J	1.48 J
F	2957.06	09/03/97	58	U	2.3	2.5	.37 J	2.19
G	2957.07	09/03/97	U	U	U	U	U	U
H	2957.08	09/03/97	U	1.6	U	U	U	U
*I	2957.09	09/03/97	U	U	5.5	6.5	35	72.2
*J	2957.10	09/03/97	U	5.9	5.8	15	24	58.5
*K	2957.11	09/03/97	U	U	5	4.7	6.1	15
L	2957.12	09/03/97	U	U	0.65	0.5	3.1	6.8
DUP D	2957.13	09/03/97	U	U	U	U	.25 J	.84 J

Abbreviations:

mg/kg: Milligrams per Kilogram.

U: Compound searched for but not detected.

J: Compound identified below detection limit.

Notes:

* Gray shading indicates exceedance of New Jersey Non-Residential Direct Contact Soil Cleanup Criteria
Sample location further remediated and resampled.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	3,410
	Non-Residential		1000	210	13	1000	1000	1000
A	2980.01	09/09/97	U	U	4.2	10	3	15.3
B	2980.02	09/09/97	U	U	1.3	8.1	23	87
C	2980.03	09/09/97	U	U	1.4	4.1	0.78	2.19
D	2980.04	09/09/97	U	U	1.5	2.4	0.99	4.4
E	2980.05	09/09/97	U	U	5.4	10	44 E	153 E
F	2980.06	09/09/97	U	U	2.7	15	25	128 E
G	2980.07	09/09/97	U	U	U	U	U	U
H	2980.08	09/09/97	U	U	0.29	U	U	0.68
I	2980.09	09/10/97	U	U	7.1	15	0.67 J	1.86 J
J	2980.10	09/10/97	U	U	2.3	3	U	U
K	2980.11	09/10/97	U	U	1.5	1.1	U	U
DUP D	2980.12	09/09/97	U	U	1.6	2.6	1	4.4

Abbreviations:

mg/kg: Milligrams per Kilogram.

U: Compound searched for but not detected.

J: Compound identified below detection limit.

E: Estimated value above the calibration curve.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	2992.01	09/15/00	U	U	U	U	U	U
B	2992.02	09/15/00	U	U	U	U	U	U
C	2992.03	09/15/00	U	U	U	U	U	U
D	2992.04	09/15/00	U	U	U	U	U	U
DUP B	2992.05	09/15/00	U	U	U	U	U	U

Abbreviations:

mg/kg: Milligrams per Kilogram.

U: Compound searched for but not detected.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	3008.01	09/22/00	U	U	0.64	U	U	U
B	3008.02	09/22/00	U	U	1.1	U	U	U
C	3008.03	09/22/00	U	U	0.52	U	0.51 J	2.95
D	3008.04	09/22/00	U	U	0.42	U	0.37 J	2.54
E	3008.05	09/23/00	U	U	1.2	U	U	U
F	3008.06	09/23/00	U	U	U	U	0.19 J	0.82 J
G	3008.07	09/23/00	U	U	U	U	U	U
DUP A	3008.08	09/22/00	U	U	1.2	U	U	U

Abbreviations:

mg/kg: Milligrams per Kilogram.
U: Compound searched for but not detected.
J: Compound identified below detection limit.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	3014.01	09/26/97	U	U	U	U	U	U
B	3014.02	09/26/97	U	U	U	U	U	U
DUP A	3014.03	09/26/97	U	U	U	U	U	U

Abbreviations:

mg/kg: Milligrams per Kilogram.

U: Compound searched for but not detected.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	3032.01	10/03/97	U	U	U	U	U	U
B	3032.02	10/03/97	U	U	U	U	U	U
C	3032.03	10/03/97	U	U	U	U	U	U
D	3032.04	10/03/97	U	U	U	U	U	U
DUP A	3032.05	10/03/97	U	U	U	U	U	U
B-1	3693.04	07/01/98	U	U	0.38	2.70	7.70	39

Abbreviations:

mg/kg: Milligrams per Kilogram.
U: Compound searched for but not detected.

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 2957.01-.13
Matrix: Soils

Sample Received: 9/3/97
Analysis Start: 9/10/97
Analysis Completed: 9/11/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
2957.01	*283C-A	59.83	600
2957.02	*283C-B	ND	600
2957.03	*283C-C	ND	600
2957.04	283C-D	ND	600
2957.05	283C-E	ND	600
2957.06	283C-F	ND	600
2957.07	283C-G	ND	600
2957.08	283C-H	ND	600
2957.09	*283C-I	8.51	600
2957.10	*283C-J	3.34	600
2957.11	*283C-K	4.94	600
2957.12	283C-L	ND	600
2957.13	283C-DUP	ND	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
*: Sample location further remediated and resampled.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 2980.01-.12
Matrix: Soils

Sample Received: 9/10/97
Analysis Start: 9/15/97
Analysis Completed: 9/15/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
2980.01	283C-A	ND	600
2980.02	283C-B	ND	600
2980.03	283C-C	ND	600
2980.04	283C-D	ND	600
2980.05	283C-E	ND	600
2980.06	283C-F	ND	600
2980.07	283C-G	ND	600
2980.08	283C-H	ND	600
2980.09	283C-I	ND	600
2980.10	283C-J	ND	600
2980.11	283C-K	ND	600
2980.12	283C-DUP	ND	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 2992.01-.05
Matrix: Soils

Sample Received: 9/16/97
Analysis Start: 9/19/97
Analysis Completed: 9/19/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
2992.01	283C-A	3.35	600
2992.02	283C-B	ND	600
2992.03	283C-D	2.83	600
2992.04	283C-E	1.36	600
2992.05	283C-DUP	ND	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3008.01-.08
Matrix: Soils

Sample Received: 9/23/97
Analysis Start: 9/30/97
Analysis Completed: 9/30/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3008.01	283C-A	ND	600
3008.02	283C-B	ND	600
3008.03	283C-C	ND	600
3008.04	283C-D	ND	600
3008.05	283C-E	ND	600
3008.06	283C-F	ND	600
3008.07	283C-G	ND	600
3008.08	283C-DUP	ND	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3014.01-.03
Matrix: Soils

Sample Received: 9/26/97
Analysis Start: 9/30/97
Analysis Completed: 9/30/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3014.01	283C-A	ND	600
3014.02	283C-B	ND	600
3014.03	283C-DUP	ND	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3032.01-.05
Matrix: Soils

Sample Received: 10/03/97
Analysis Start: 10/09/97
Analysis Completed: 10/10/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3032.01	283C-A	6.66	600
3032.02	283C-B	ND	600
3032.03	283C-C	12.66	600
3032.04	283C-D	1.99	600
3032.05	283C-DUP	4.50	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3693.04
Matrix: Soils

Sample Received: 7/01/98
Analysis Start: 7/07/98
Analysis Completed: 7/08/98

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3693.04	B-1	ND	600

Note:
mg/kg: Milligrams per Kilogram.
ND: Not Detected.
NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Aluminum	Iron	Lead	Manganese	Nickel
UNITS		ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA		200	300	5	50	100
283MW01	06/28/00	2070.00	1450.00	ND	22.20	10.40
283MW01	08/10/00	1930.00	739.00	2.38	23.80	5.91

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW:	Monitoring Well.
ND:	Not Detected.
ug/L:	Micrograms per liter.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Acetone	Chloromethane	Benzene	Toulene	Ethylbenzene	Xylenes (total)	Phenols	2,4-Dimethyl phenol	Naphthalene	2-Methyl naphthalene
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		700	30	1	1000	700	40	4000	100	NLE	NLE
283MW02	09/20/99	ND	15.51	536.90	598.40	797.40	3831.40	ND	3.88	119.20	25.25
283MW02	12/27/99	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	26.28
283MW02	03/23/00	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	7.43
283MW02	06/28/00	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	25.10
283MW02	08/10/00	15.55	ND	152.00	381.19	747.50	4009.44	ND	1.48	101.97	25.13

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW: Monitoring Well.
ND: Not Detected.
ug/L: Micrograms per liter.
NLE: No limit established.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Nitro-benzene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Nickel	Selenium
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		10	200	8	300	5	10	50	2	100	50
283MW02	09/20/99	ND	309.00	4.74	2330.00	22.00	8.76	14.50	ND	4.11	6.49
283MW02	12/27/99	ND	123.00	ND	2060.00	6.92	ND	44.00	0.30	3.62	4.73
283MW02	03/23/00	ND	241.00	ND	2010.00	15.80	ND	11.90	0.20	6.43	7.29
283MW02	06/28/00	ND	81.40	ND	2130.00	11.50	ND	8.31	ND	6.01	4.36
283MW02	08/10/00	1.17	812.00	3.40	2060.00	31.90	ND	5.97	ND	ND	8.40

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW: Monitoring Well.

ND: Not Detected.

ug/L: Micrograms per liter.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Benzene	Aluminum	Arsenic	Manganese	Nickel
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		1	200	8	50	100
283MW03	06/28/00	9.25	3920.00	ND	36.90	9.39
283MW03	08/10/00	11.76	302.00	3.56	30.80	2.93

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW:	Monitoring Well.
ND:	Not Detected.
ug/L:	Micrograms per liter.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Laboratory I.D.	Sample Date	Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylene
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA		1	200	700	NLE	NLE
B1	07/01/98	2238.10 D	1600.00 D	396.85 D	936.96 D	654.05 D

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW:	Monitoring Well.
ND:	Not Detected.
ug/L:	Micrograms per liter.
D:	Value from dilution.
NLE:	No limit established.

FIGURES

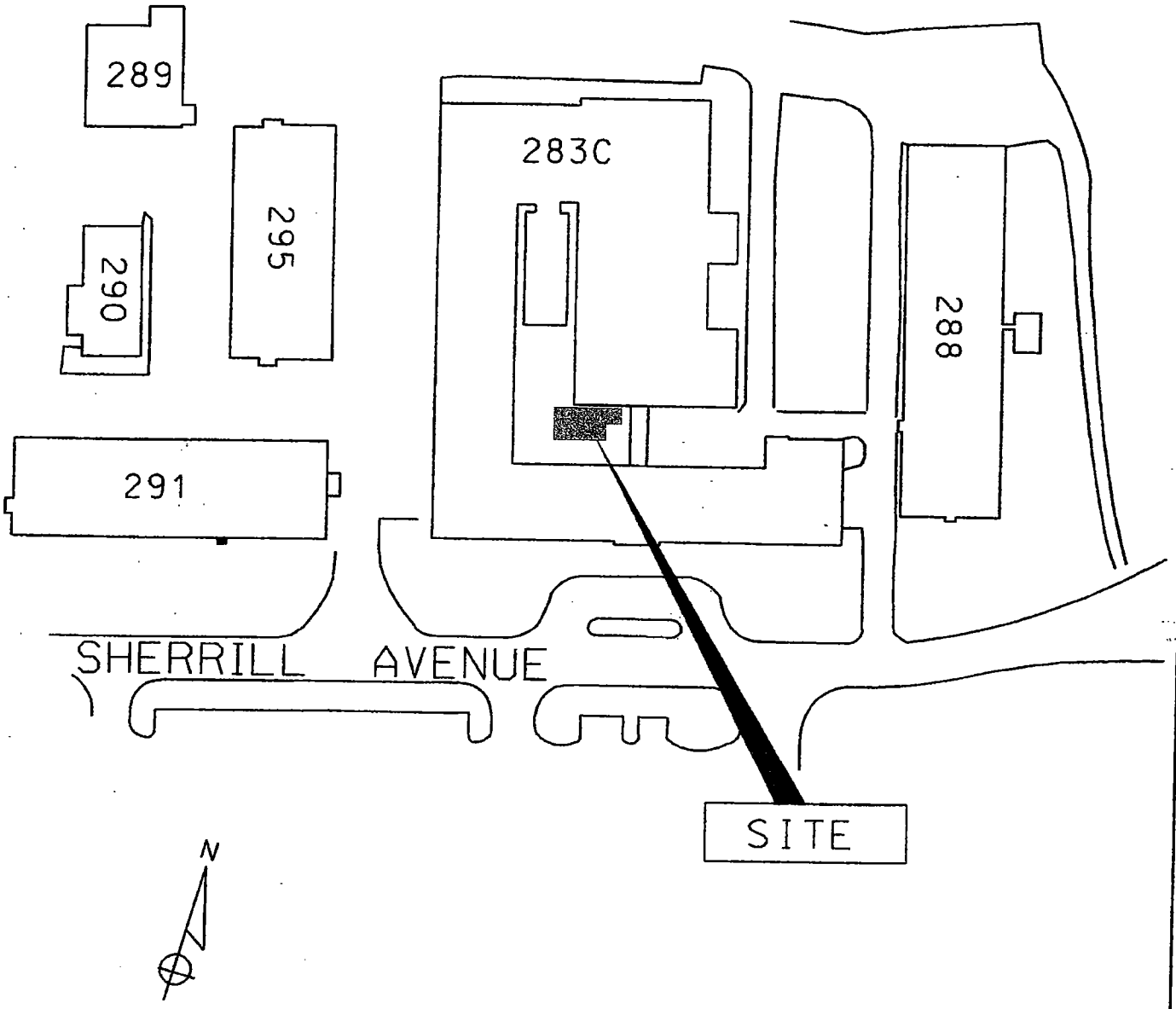


FIGURE 2
SITE MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=100'

DATE: AUGUST 1997

283C FIG2

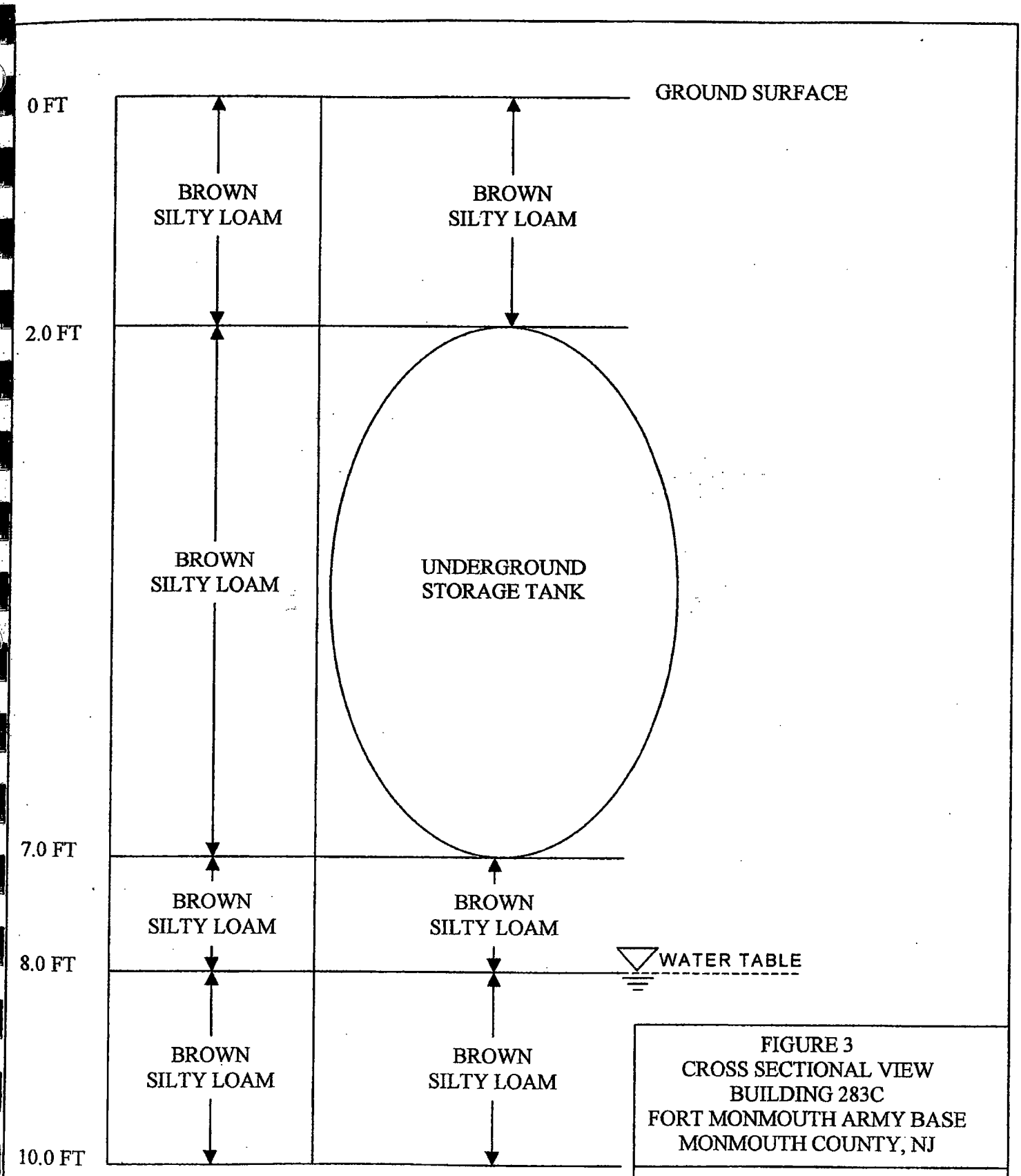
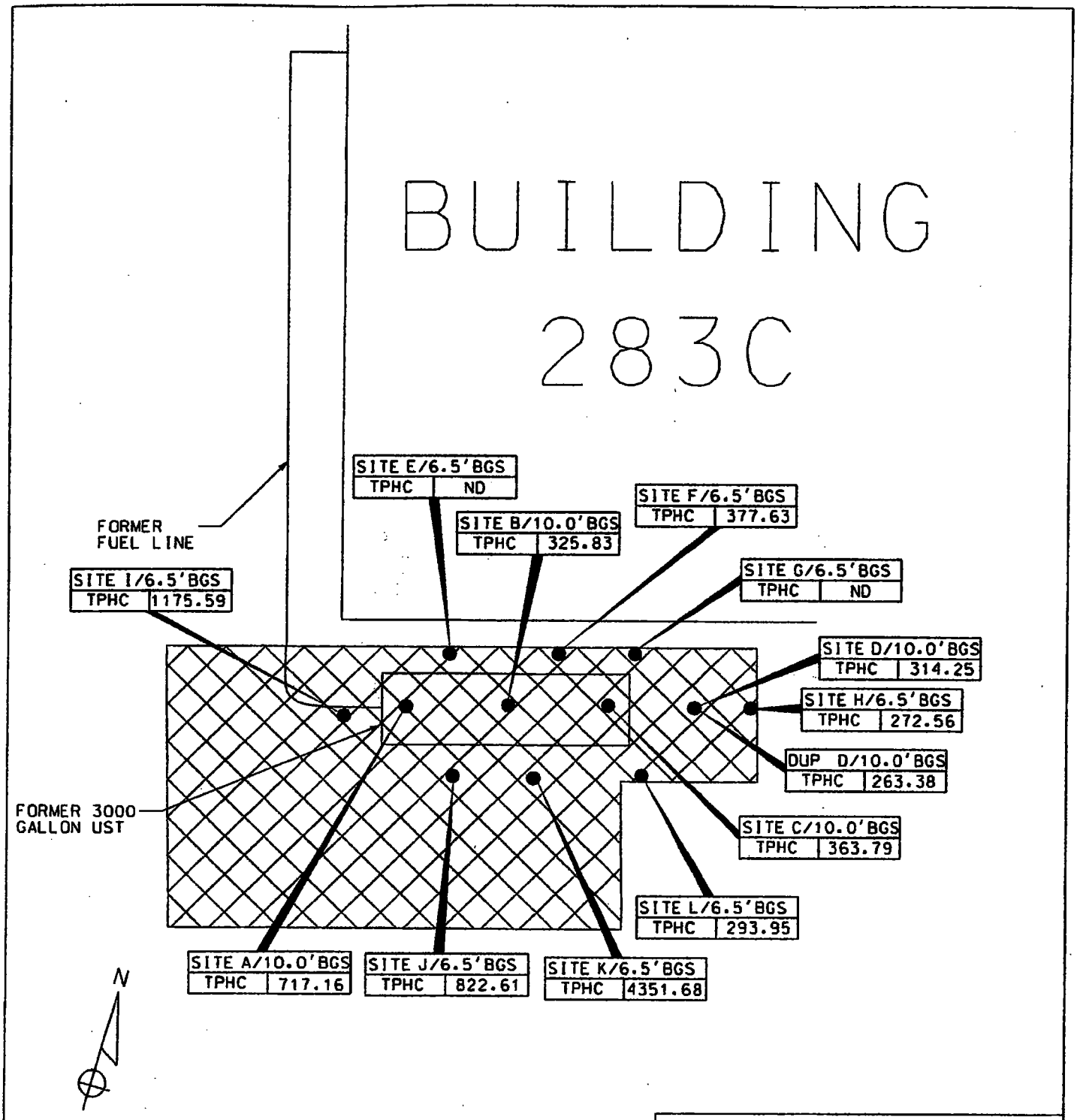


FIGURE 3
CROSS SECTIONAL VIEW
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
Engineers, Managers, Scientists & Planners
Bristol, Pennsylvania

SCALE: NTS | DATE: August 1997



LEGEND

- SOIL SAMPLE LOCATION (SEPTEMBER 3, 1997)
- LIMIT OF EXCAVATION (OCTOBER 3, 1997)

NOTES:

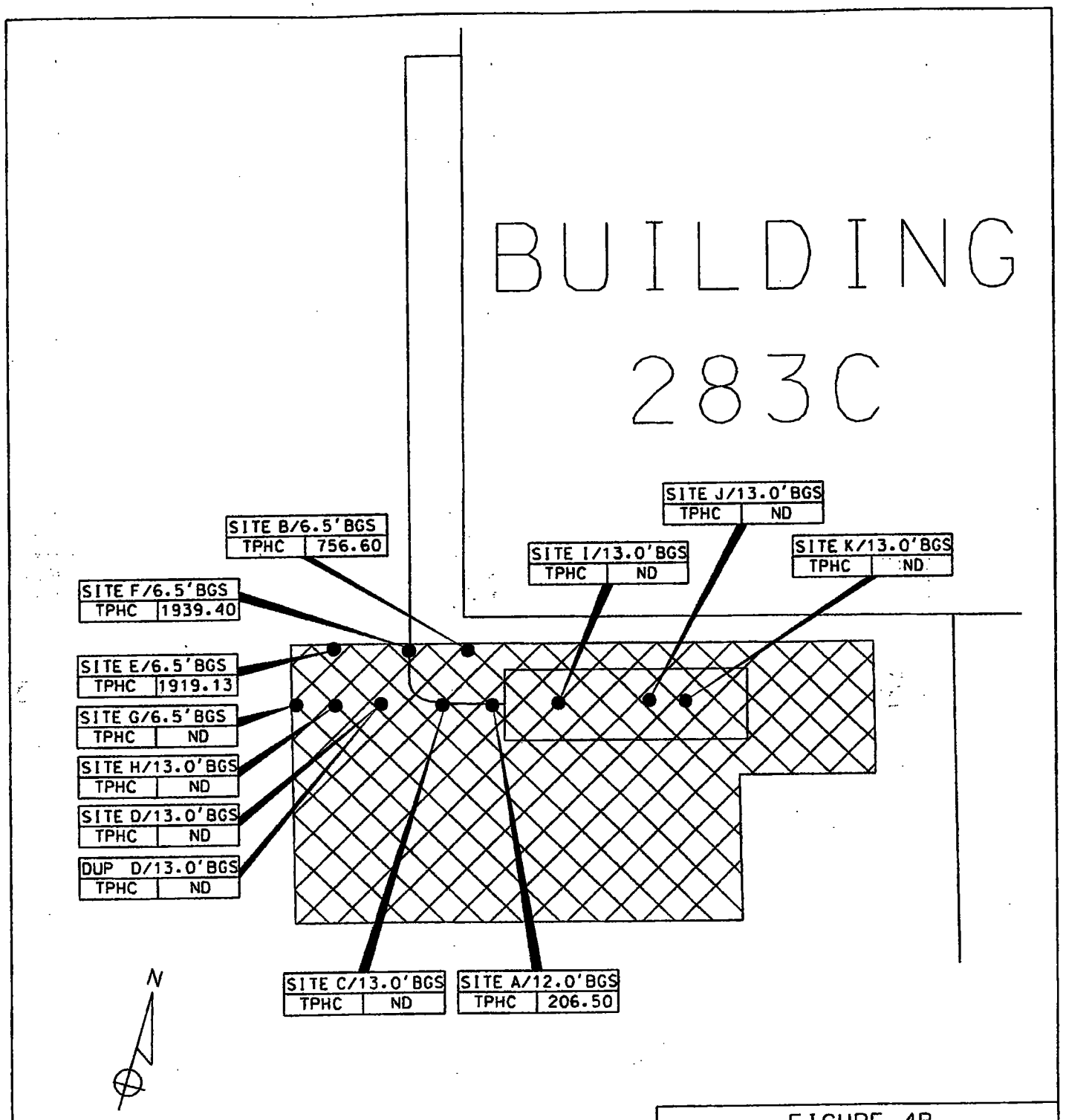
1. ALL RESULTS IN MG/KG.
2. SEE TABLE 2 FOR NJDEP SOIL CLEANUP CRITERIA
3. BGS = BELOW GROUND SURFACE

FIGURE 4A
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10' | DATE: AUGUST 1997

283C FIG4A



LEGEND

- SOIL SAMPLE LOCATION (SEPTEMBER 9, 1997)
- LIMIT OF EXCAVATION (OCTOBER 3, 1997)

NOTES:

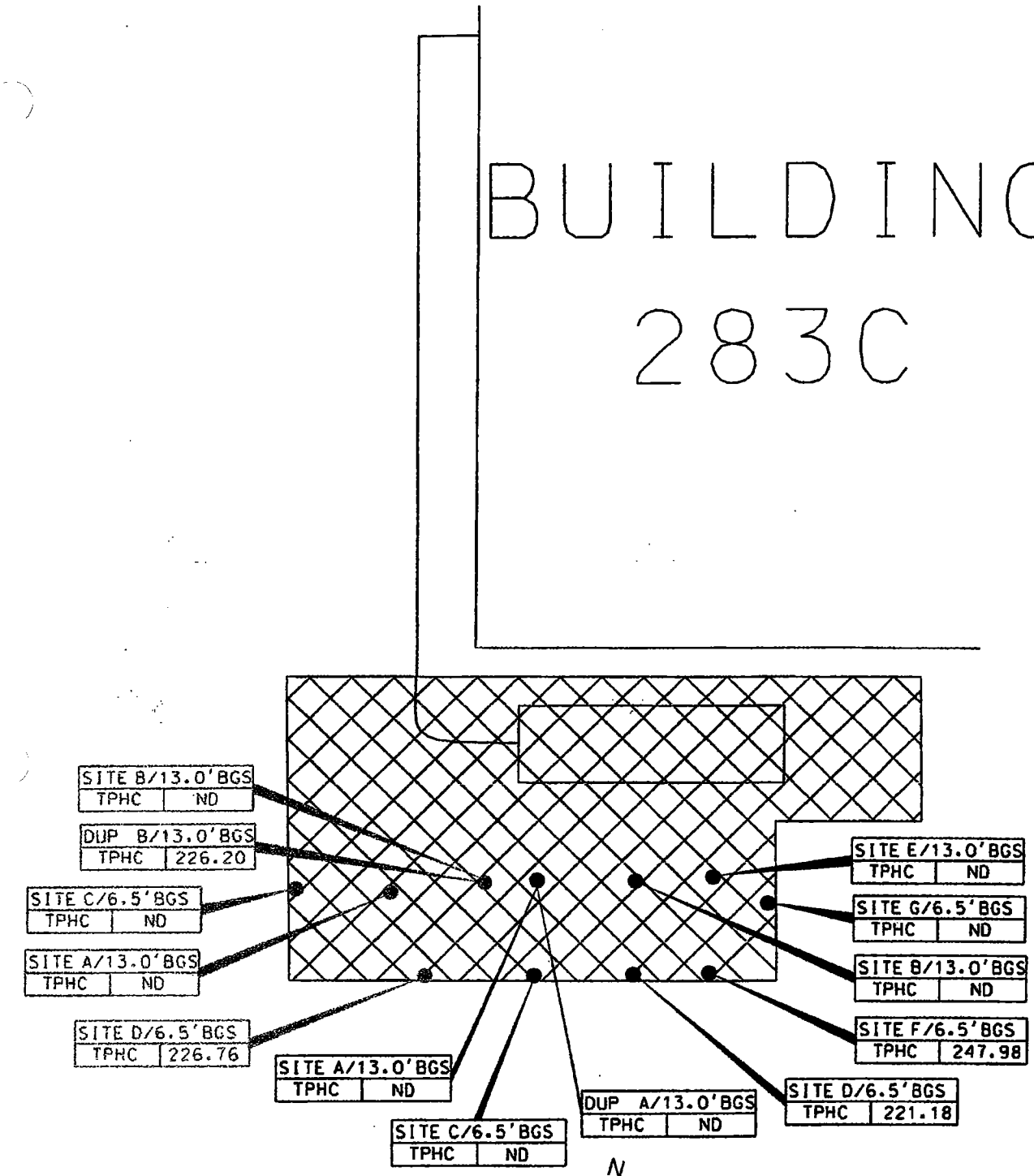
1. ALL RESULTS IN MG/KG.
2. SEE TABLE 2 FOR NJDEP SOIL CLEANUP CRITERIA
3. BGS = BELOW GROUND SURFACE

FIGURE 4B
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10' | DATE: AUGUST 1997

283C FIG4B



LEGEND

- SOIL SAMPLE LOCATION (SEPTEMBER 15, 1997)
- SOIL SAMPLE LOCATION (SEPTEMBER 22, 1997)
- LIMIT OF EXCAVATION (OCTOBER 3, 1997)

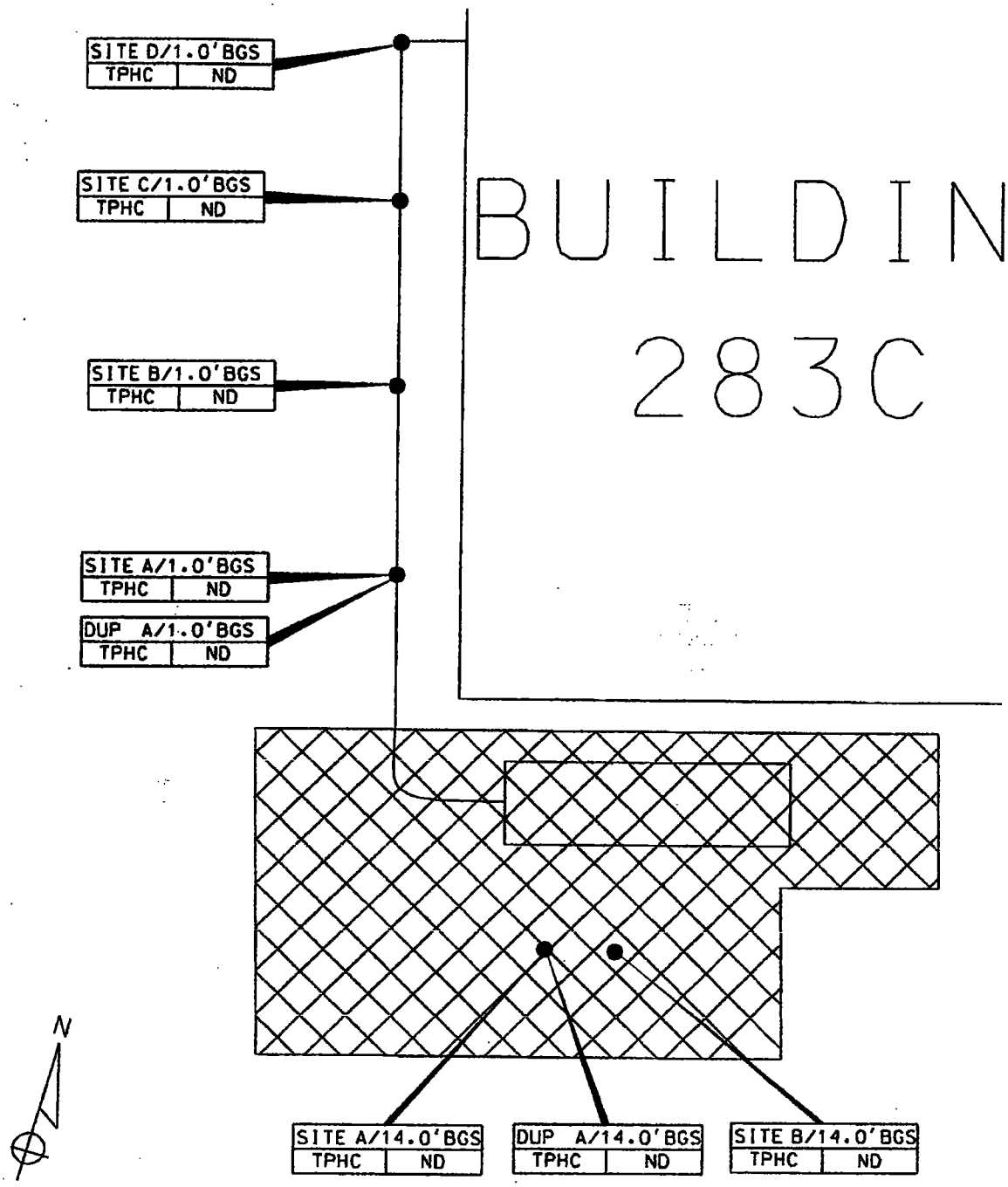
NOTES:

1. ALL RESULTS IN MG/KG.
2. SEE TABLE 2 FOR NJDEP SOIL CLEANUP CRITERIA
3. BGS = BELOW GROUND SURFACE

FIGURE 4C
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10' | DATE: AUGUST 1997



LEGEND

- ● SOIL SAMPLE LOCATION (SEPTEMBER 26, 1997)
- ● SOIL SAMPLE LOCATION (OCTOBER 3, 1997)
- ▨ LIMIT OF EXCAVATION (OCTOBER 3, 1997)

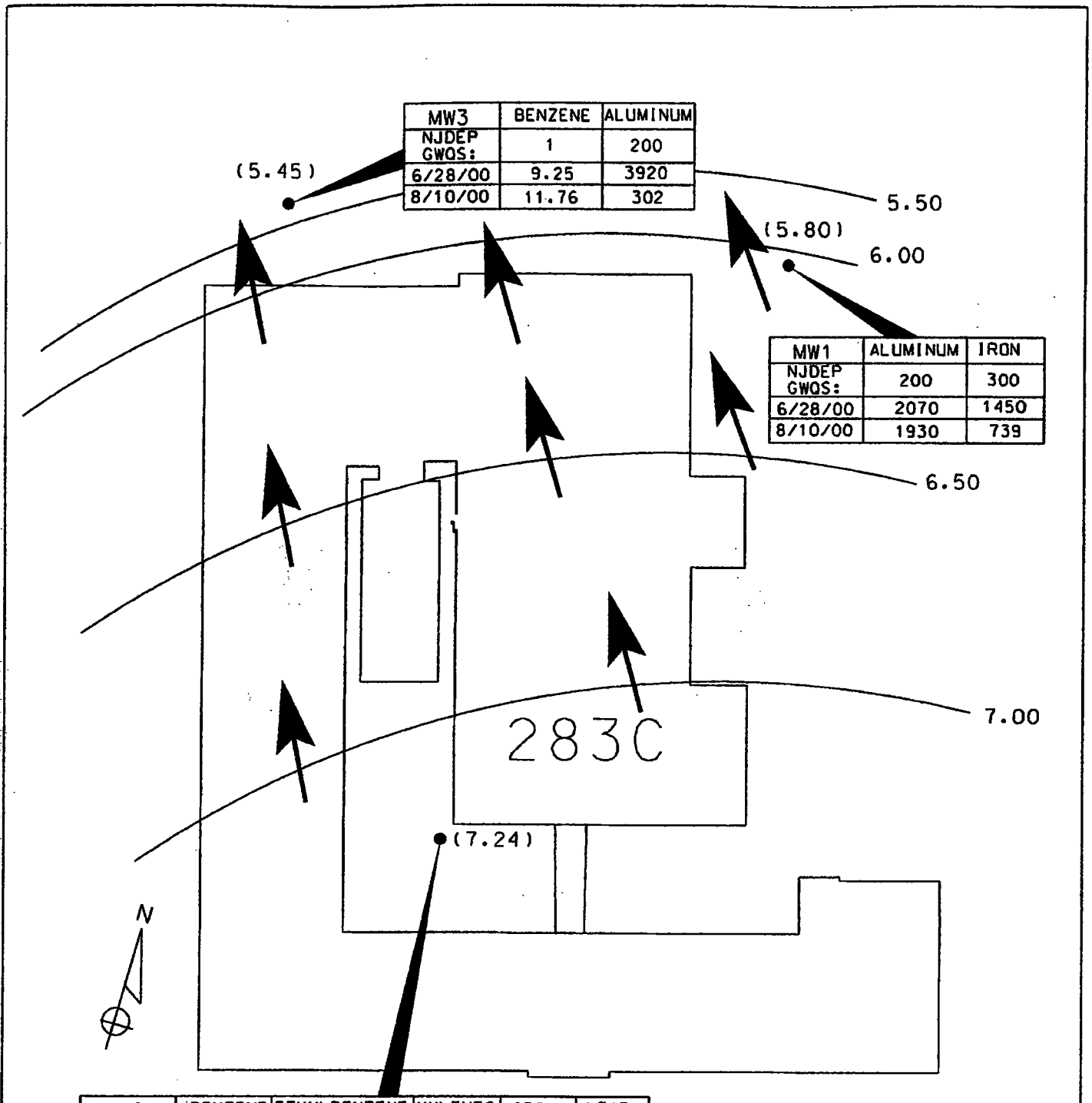
NOTES:

1. ALL RESULTS IN MG/KG.
2. SEE TABLE 2 FOR NJDEP SOIL CLEANUP CRITERIA
3. BGS = BELOW GROUND SURFACE

FIGURE 4D
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10' | DATE: AUGUST 1997



MW3	BENZENE	ALUMINUM
NJDEP GWQS:	1	200
6/28/00	9.25	3920
8/10/00	11.76	302

MW1	ALUMINUM	IRON
NJDEP GWQS:	200	300
6/28/00	2070	1450
8/10/00	1930	739

MW2	BENZENE	ETHYLBENZENE	XYLENES	IRON	LEAD
NJDEP GWQS:	1	700	40	300	10
9/20/99	536.9	797.4	3831.4	2330	22.0
12/27/99	720.56	422.50	2125.86	2060	6.92
3/23/00	827.72	725.71	4295.69	2010	15.3
6/28/00	908.16	1129.23	5960.70	2130	11.5
8/10/00	152.00	717.50	4009.44	2060	31.9

LEGEND

⌒ ESTIMATED GROUNDWATER ELEVATION CONTOUR (FT)

(7.24) GROUNDWATER ELEVATION ON AUGUST 10, 2000

NOTE:

1. ALL RESULTS IN UG/L

FIGURE 5
WELL LOCATION AND GROUNDWATER CONTOUR
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"= 50'

DATE: AUGUST 1997

APPENDIX C

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 D

Boring Logs and Monitoring Well Construction Records

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

LOG OF BORING 283 MW1

U.S. ARMY
SELFM-PW-EV
JOSEPH FALLON
BLDG. 283
GROUNDWATER INVESTIGATION

DRILLING COMPANY : LUTZ ENVIRONMENTAL
DRILLER : TIM WESTOVER
DRILLING METHOD : HOLLOW STEM AUGER
HOLE DIAMETER : 11 INCH
SAMPLING METHOD : 2 IN. SPLIT SPOON

GEOLOGIST : FRANK ACCORSI
DATE COMPLETED : 03/28/00
NJDEP PERMIT NO. : 29 40 367
NJDEP COORD. : 29.14.446

Depth in FEET	Samples	Blow Count	DESCRIPTION	USCS	OVA (PPM)
0	1	9	Topsoil		
1	2	25	FILL-CINDERS, SLAG, COAL fragments (black, brown, red)		0
	3	27			0.7
2	4	18		FILL	0.5
	5	5			0.4
3	6	6			0.4
	7	8	Brown-green/ brown med-fine SAND, and Silty CLAY		
4	8	9		SC	0
	9	3			
5	10	4			0
	11	5	Brown-orange/brown-green/brown Silty CLAY, mottled, little fine SAND, w/alternating layers of Clayey SILT		
6	12	7			0
	13	3			
7	14	2			0
	15	3	Wet @ 8 ft.		
8	16	5			0
	17	7		ML	
9	18	5			0
	19	6			
10	20	8			0
11					
12			Green fine SAND, and Silty CLAY		
13					
14					
15					
16				SC	
17					
18					
19					
20					

Well Construction Information

WELL CASING :
MATERIAL : PVC
DIAMETER : 4 inch
JOINTS : threaded
LENGTH : 5 feet

WELL SCREEN :
MATERIAL : PVC
DIAMETER : 4 inch
JOINTS : threaded
OPENING : 0.010 inch
LENGTH : 15 feet

SAND PACK : Morie #1

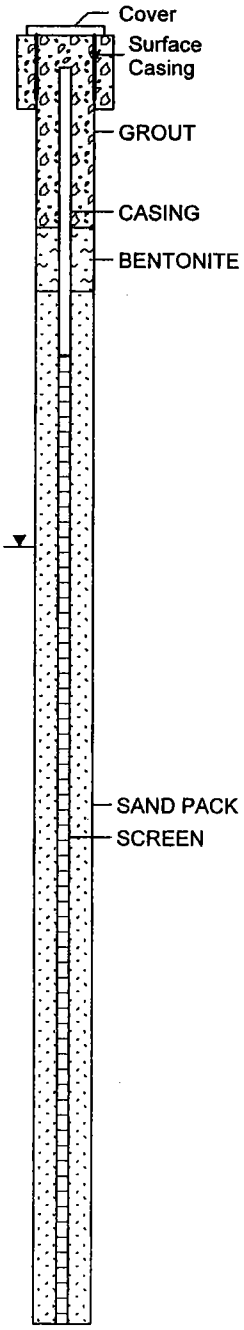
ANNULUS SEAL: bentonite

FLUSH MOUNT :
MATERIAL : steel
DIAMETER : 12 inch

NOTES

Development of the monitoring well was performed using a submersible pump until ground water was visibly free of sediments (approximately one-half hour)

Well: 283 MW1
Elev.:



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U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

LOG OF BORING 283 MW2

U.S. ARMY
SELFM-PW-EV
JOSEPH FALLON
BLDG. 283
GROUNDWATER INVESTIGATION

DRILLING COMPANY : LUTZ ENVIRONMENTAL
DRILLER : TIM WESTOVER
DRILLING METHOD : HOLLOW STEM AUGER
HOLE DIAMETER : 11 INCH
SAMPLING METHOD : 2 IN. SPLIT SPOON

GEOLOGIST : FRANK ACCORSI
DATE COMPLETED : 03/28/00
NJDEP PERMIT NO. : 29 40 367
NJDEP COORD. : 29.14.446

Depth in FEET	Samples	Blow Count	DESCRIPTION	USCS	OVA (PPM)
0	1	9	Topsoil		
1	2	25	FILL-CINDERS, SLAG, COAL fragments (black, brown, red)		0
	3	27			0.7
2	4	18		FILL	0.5
	5	5			0.4
3	6	6			0.4
	7	8	Brown-green/ brown med-fine SAND, and Silty CLAY		
4	8	9		SC	0
	9	3			
5	10	4			0
	11	5	Brown-orange/brown-green/brown Silty CLAY, mottled, little fine SAND, w/alternating layers of Clayey SILT		
6	12	7			0
	13	3			
7	14	2			0
	15	3	Wet @ 8 ft.		
8	16	5			0
	17	7		ML	
9	18	5			0
	19	6			
10	20	8			0
11					
12			Green fine SAND, and Silty CLAY		
13					
14					
15					
16				SC	
17					
18					
19					
20					

Well Construction Information

WELL CASING :
MATERIAL : PVC
DIAMETER : 4 inch
JOINTS : threaded
LENGTH : 5 feet

WELL SCREEN :
MATERIAL : PVC
DIAMETER : 4 inch
JOINTS : threaded
OPENING : 0.010 inch
LENGTH : 15 feet

SAND PACK : Morie #1

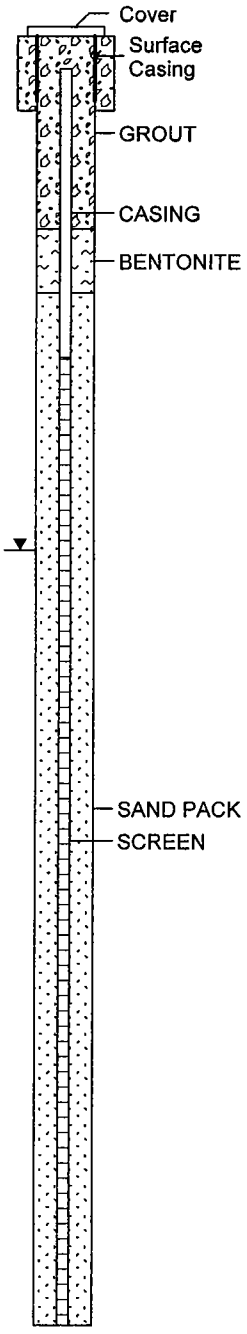
ANNULUS SEAL: bentonite

FLUSH MOUNT :
MATERIAL : steel
DIAMETER : 12 inch

NOTES

Development of the monitoring well was performed using a submersible pump until ground water was visibly free of sediments (approximately one-half hour)

Well: 283 MW1
Elev.:



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U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

LOG OF BORING 283 MW3

U.S. ARMY
SELFM-PW-EV
JOSEPH FALLON
BLDG. 283
GROUNDWATER INVESTIGATION

DRILLING COMPANY : LUTZ ENVIRONMENTAL
DRILLER : TIM WESTOVER
DRILLING METHOD : HOLLOW STEM AUGER
HOLE DIAMETER : 11 INCH
SAMPLING METHOD : 2 IN. SPLIT SPOON

GEOLOGIST : FRANK ACCORSI
DATE COMPLETED : 03/28/00
NJDEP PERMIT NO. : 29 41 650
NJDEP COORD. : 29.14.446

Depth in FEET	Samples	Blow Count	DESCRIPTION	USCS	OVA (PPM)
0	1	-	asphalt		
1	2	-	Brown coarse-med-fine SAND, some medium-fine Gravel	SW	0
	3	4			
2	4	2	Brown medium-fine SAND, little Silt		0
	5	2		SM	
3	6	3			0
	7	4			
4	8	4			0
	9	5	Brown-green brown fine SAND, some Silty CLAY, mottled		
5	10	7			0
	11	10			
6	12	9			0
	13	11			
7	14	12			0
	15	6			
8	16	6			0
	17	11			
9	18	12		SM	0
	19	13			
10	20	12	Wet @ 10 ft.		0
	21	8			
11	22	8			0
12					
13					
14			Green Silty CLAY, some black fine Sand		
15					
16					
17					
18					
19				CL	
20					
21					
22					
23					
24					
25					

Well Construction Information

WELL CASING :
MATERIAL : PVC
DIAMETER : 4 inch
JOINTS : threaded
LENGTH : 5 feet

WELL SCREEN :
MATERIAL : PVC
DIAMETER : 4 inch
JOINTS : threaded
OPENING : 0.010 inch
LENGTH : 20 feet

SAND PACK : Morie #1

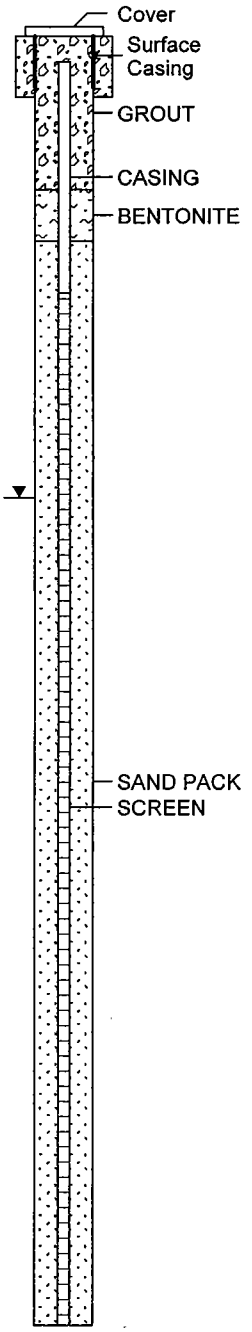
ANNULUS SEAL: bentonite

FLUSH MOUNT :
MATERIAL : steel
DIAMETER : 12 inch

NOTES

Development of the monitoring well was performed using a submersible pump until ground water was visibly free of sediments (approximately one-half hour)

Well: 283 MW3
Elev.:



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DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40887

Atlas Sheet Coordinates 29 : 14 446

NER 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 7/28/99

DATE WELL COMPLETED 7/28/99

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) Tecon - 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 1/2 hours at 10 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	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

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. U2420 Date 7/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 Clayey silt Fine sand

5-20 Silty clay Fine sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

SERIAL # 003342

U.W.R. 13JM (10/96)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Mail to:
NJDEP
Bureau Water Allocation
P.O. Box 426
Trenton, NJ 08625-0426

MONITORING WELL PERMIT

Permit No. 294036

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COORD # 29 14 46

Owner U.S. ARMY

Address FT. MONMOUTH N.J. 07703

Name of Facility AS ABOVE

Address BLDG. 283
WILSON AVE.

Driller LUT ENVIRONMENTAL CO.

Address 2020 ORMOND ST, P.O. BOX 2
L.WOOD N.J. 07026

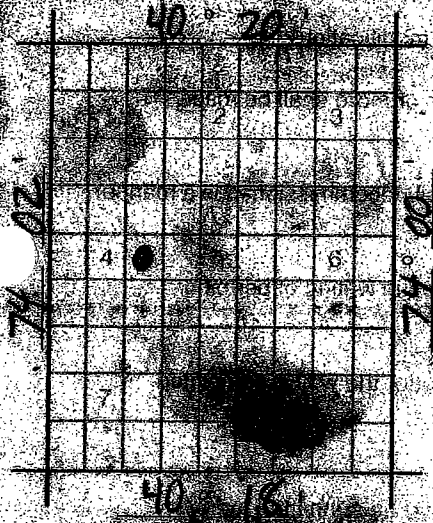
Diameter of Well(s) 4 inches	Proposed Depth of Well(s) 25 ft.
# of Wells Applied for (max. 10) 1	Will pumping equipment be installed? YES ☐ NO ☑
Type of Well (see reverse) MONITOR	If Yes, give pump capacity N/A cumulative GPM

LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
N/A	N/A	OCEANPORT	MONMOUTH

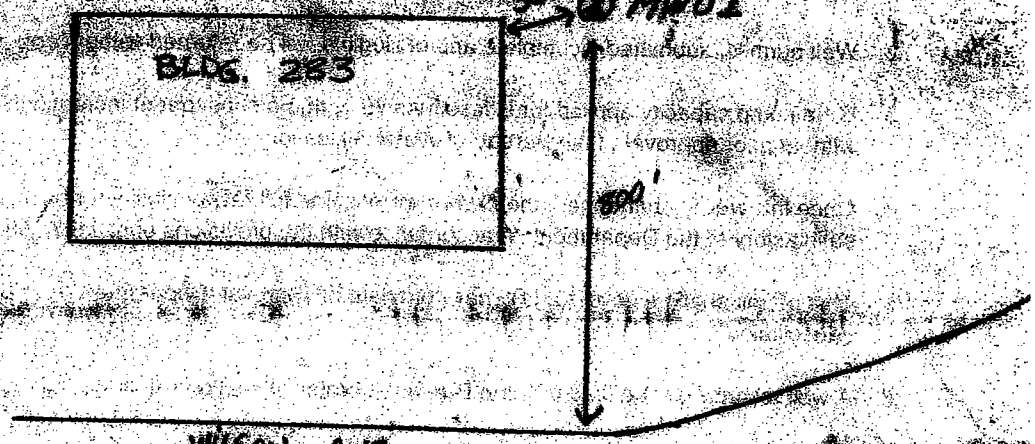
State Atlas Map No. 29

40° 20'



40° 16'

Draw sketch of well(s) nearest roads, buildings, etc. with marked distances to feet. Each well MUST be labeled with a name and/or number on the sketch.



FOR MONITORING WELLS, OBSERVATION 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
97-08-08-1330-33

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
APR 21 1999
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 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 3/30/99 Signature of Driller [signature] Registration No. J1598

Signature of Owner [signature] Charles Hopkins DAV-86

COPIES: Water Allocation — White Health Dept. — Yellow Owner — Blue Driller — White

SERIAL # 003345

DWR-133M (10/96)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Permit No. 294088

Mail to
NJDEP
Bureau Water Allocation
PO Box 426
Trenton, NJ 08625-0426

MONITORING WELL PERMIT

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COGRID # 29-19-446

Owner U.S. Army
Address Ft. Monmouth, N.J. 07703

Driller INLAND REMEDIATION SERVICES, INC.
Address 935-939 FARMOUNT AVENUE ELIZABETH, NJ 07201

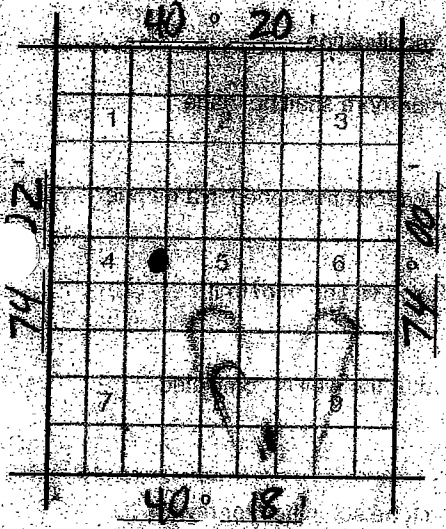
Name of Facility AS ABOVE
Address BLDG 283
Wilson Ave.

Diameter of Well(s)	4 inches	Proposed Depth of Well(s)	20
Well Yield Applied for (max. 10)	1	Will pumping equipment be installed? YES ☐ NO ☒	
Type of Well (see reverse)	Monitor	If Yes, give pump capacity	N/A gpm/hr

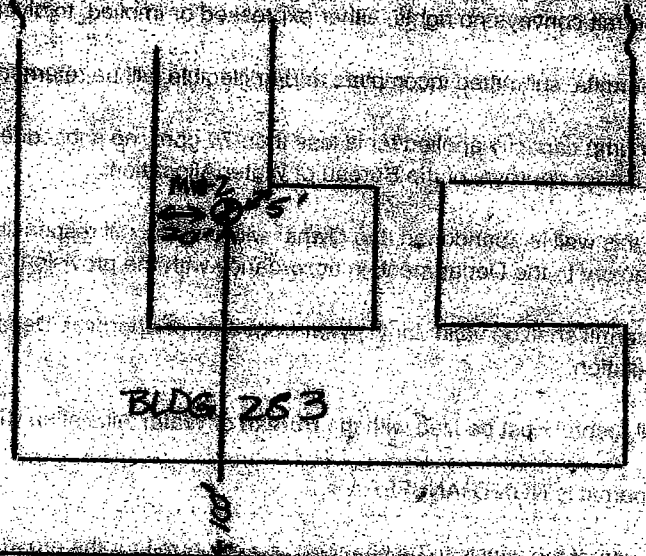
LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
N/A	N/A	OCEANPORT	MONMOUTH

State Atlas Map No. 29



Draw sketch of well(s) nearest roads, buildings, etc., and mark distances in feet. Each grid square is 50' (please label 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
97-08-28-1330-33

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
JUL 6 1999
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 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 6-29-99

Signature of Driller [signature] Registration No. 523420

Signature of Owner [signature] Charles Apsley DPW-Ed

COPIES: Water Allocation — White

SERIAL # 003337

GWR-1spM (10/96)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Mail to
NJDEP
Bureau Water Allocation
PO Box 426
Trenton, NJ 08625-0426

MONITORING WELL PERMIT

Permit No. 29 41651

WELLS ONLY AFTER APPROVAL BY THE D.E.P.

COGRID # 29 14.446

Owner U.S. ARMY/Ft. Monmouth

Address C/o 173 Riverside Ave.
Ft. Monmouth, N.J. 07703

Name of Facility Bldg. 283

Address Ft. Monmouth N.J. 07703

Driller LUTZ ENVIRONMENTAL CO INC.

Address 2020 CLINTON ST., P.O. BOX 1347,
LINDEN, NJ 07036

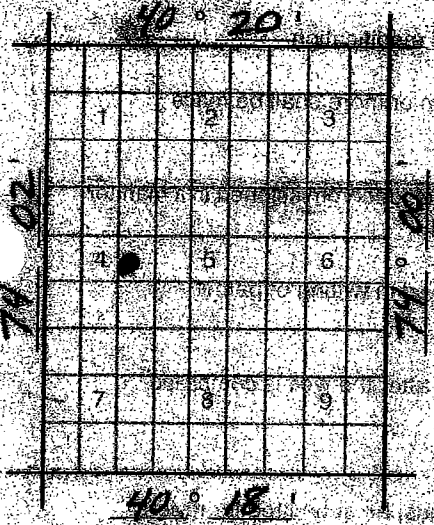
Diameter of Well(s)	4	Proposed depth(s) of Well(s)	20
# of Wells Applied for (max 10)	1	Will pumping equipment be installed?	YES ☐ NO ☐
Type of Well (see reverse)	MONITOR	If Yes, give pump capacity	N/A gal/min cumulative G

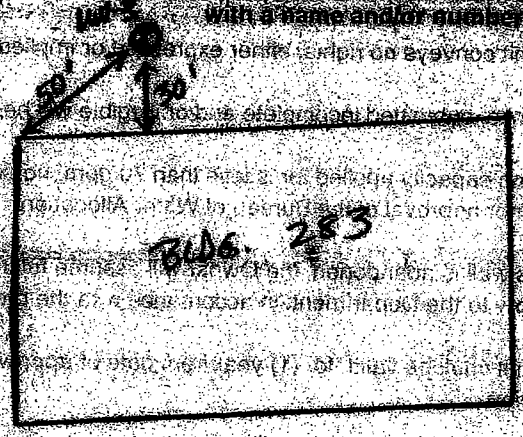
LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
N/A	N/A	Eatontown	Monmouth

State Atlas Map No. 29

Draw sketch of well(s) nearest roads, buildings, etc. with marked distances in three directions. Indicate N-S orientation 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) MWER VERIFICATION

CASE I.D. Number 97-08-28-1330-33

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
OCT 22 1999
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 one 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 10-19-99 Signature of Driller [signature] Registration No. J1598

Signature of Owner [signature] SRCm-10-8V

COPIES: Water Allocation — White Health Dept. — Yellow Owner — Blue Driller — White

SERIAL # 003342

DWR-143M (10/96)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Mail to:
NJDEP
Bureau Water Allocation
426
nton, NJ 08625-0426

MONITORING WELL PERMIT

VALID ONLY AFTER APPROVAL BY THE D.E.P.

Permit No. 294036 / 36

COGRD # 2914446

Owner U.S. ARMY

Address FT. MONMOUTH N.J. 07703

Driller LITE ENVIRONMENTAL CO.

Address 2020 CHAIN ST, P.O. BOX 127
LINDEN NJ 07026

Name of Facility AS ABOVE

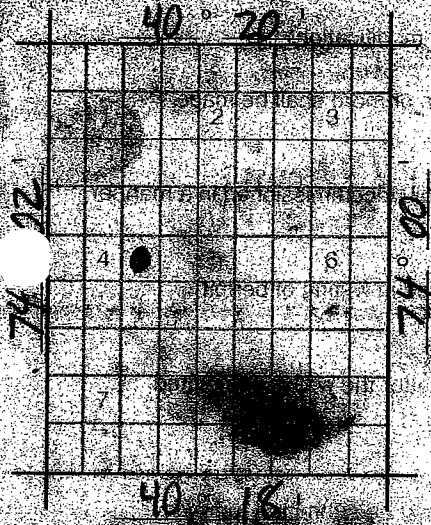
Address BLDG. 283
WILSON AVE.

Diameter of Well(s)	4 inches	Proposed Depth of Well(s)	25 Feet
# of Wells Applied for (max. 10)	1	Will pumping equipment be installed? YES ☐ NO ☑	
Type of Well (see reverse)	MONITOR	If Yes, give pump capacity N/A	cumulative GPM

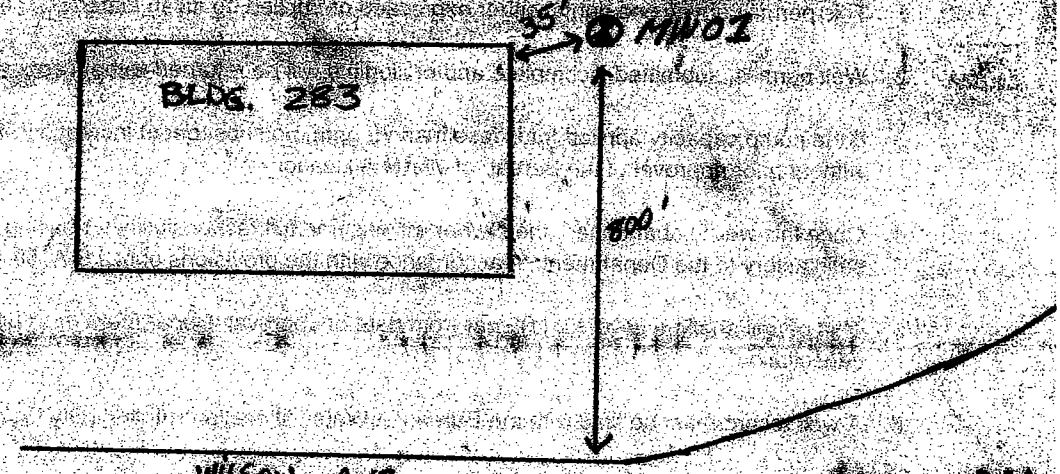
LOCATION OF WELL(S)

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 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:

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- ☐ 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
97-08-28-1330-33

This Space for Approval Stamp

WELL PERMIT APPROVED
N J D E P
APR 21 1999
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 25 feet of total screen or uncased borehole.

SEE 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 3/30/99

Signature of Driller [signature] Registration No. J1598

Signature of Owner [signature] Charles Appleby DPW-EO

COPIES: Water Allocation — White Health Dept. — Yellow Owner — Blue Driller — White

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. 39-40367

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

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 A.M. CASING CEMENT BENT. #1 WELL GRAVEL 23', .010 SLOT SCREEN #1 WELL GRAVEL Set well @ 25'	0"-1' → ASPHALT + ROAD STONE 1'-8' → ORANGE BROWN GRAVELS SANDS WITH CLAYS AND SILTS. 8'-25' → OLIVE GREEN CLAYS 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): 29-40367
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74° 02' 43.2"
Latitude (one tenth of a second): North 40° 18' 59.3"
Elevation of Top of Casing (cap off) 11.34
Distance from Top of Casing (cap off) to ground 0.21
Owner's Well Number (As shown in the application or Plans): BLDG 283 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.

SERIAL # 003345

DWR-133M (10/96)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Mail to
NJDEP
Bureau Water Allocation
426
enton, NJ 08625-0426

MONITORING WELL PERMIT

Permit No. 2940887

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COORD #: 29 . 14.446

Owner U.S. Army
Address Ft. Monmouth, N.J. 07703

Driller INLAND POLLUTION SERVICES, INC.
Address 935-939 FAIRMOUNT AVENUE ELIZABETH, NJ 07201

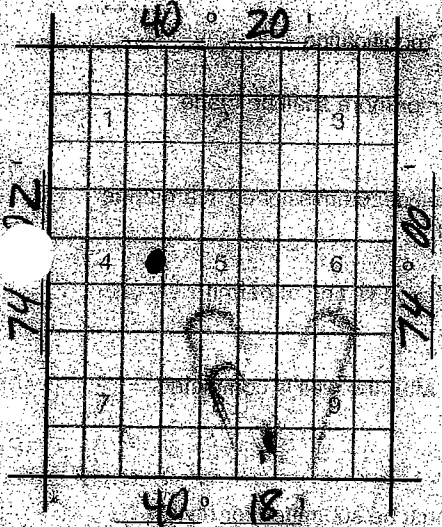
Name of Facility AS ABOVE
Address BLDG 283
WILSON Ave.

Diameter of Well(s) 4 inches	Proposed Depth of Well(s) 20 Feet
# of Wells Applied for (max. 10) 1	Will pumping equipment be installed? YES ☐ NO ☑
Type of Well (See reverse) Monitor	If Yes, give pump capacity N/A cumulative GPM

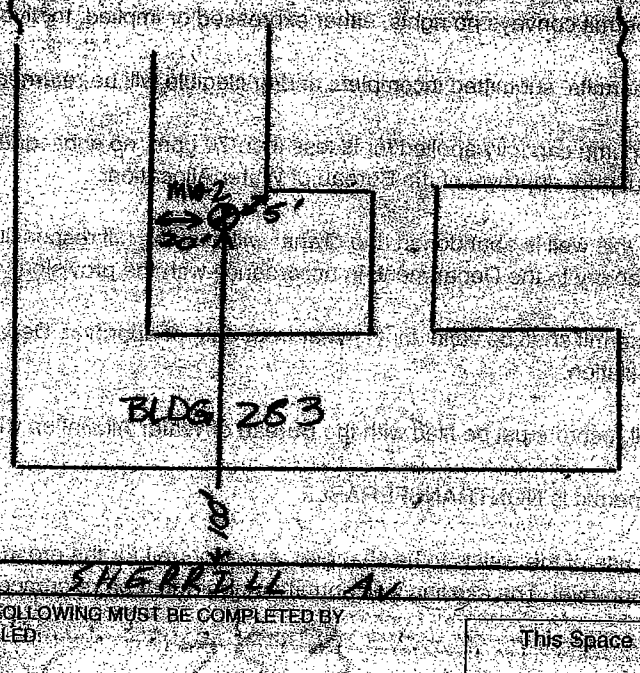
LOCATION OF WELL(S)

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 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 Groundwater Permit Site
- ☐ Pretreatment and Residuals Site
- ☑ Water and Hazardous Waste Enforcement Case
- ☐ Water Supply Aquifer Test Observation Well
- ☐ Other (explain)

CASE I.D. Number
97-08-28-1330-33

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
JUL 6 1999
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 25 feet of total screen or uncased borehole.
- ☐

SEE 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 6-29-99 Signature of Driller [signature] Registration No. C2420

Signature of Owner [signature] Charles Apsley DPW-EO

COPIES: Water Allocation — White Health Dept. — Yellow Owner — Blue Driller — White

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): 27-40887
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74°02'44.2"
Latitude (one tenth of a second): North 40°18'57.1"
Elevation of Top of Casing (cap off) 13.52
Distance from Top of Casing (cap off) to ground 0.48
Owner's Well Number (As shown in the application or Plans): BLDG 283 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.

Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name

SEAL

N.J. Lic. # 34008
Professional Land Surveyor's License #

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SERIAL # 003337

NWR-138M (10/96)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Mail to
NJDEP
Bureau Water Allocation
426
enton, NJ 08625-0426

MONITORING WELL PERMIT

Permit No. 29 41650

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COORD # 29 14 .446

Owner U.S. ARMY/FT. MONMOUTH

Address C/O 173 RIVERSIDE AVE.
FT. MONMOUTH, N.J. 07703

Name of Facility BLDG. 283

Address FT. MONMOUTH N.J. 07703

Driller LUTZ ENVIRONMENTAL CO INC.

Address 2020 CLINTON ST., P.O. BOX 1247
LINDEN, NJ 07036

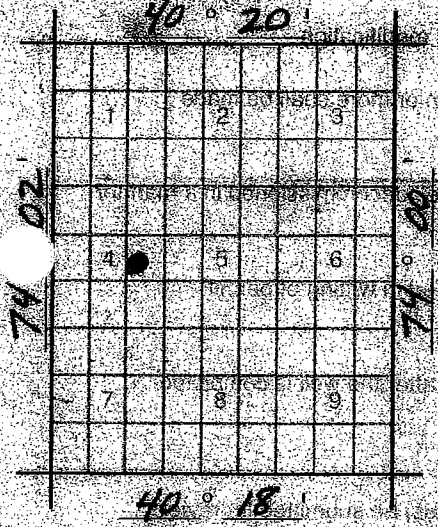
Diameter of Well(s)	4 inches	Proposed Depth of Well(s)	20 Feet
# of Wells for which Applied for (max. 10)	1	Will pumping equipment be installed? YES ☐ NO ☑	
Type of Well (see reverse)	MONITOR	If Yes, give pump capacity	N/A cumulative GPM

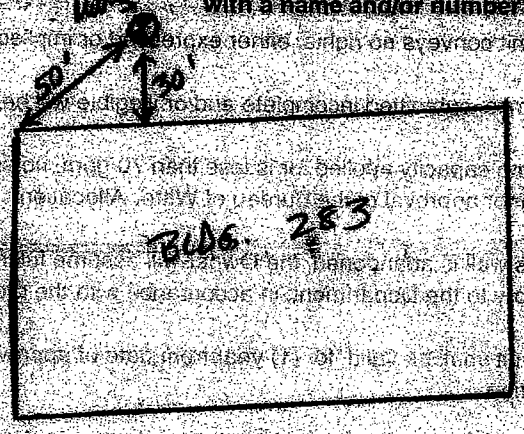
LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
N/A	N/A	EATONTOWN	MONMOUTH

State Atlas Map No. 29

Draw sketch of well(s) nearest roads, buildings, etc. with mark of distances in feet. Each well shall 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 97-08-28-1330-33

AREA OF CONCERN

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
OCT 22 1999
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 10 feet of 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 10-19-99 Signature of Driller [signature] Registration No. J1598

Signature of Owner [signature] SELF 10-19-99

COPIES: Water Allocation — White Health Dept. — Yellow Owner — Blue Driller — White

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 A. 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 INTERVAL RECORDED BY DRILLER ↓	11" STEEL MANHOLE WITH 2'x2' CONCRETE PAD. CEMENT BENT. 5' SOLID F.M. CASING 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. SET WELL @ 20'

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): 29-41650
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74°02'45.9"
Latitude (one tenth of a second): North 40°18'58.9"
Elevation of Top of Casing (cap off) 11.86
Distance from Top of Casing (cap off) to ground 0.56
Owner's Well Number (As shown in the application or Plans): BLDG 293 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.

APPENDIX E

Laboratory Data Sheets for Monitoring Well Samples

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 : UST/Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
4798.01	0283MW02	29-40887	09/20/99

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: C. Appleby
Phone #: X26234
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 Well (New well) 3rd Qtr '99

Samplers Name / Company: Corey McCormack, TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VO+15	TAL+MTLS	BNA+25	Pest/PCB				HNU Read	Comments: HCl/HNO_3/4°C Remarks / Preservation Method
4798.01	0283 MW02	9/20/99	1559	AQ	5	✓	✓	✓	✓				0.0	29-40887
														Rush: VO+15 and Pb.
														1st Time Sampled. Joins Qrtly Sampling System. COM

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	9/20/99 1615				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, ( )Standard, ( )Screen / non-certified VO + 15 and Pb Rush 4 Days
Turnaround time: ( )Standard 4 wks, (X)Rush 4 Days, ( )ASAP Verbal ___ Hrs.

Remarks: Trip/FB/Rinse shed from MTB since Late. COM
Tidal Low

Rest Std. RecCA COM

Corydoc8/13/99

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 09/20/99
WEATHER: Sunny, Warm.
TIDE: Low

ELEV. OF CASING SURVEY MARK: Not Available. ft
DEPTH TO WATER: 7.20 ft
DEPTH OF WELL: 18.69 ft
HEIGHT OF WATER: 12.49 ft
(12.49) X .65 X 3 = 24.35
GALLONS OF H2O TO BE PURGED: 24 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: 14:15
pH 7.65 su
DISSOLVED O_2 7.62 PPM
TEMP 12.4 °C
SPECIFIC CONDUCTIVITY 80 us/cm

PURGE END TIME: 15:59
pH 7.65 su
DISSOLVED O_2 5.41 PPM
TEMP 12.4 °C
SPECIFIC CONDUCTIVITY 83 us/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.60 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 24 gal

pH 7.66 su
DISSOLVED O_2 5.37 PPM
TEMP 12.4 °C
SPECIFIC CONDUCTIVITY 82 us/cm

COMMENTS: No Phases, 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	**VC000827.D**	Sample Name	**Vblk28**
Operator	**Skelton**	Field ID	**Vblk28**
Date Acquired	**20 Sep 1999 10:22 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	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: **Vblk28**

Lab Name: FMETL NJDEP#: 13461

Project: NewWells Case No.: 4798 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: Vblk28

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000827.D

Level: (low/med) LOW Date Received: 9/20/99

% Moisture: not dec. _____ Date Analyzed: 9/20/99

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 **VC000853.D**
Operator **Skelton**
Date Acquired **21 Sep 1999 6:37 pm**

Sample Name **Vblk29**
Field ID **Vblk29**
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	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: **Vblk29**

Lab Name: FMETL NJDEP#: 13461

Project: NewWells Case No.: 4798 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: Vblk29

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000853.D

Level: (low/med) LOW Date Received: 9/20/99

% Moisture: not dec. _____ Date Analyzed: 9/21/99

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	VC000847.D	Sample Name	4798.01
Operator	Skelton	Field ID	0283MW02
Date Acquired	21 Sep 1999 8:36 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	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	4.91	707720	15.51 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			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	18.65	53035163	217.14 ug/L	1	0.23 ug/L	B
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	23.67	49105828	188.56 ug/L	1000	0.37 ug/L	E
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	27.51	48707530	170.08 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.64	50974062	450.01 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.81	49348567	229.77 ug/L	nle	0.62 ug/L	E
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

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File **VC000865.D**
Operator **Skelton**
Date Acquired **22 Sep 1999 2:52 am**

Sample Name **4798.01**
Field ID **0283MW02**
Sample Multiplie **20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.61	5698220	536.85 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.63	6772747	598.45 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.47	9853358	797.40 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.67	11725494	2399.00 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.76	13274054	1432.36 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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: **0283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: NewWells Case No.: 4798 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 4798.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC000847.D

Level: (low/med) LOW Date Received: 9/20/99

% Moisture: not dec. _____ Date Analyzed: 9/21/99

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: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.35	1200	J
2.	unknown	7.18	1100	J
3. 000627-20-3	2-Pentene, (Z)-	7.83	540	JN
4. 000107-83-5	Pentane, 2-methyl-	10.54	520	JN
5. 000142-29-0	Cyclopentene	11.17	410	JN
6. 000598-61-8	Cyclobutane, methyl-	11.50	930	JN
7.	unknown	15.21	1300	J
8. 000110-82-7	Cyclohexane	17.47	1300	JN
9. 000620-14-4	Benzene, 1-ethyl-3-methyl-	30.85	600	JN
10.	unknown	31.93	500	J

Semi-Volatiles

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN03883.D**	Sample Name	**Sblk304**
Operator	**Bhaskar**	Misc Info	**Sblk304 A 990922**
Date Acquired	**24-Sep-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	
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	0.79	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	**BN03883.D**	Sample Name	**Sblk304**
Operator	**Bhaskar**	Misc Info	**Sblk304 A 990922**
Date Acquired	**24-Sep-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: **Sblk304**

Lab Name: FMETL Lab Code 13461

Project: New Well Case No.: 4798 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: Sblk304

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03883.D

Level: (low/med) LOW Date Received: 9/20/99

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/24/99

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	**BN03894.D**	Sample Name	**4798.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**25-Sep-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	
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	10.06	70926	3.88 ug/L	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	10.66	5726353	119.16 ug/L	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	12.23	742209	25.25 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	**BN03894.D**	Sample Name	**4798.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**25-Sep-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: **0283MW02**

Lab Name: FMETL Lab Code 13461

Project: New Well Case No.: 4798 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 4798.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN03894.D

Level: (low/med) LOW Date Received: 9/20/99

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/25/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	3.64	23	J
2.	unknown	3.71	84	J
3. 001462-03-9	Cyclopentanol, 1-methyl-	4.25	210	JN
4.	unknown	4.91	140	J
5.	unknown	5.05	420	J
6. 061142-07-2	Cyclopentene, 1-ethenyl-3-methy	5.52	810	JN
7. 000098-82-8	Benzene, (1-methylethyl)-	6.41	32	JN
8.	unknown	6.51	82	J
9.	unknown	6.68	76	J
10. 000103-65-1	Benzene, propyl-	6.90	27	JN
11. 000611-14-3	Benzene, 1-ethyl-2-methyl-	7.05	230	JN
12. 000108-67-8	Benzene, 1,3,5-trimethyl-	7.16	170	JN
13. 000611-14-3	Benzene, 1-ethyl-2-methyl-	7.36	98	JN
14. 000526-73-8	Benzene, 1,2,3-trimethyl-	7.60	300	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	8.07	160	JN
16.	unknown	8.15	24	J
17. 000496-11-7	Indane	8.29	120	JN
18. 001074-43-7	Benzene, 1-methyl-3-propyl-	8.51	30	JN
19.	unknown	8.58	22	J
20. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	8.63	49	JN
21. 000099-87-6	Benzene, 1-methyl-4-(1-methylel	8.96	44	JN
22. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	9.62	33	JN
23. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	9.92	41	JN

Pesticide/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK409
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	9/21/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/21/99
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 # :**	4798.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/20/99
	Bldg. 173	**Extraction Date:**	9/21/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/21/99
Analysis:	EPA Method 608	**Location :**	283 Well
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0283MW02
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 #: 4798
Sample Prepared: 10/07/99

Site: 283 Well

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	09/28/99	129	NLE	20.0
Manganese	10/07/99	ND	50	0.5
Mercury	10/07/99	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 #: 4798.01
Sample Received: 09/20/99
Sample Matrix: Aqueous

Site: 283 Well

Field ID#:0283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/07/99	309	200	10.0
Antimony	10/07/99	ND	20	2.0
Arsenic	10/07/99	4.74	8	2.0
Barium	10/07/99	39.9	2000	0.5
Beryllium	10/07/99	ND	20	0.5
Cadmium	10/07/99	1.05	4	0.5
Calcium	10/07/99	3500	NLE	20.0
Chromium	10/07/99	5.05	100	0.5
Cobalt	10/07/99	0.908	NLE	0.5
Copper	10/07/99	41.2	1000	3.0
Iron	10/07/99	2330	300	10.0
Lead	10/07/99	22.0	10	2.0
Magnesium	09/28/99	799	NLE	20.0
Manganese	10/07/99	14.5	50	0.5
Mercury	10/07/99	ND	2	0.1
Nickel	10/07/99	4.11	100	0.5
Potassium	10/07/99	1930	NLE	20.0
Selenium	10/07/99	6.49	50	3.0
Silver	10/07/99	ND	20	3.0
Sodium	10/07/99	12100	50000	20.0
Thallium	10/07/99	8.76	10	3.0
Vanadium	10/07/99	1.73	NLE	1.0
Zinc	10/07/99	21.9	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	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	2,4-Di methyl phenol	Naphtha lene	2-Methyl naphtha lene	Aluminum	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	30	1	1000	700	NLE	100	NLE	NLE	200	-
09/20/99	FMETL	15.51	536.9	598.4	797.4	3831.4	3.88	119.2	25.25	309	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 09/20/99

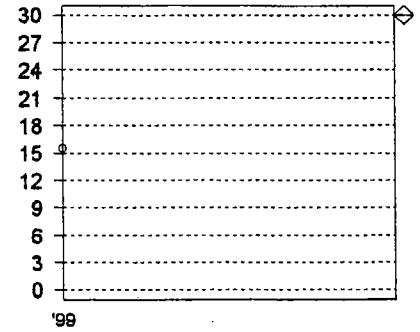
NOTES:

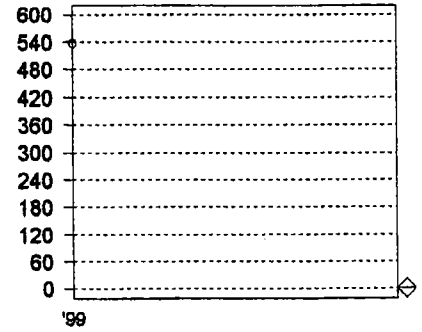
FORT MONMOUTH

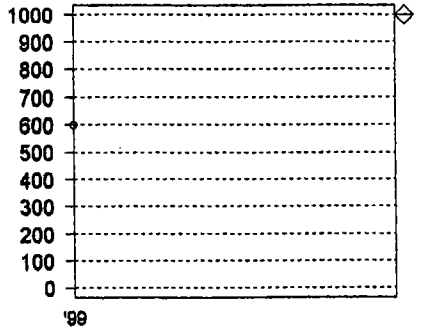
GW MONITORING
BLDG. 283

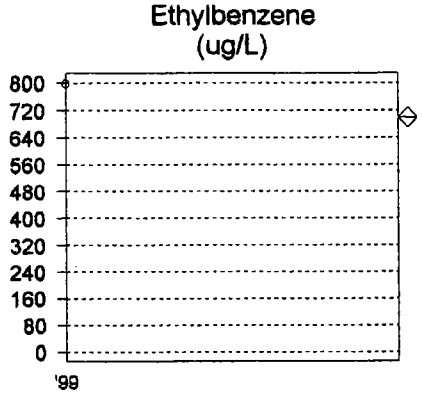
Well 1 of 1

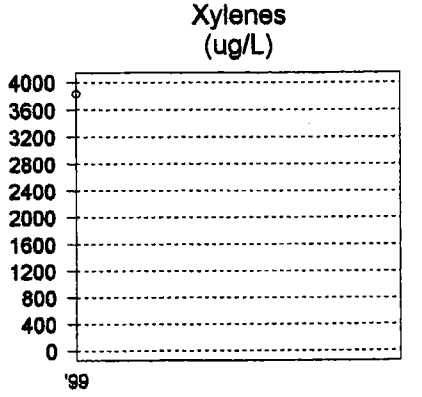
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

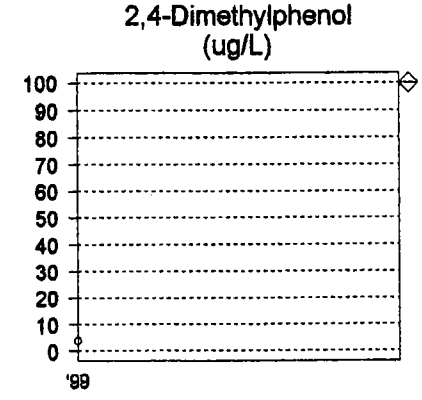


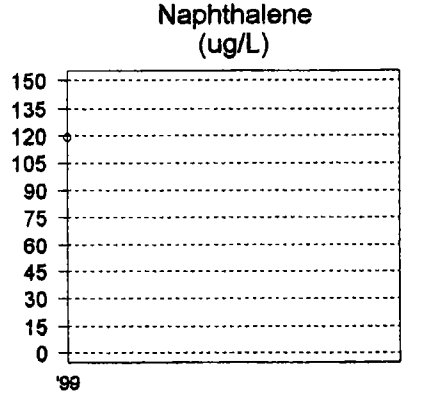


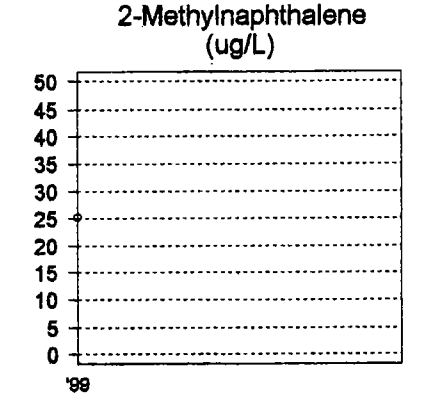


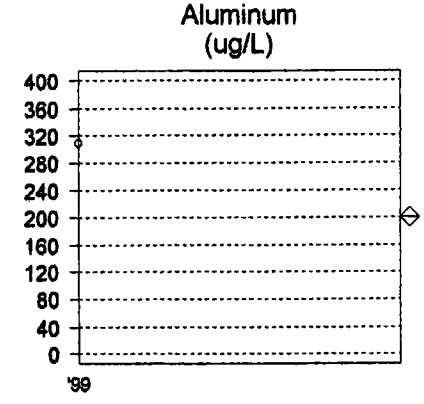












SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 09/20/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-12-1999 x:\mtech46\fm\283\gw\283.WSF

	Lab	Arsenic	Iron	Lead	Thallium	Depth to Water					Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	Feet					-
NJDEP Criteria:	-	8	300	10	10	NLE					-
09/20/99	FMETL	4.74	2330	22.0	8.76	7.20					V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 09/20/99

NOTES:

Page 2 of 2.

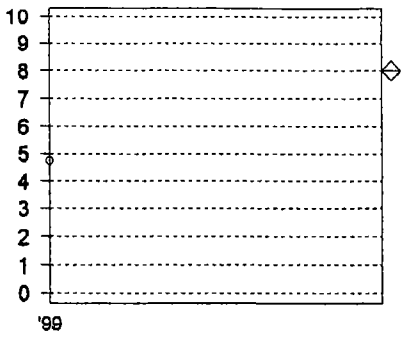
FORT MONMOUTH

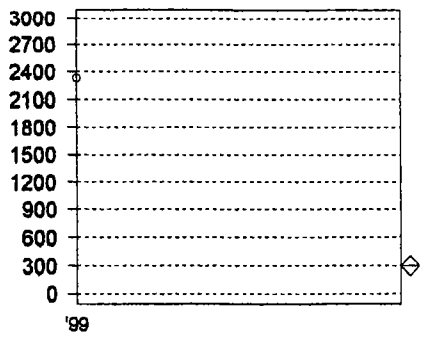
GW MONITORING
BLDG. 283

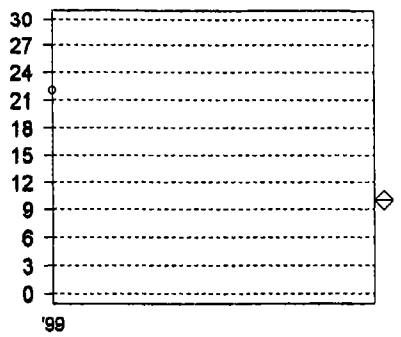
Well 1 of 1

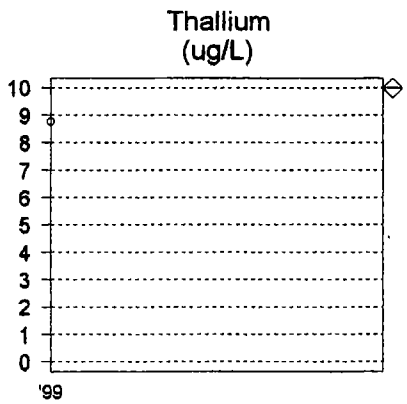
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

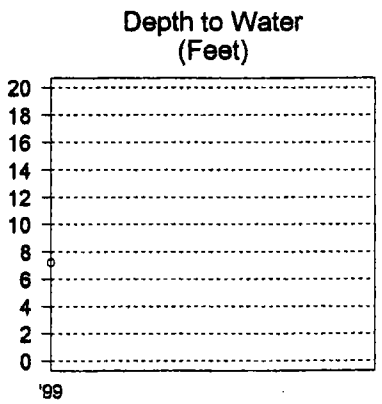
10-12-1999 x:\mtech46\fm\283\gw\283.wsf











SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 09/20/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-12-1999 x:\mtech48\fm\283\gw\283.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 : UST/Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5046.01	0283MW02	29-40887	12/27/99

NJDEP Laboratory Certification # 13461

1-28-00

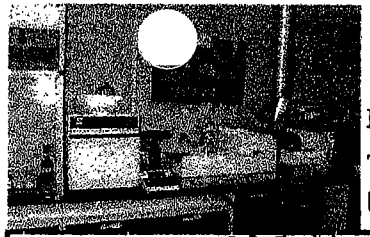
Daniel Wright/Date:
Laboratory Director

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: J. FALLON
Phone #: X26223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 mw
4th Qrt-'99

Samplers Name / Company: Corey McCormack

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL mtls	BNA+25	PST / PCB				Hex Rvd	Comments: Remarks / Preservation Method
														HCL/HNO3/4°C
5046.01	0283mw02	12/27/99	1439	AQ	59	✓	✓	✓	✓				0.0	29-40588

Analysis Parameters

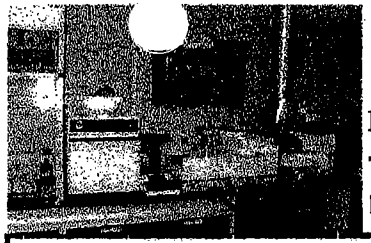
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	12/27/99 1500	J. Fallon			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, ( )Standard, ( )Screen / non-certified
Turnaround time: ( )Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Shows Trip/FB/Dup sue data MIS. CPM
Tides: L MS/MSD Here. CPM

print legibly

Coc.xls11/1/99



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:

Phone #:

( )DERA ( )OMA ( )Other:_____

Project No:

Location: MW18 wells 4th Qrtr '99

Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VO +15	TAL metals	B/N A +25	Pest / PCB				H_2S Read	Remarks / Preservation Method
5045 .01	Trip	12/27/99	0737	AQ	2	✓							—	
.02	Field Blank		0900		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	MP18MW24		1025		5	✓	✓	✓	✓			0.0	→	29-32565
.05	★ MP18MW25		1030		5	✓	✓	✓	✓				0.0	29-32566

Comments: HCL/HNO_3/4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	12/27/99 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 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Shows Trip / FB / Dupe w/ 296, 290, 283 same date. cpm

Tidal

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/27/99
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: 6.81 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 12.88 ft
(12.88) X .65 X 3 =25.11
GALLONS OF H2O TO BE PURGED: 25 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: 12:50
pH 6.57 su — TEMP 13.5 °C
DISSOLVED O2 6.11 ppm — SPECIFIC CONDUCTIVITY 90 us/cm

PURGE END TIME: 14:38
pH 6.59 su — TEMP 13.3 °C
DISSOLVED O2 5.30 ppm — SPECIFIC CONDUCTIVITY 90 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 10.77 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 25 gal

SAMPLE START TIME: 14:39
pH 6.60 su — TEMP 13.2 °C
DISSOLVED O2 5.27 ppm — SPECIFIC CONDUCTIVITY 90 us/cm

SAMPLE END TIME: 14:45

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	VB005266.D	Sample Name	Vblk160
Operator	Skelton	Field ID	Vblk160
Date Acquired	3 Jan 2000 6:23 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	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

1/11/00 4:09 PM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk160**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5046 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk160

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB005266.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: not dec. Date Analyzed: 1/3/00

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	**VB005271.D**	Sample Name	**5045.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**3 Jan 2000 9:47 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	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.

Trip Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5045 Location: M18 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 5045.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB005271.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: not dec. _____ Date Analyzed: 1/3/00

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 **VB005272.D**
Operator **Skelton**
Date Acquired **3 Jan 2000 10:27 pm**

Sample Name **5045.02**
Field ID **Field Blank**
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	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: LTM

NJDEP#: 13461 Case No.: 5045 Location: M18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5045.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB005272.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: not dec. Date Analyzed: 1/3/00

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	**VB005276.D**	Sample Name	**5046.01**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**4 Jan 2000 1:11 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	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	18.85	43267553	720.56 ug/L	1	0.23 ug/L	E
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	23.85	26658636	413.22 ug/L	1000	0.37 ug/L	E
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	27.70	30077003	422.50 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.92	37513637	1477.38 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	29.00	34555781	648.48 ug/L	nle	0.62 ug/L	E
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

1/11/00 4:10 PM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5046 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5046.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB005276.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: not dec. Date Analyzed: 1/4/00

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. 000078-78-4	Butane, 2-methyl-	6.50	110	JN
2.	unknown	7.37	120	J
3. 000107-83-5	Pentane, 2-methyl-	10.77	89	JN
4.	unknown	11.82	160	J
5. 000096-37-7	Cyclopentane, methyl-	15.46	200	JN
6. 000110-82-7	Cyclohexane	17.71	180	JN
7. 000108-87-2	Cyclohexane, methyl-	20.69	240	JN
8.	unknown	26.19	100	J
9.	unknown	29.18	110	J
10. 000611-14-3	Benzene, 1-ethyl-2-methyl-	31.06	660	JN
11. 000108-67-8	Benzene, 1,3,5-trimethyl-	31.21	280	JN
12. 000611-14-3	Benzene, 1-ethyl-2-methyl-	31.82	200	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	32.15	730	JN
14. 000095-36-3	1,2,4-Trimethylbenzene	33.25	260	JN
15. 000496-11-7	Indane	33.99	230	JN

Semi-Volatiles

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03495.D**	Sample Name	**Sblk331**
Operator	**Bhaskar**	Misc Info	**Sblk331 A 991229**
Date Acquired	**4-Jan-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
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Data File Name	**BNA03495.D**	Sample Name	**Sblk331**
Operator	**Bhaskar**	Misc Info	**Sblk331 A 991229**
Date Acquired	**4-Jan-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: **Sblk331**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5046 Location 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk331

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03495.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: decanted: (Y/N) N Date Extracted: 12/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/4/00

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	10.15	57	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03501.D**	Sample Name	**5045.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**4-Jan-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
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Data File Name	**BNA03501.D**	Sample Name	**5045.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**4-Jan-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	26.74	57684	3.85 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.: 5045 Location M18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5045.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03501.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: decanted: (Y/N) N Date Extracted: 12/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/4/00

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	7.17	7	J
2.	unknown	10.15	51	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03505.D**	Sample Name	**5046.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**4-Jan-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	12.85	24091	3.57 ug/L	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	13.57	3125435	167.93 ug/L	NLE	1.27	ug/L	E
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	15.24	297433	24.16 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	0.96	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
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Data File Name	**BNA03505.D**	Sample Name	**5046.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**4-Jan-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: 0283MW02

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5046 Location 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5046.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03505.D

Level: (low/med) LOW Date Received: 12/27/99

% Moisture: decanted: (Y/N) N Date Extracted: 12/29/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/4/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 12 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.17	290	J
2. 019550-46-0	1,3-Dimethyl cyclopentanol	6.05	300	JN
3. 000625-23-0	2-Hexanol, 2-methyl-	6.96	150	JN
4.	unknown	9.00	160	J
5.	unknown	9.19	100	J
6. 000620-14-4	Benzene, 1-ethyl-3-methyl-	9.65	390	JN
7. 000108-67-8	Benzene, 1,3,5-trimethyl-	9.78	210	JN
8.	unknown	10.15	61	J
9. 000095-36-3	1,2,4-Trimethylbenzene	10.27	560	JN
10. 000526-73-8	Benzene, 1,2,3-trimethyl-	10.79	260	JN
11. 000496-11-7	Indane	11.05	140	JN
12. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	12.97	77	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03521.D**	Sample Name	**5046.01 (1:4)**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**5-Jan-00**	Sample Multiplier	**4**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	7.32	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	3.64	ug/L	
62-53-3	Aniline			not detected	NLE	6.52	ug/L	
108-95-2	Phenol			not detected	4000	3.28	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	5.12	ug/L	
95-57-8	2-Chlorophenol			not detected	40	8.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	4.84	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	4.76	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	4.08	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	4.52	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	4.68	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	5.56	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.40	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	3.20	ug/L	
67-72-1	Hexachloroethane			not detected	10	6.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	3.88	ug/L	
78-59-1	Isophorone			not detected	100	4.04	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	7.68	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	10.48	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	4.84	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	5.32	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	7.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	4.88	ug/L	
91-20-3	Naphthalene	13.55	713608	183.38 ug/L	NLE	5.08	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	4.36	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	2.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	5.56	ug/L	
91-57-6	2-Methylnaphthalene	15.23	67652	26.28 ug/L	NLE	4.32	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	5.28	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	7.12	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	5.12	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	4.04	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	3.84	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	6.08	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	3.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	3.24	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	3.16	ug/L	
83-32-9	Acenaphthene			not detected	400	4.40	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	5.76	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	4.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	4.24	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA03521.D**	Sample Name	**5046.01 (1:4)**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**5-Jan-00**	Sample Multiplier	**4**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	3.48	ug/L	
84-66-2	Diethylphthalate			not detected	5000	6.48	ug/L	
86-73-7	Fluorene			not detected	300	3.96	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	4.40	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	4.20	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	7.92	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	4.04	ug/L	
103-33-3	Azobenzene			not detected	NLE	2.68	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	3.04	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	3.76	ug/L	
87-86-5	Pentachlorophenol			not detected	1	5.68	ug/L	
85-01-8	Phenanthrene			not detected	NLE	4.92	ug/L	
120-12-7	Anthracene			not detected	2000	4.48	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	6.80	ug/L	
206-44-0	Fluoranthene			not detected	300	6.56	ug/L	
92-87-5	Benzidine			not detected	50	16.72	ug/L	
129-00-0	Pyrene			not detected	200	5.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	4.20	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	4.76	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	7.00	ug/L	
218-01-9	Chrysene			not detected	20	5.52	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	6.96	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	5.76	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	5.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	5.16	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	4.20	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	3.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	2.56	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	3.36	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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03507.D**	Sample Name	**5046.01Dup**
Operator	**Bhaskar**	Misc Info	**0283MW02Dup**
Date Acquired	**4-Jan-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	12.86	23259	3.46 ug/L	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	13.57	2958902	159.34 ug/L	NLE	1.27	ug/L	E
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	15.24	285548	23.24 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	0.96	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	**BNA03507.D**	Sample Name	**5046.01Dup**
Operator	**Bhaskar**	Misc Info	**0283MW02Dup**
Date Acquired	**4-Jan-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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03522.D**	Sample Name	**5046.01Dup (1:4)**
Operator	**Bhaskar**	Misc Info	**0283MW02Dup**
Date Acquired	**5-Jan-00**	Sample Multiplier	**4**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifiers
110-86-1	Pyridine			not detected	NLE	7.32 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	3.64 ug/L	
62-53-3	Aniline			not detected	NLE	6.52 ug/L	
108-95-2	Phenol			not detected	4000	3.28 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	5.12 ug/L	
95-57-8	2-Chlorophenol			not detected	40	8.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	4.84 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	4.76 ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	4.08 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	4.52 ug/L	
95-48-7	2-Methylphenol			not detected	NLE	4.68 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	5.56 ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.40 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	3.20 ug/L	
67-72-1	Hexachloroethane			not detected	10	6.00 ug/L	
98-95-3	Nitrobenzene			not detected	10	3.88 ug/L	
78-59-1	Isophorone			not detected	100	4.04 ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	7.68 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	10.48 ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	4.84 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	5.32 ug/L	
65-85-0	Benzoic Acid			not detected	NLE	7.00 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	4.88 ug/L	
91-20-3	Naphthalene	13.55	696139	186.78 ug/L	NLE	5.08 ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	4.36 ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	2.84 ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	5.56 ug/L	
91-57-6	2-Methylnaphthalene	15.23	64138	26.01 ug/L	NLE	4.32 ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	5.28 ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	7.12 ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	5.12 ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	4.04 ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	3.84 ug/L	
131-11-3	Dimethylphthalate			not detected	7000	6.08 ug/L	
208-96-8	Acenaphthylene			not detected	NLE	3.84 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	3.24 ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	3.16 ug/L	
83-32-9	Acenaphthene			not detected	400	4.40 ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	5.76 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	4.00 ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	4.24 ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA03522.D**	Sample Name	**5046.01Dup (1:4)**
Operator	**Bhaskar**	Misc Info	**0283MW02Dup**
Date Acquired	**5-Jan-00**	Sample Multiplier	**4**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	3.48	ug/L	
84-66-2	Diethylphthalate			not detected	5000	6.48	ug/L	
86-73-7	Fluorene			not detected	300	3.96	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	4.40	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	4.20	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	7.92	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	4.04	ug/L	
103-33-3	Azobenzene			not detected	NLE	2.68	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	3.04	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	3.76	ug/L	
87-86-5	Pentachlorophenol			not detected	1	5.68	ug/L	
85-01-8	Phenanthrene			not detected	NLE	4.92	ug/L	
120-12-7	Anthracene			not detected	2000	4.48	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	6.80	ug/L	
206-44-0	Fluoranthene			not detected	300	6.56	ug/L	
92-87-5	Benzidine			not detected	50	16.72	ug/L	
129-00-0	Pyrene			not detected	200	5.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	4.20	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	4.76	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	7.00	ug/L	
218-01-9	Chrysene			not detected	20	5.52	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	6.96	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	5.76	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	5.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	5.16	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	4.20	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	3.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	2.56	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	3.36	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

Pesticide/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	BLK447
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	12/28/99
	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 # :**	5045.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/27/99
	Bldg. 173	**Extraction Date:**	12/28/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/29/99
Analysis:	EPA Method 608	**Location :**	M18 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	0.0030	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 # :**	5046.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/27/99
	Bldg. 173	**Extraction Date:**	12/28/99
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/29/99
Analysis:	EPA Method 608	**Location :**	283 MW
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0283MW02
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 #: 5046
Sample Prepared: 01/03/00

Site: 283

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 #: 5045
Sample Prepared: 01/03/00

Site: M-18
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 #: 5045.02
Sample Received: 12/27/99
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)	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	ND	2000	0.5
Beryllium	01/04/00	ND	20	0.5
Cadmium	01/04/00	ND	4	0.5
Calcium	01/04/00	ND	NLE	20.0
Chromium	01/04/00	ND	100	0.5
Cobalt	01/04/00	ND	NLE	0.5
Copper	01/04/00	ND	1000	3.0
Iron	01/04/00	49.0	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	30.7	NLE	20.0
Selenium	01/04/00	ND	50	3.0
Silver	01/04/00	ND	20	3.0
Sodium	01/04/00	742	50000	20.0
Thallium	01/04/00	ND	10	3.0
Vanadium	01/04/00	ND	NLE	1.0
Zinc	01/04/00	5.29	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 #: 5046.01
Sample Received: 12/27/99
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/04/00	123	200	10.0
Antimony	01/04/00	ND	20	2.0
Arsenic	01/04/00	ND	8	2.0
Barium	01/04/00	40.3	2000	0.5
Beryllium	01/04/00	ND	20	0.5
Cadmium	01/04/00	ND	4	0.5
Calcium	01/04/00	7350	NLE	20.0
Chromium	01/04/00	ND	100	0.5
Cobalt	01/04/00	1.43	NLE	0.5
Copper	01/04/00	ND	1000	3.0
Iron	01/04/00	2060	300	10.0
Lead	01/04/00	6.92	10	2.0
Magnesium	01/04/00	1990	NLE	20.0
Manganese	01/04/00	44.0	50	0.5
Mercury	01/06/00	0.3	2	0.1
Nickel	01/04/00	3.62	100	0.5
Potassium	01/04/00	2530	NLE	20.0
Selenium	01/04/00	4.73	50	3.0
Silver	01/04/00	ND	20	3.0
Sodium	01/04/00	18600	50000	20.0
Thallium	01/04/00	ND	10	3.0
Vanadium	01/04/00	ND	NLE	1.0
Zinc	01/04/00	29.4	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	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	2,4-Di methyl phenol	Naphtha lene	2-Methyl naphtha lene	Aluminum	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	30	1	1000	700	NLE	100	NLE	NLE	200	-
09/20/99	FMETL	15.51	536.9	598.4	797.4	3831.4	3.88	119.2	25.25	309	V,S,P,M
12/27/99	FMETL	ND	720.56	413.22	422.50	2125.86	ND	183.38	26.28	123	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 12/27/99

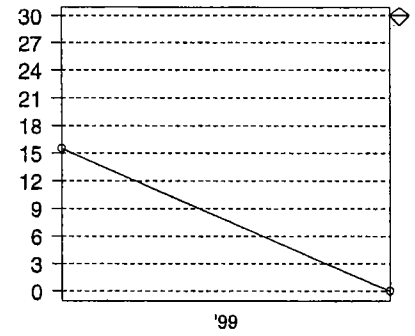
NOTES:

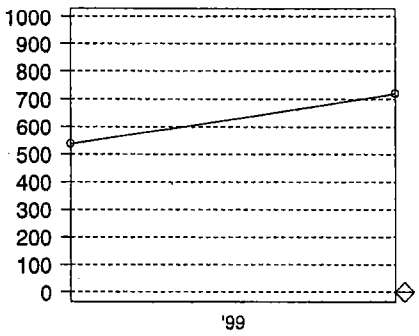
FORT MONMOUTH

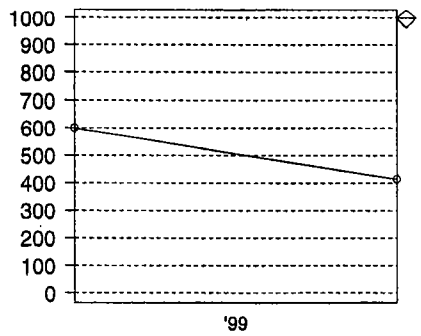
GW MONITORING
BLDG. 283

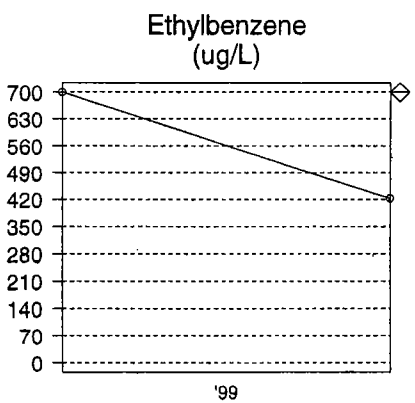
Well 1 of 1

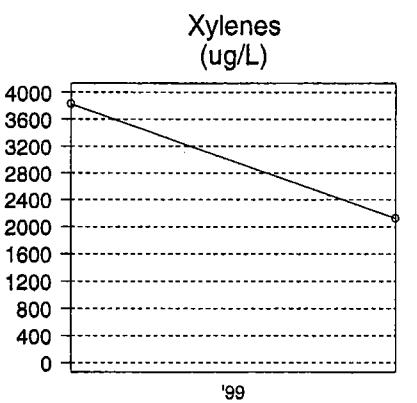
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

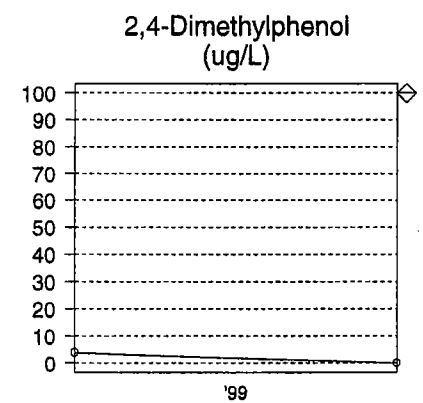


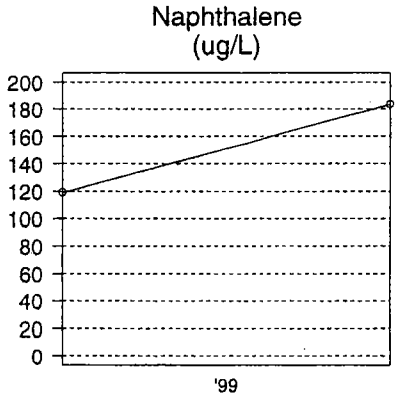


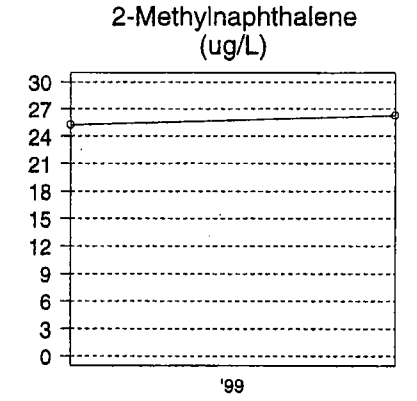


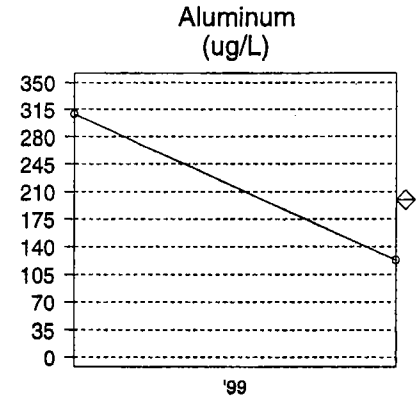












SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 12/27/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-28-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Arsenic	Iron	Lead	Thallium	Depth to Water					Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	Feet					-
NJDEP Criteria:	-	8	300	10	10	NLE					-
09/20/99	FMETL	4.74	2330	22.0	8.76	7.20					V,S,P,M
12/27/99	FMETL	ND	2060	6.92	ND	6.81					V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 12/27/99

NOTES:

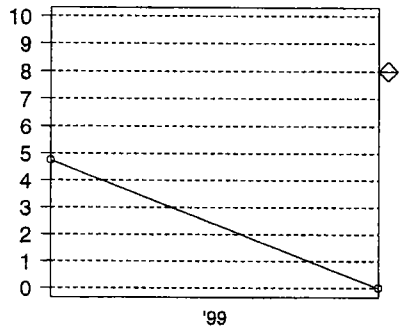
Page 2 of 2.

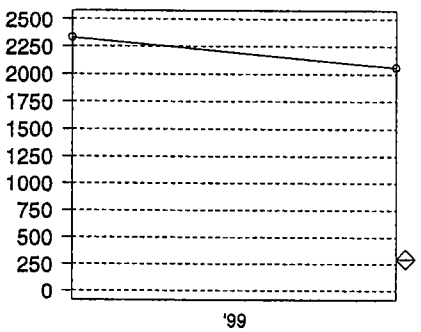
FORT MONMOUTH

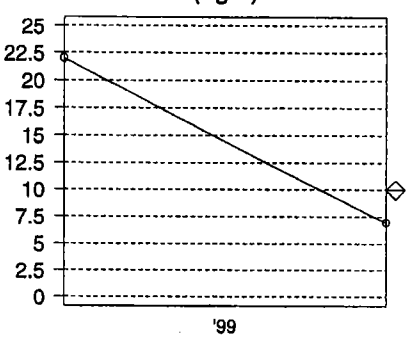
GW MONITORING
BLDG. 283

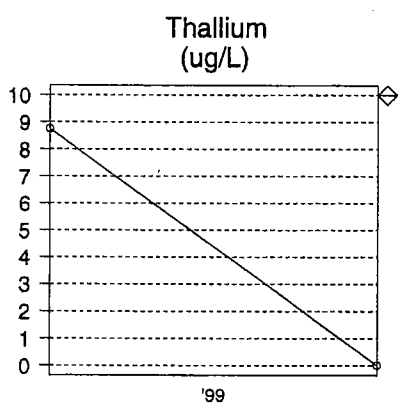
Well 1 of 1

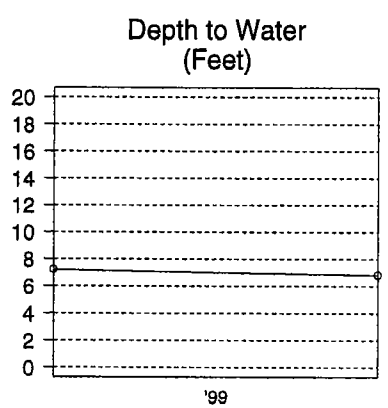
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW02

Sampling Dates:
09/20/99 - 12/27/99

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-27-2000 x:\mtech46\fm\283\gw\283.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 : UST/Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5280.01	0283MW02	29-40887	03/23/00

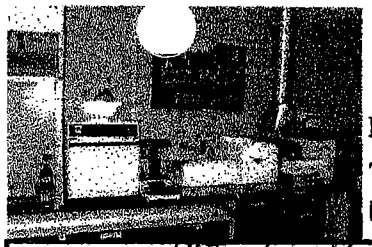
NJDEP Laboratory Certification # 13461

5-2-00
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: PJ Patton / D. Deasi
Phone #: ~~X26223~~ X21475
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 LTM 1st Qtr '00

Samplers Name / Company: Cory McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL MTLS	BNA+25	P.st/PCB				H2O Read	Comments: HCL/HNO3/C4°C Remarks / Preservation Method
5280 . .01	0283 MW02	3/23/00	~~1351~~ 1451 CM	AQ	5	✓	✓	✓	✓				0.0	29-40887

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Cory McCormack	3/24/00 1515	J. Vaughan			
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 MW8 Sent Later COC
T.C.: 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
Phone #: x26223
(X)DERA ( )OMA ( )Other:

Project No:
Location: M18 LTM
1st Qrtr '00

Samplers Name / Company: Corey McCormack, TUS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	Vo +15	TAL MTLS	BNA +25	Pest/PCB				Hw Rad	Comments: Remarks / Preservation Method
														HCL/HNO_3/4°C
2283 . 01	Trip	3/23/00	0737	AQ	2	✓							–	
.02	Field Blank		1030		5	✓	✓	✓	✓				–	
.03	Dupe		—			✓	✓	✓	✓				–	
.04	MP 18 MW24 *		1051			✓	✓	✓	✓				0.0	29-32565
.05	MP18MW25		1036			✓	✓	✓	✓				0.0	29-32566

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	3/23/00 1515				
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 -1 296, 290, 283 of same date. EPM
Tide: L → T

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 03/23/00
WEATHER: Sunny, warm.
TIDE: Low-Incoming.

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.38 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.31 ft
(13.31) X .65 X 3 =20.95
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: 13:19
pH 6.80 su
TEMP 13.4 °C
DISSOLVED O2 5.91 ppm
SPECIFIC CONDUCTIVITY 183 us/cm

PURGE END TIME: 14:50
pH 6.83 su
TEMP 13.2 °C
DISSOLVED O2 5.11 ppm
SPECIFIC CONDUCTIVITY 180 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 7.40 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 21 gal

SAMPLE START TIME: 14:51
pH 6.84 su
TEMP 13.3 °C
DISSOLVED O2 5.07 ppm
SPECIFIC CONDUCTIVITY 181 us/cm

SAMPLE END TIME: 14:57

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	**VB006469.D**	Sample Name	**Vblk196**
Operator	**Skelton**	Field ID	**Vblk196**
Date Acquired	**29 Mar 2000 11:22 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. **Vblk196**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5280 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk196

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006469.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: not dec. Date Analyzed: 3/29/00

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	**VB006505.D**	Sample Name	**Vblk197**
Operator	**Skelton**	Field ID	**Vblk197**
Date Acquired	**30 Mar 2000 1:18 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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk197**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5283 Location: 296M1 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk197

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006505.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: not dec. Date Analyzed: 3/30/00

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	VB006529.D	Sample Name	5283.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	31 Mar 2000 5:23 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

4/5/00 1:42 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.: 5283 Location: 296M1 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5283.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006529.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: not dec. Date Analyzed: 3/31/00

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	**VB006530.D**	Sample Name	**5283.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**31 Mar 2000 6:03 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: LTM

NJDEP#: 13461 Case No.: 5283 Location: 296M1 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5283.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006530.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: not dec. Date Analyzed: 3/31/00

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	**VB006498.D**	Sample Name	**5280.01**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**30 Mar 2000 6:46 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	18.84	34590170	558.59 ug/L	1	0.23 ug/L	B
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	23.84	24592672	352.05 ug/L	1000	0.37 ug/L	B
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	27.69	29523603	353.18 ug/L	700	0.65 ug/L	B
1330-20-7	m+p-Xylenes	27.90	31492846	1054.12 ug/L	nle	1.14 ug/L	B
1330-20-7	o-Xylene	28.98	33284331	510.19 ug/L	nle	0.62 ug/L	B
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 3:21 PM

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB006501.D	Sample Name	5280.01
Operator	Skelton	Field ID	0283MW02
Date Acquired	30 Mar 2000 9:05 am	Sample Multiplier	10

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	18.50 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	
71-43-2	Benzene	18.82	5289636	827.72 ug/L	1	2.30 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	5.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	
108-88-3	Toluene	23.83	3689465	511.78 ug/L	1000	3.70 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	
126-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	
100-41-4	Ethylbenzene	27.67	6238062	725.71 ug/L	700	6.50 ug/L	D
1330-20-7	m+p-Xylenes	27.87	9002863	2930.46 ug/L	nle	11.40 ug/L	E D
1330-20-7	o-Xylene	28.96	9158766	1365.23 ug/L	nle	6.20 ug/L	D
100-42-5	Styrene			not detected	100	5.60 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 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. **0283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5280 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5280.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB006498.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: not dec. Date Analyzed: 3/30/00

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. 000078-78-4	Butane, 2-methyl-	6.61	490	JN
2.	unknown	7.40	360	J
3. 000563-46-2	1-Butene, 2-methyl-	8.08	120	JN
4. 000107-83-5	Pentane, 2-methyl-	10.78	130	JN
5.	unknown	11.82	210	J
6. 000096-37-7	Cyclopentane, methyl-	15.45	280	JN
7. 000110-82-7	Cyclohexane	17.70	260	JN
8.	unknown	19.08	72	J
9. 000108-87-2	Cyclohexane, methyl-	20.68	230	JN
10. 000526-73-8	Benzene, 1,2,3-trimethyl-	31.05	530	JN
11. 000095-36-3	1,2,4-Trimethylbenzene	31.20	240	JN
12. 000620-14-4	Benzene, 1-ethyl-3-methyl-	31.81	170	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	32.14	580	JN
14. 000526-73-8	Benzene, 1,2,3-trimethyl-	33.24	250	JN
15. 000496-11-7	Indane	33.98	180	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03771.D**	Sample Name	**Sblk358**
Operator	**Bhaskar**	Misc Info	**Sblk358 A 000328**
Date Acquired	**28-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	BNA03771.D	Sample Name	Sblk358
Operator	Bhaskar	Misc Info	Sblk358 A 000328
Date Acquired	28-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: **Sblk358**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5280 Location 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk358

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03771.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/28/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/28/00

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	7.02	8	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03783.D**	Sample Name	**5283.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**29-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	**BNA03783.D**	Sample Name	**5283.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**29-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	26.60	120593	3.34 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.: 5283 Location M18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5283.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03783.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/28/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/29/00

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	7.03	10	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA03773.D**	Sample Name	**5280.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**28-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	9.94	95520	5.11 ug/L	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	12.74	63128	3.90 ug/L	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	13.41	3396399	82.44 ug/L	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	15.07	201363	7.43 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	0.96	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	**BNA03773.D**	Sample Name	**5280.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**28-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: **0283MW02**

Lab Name: FMETL Lab Code 13461

Project LTM Case No.: 5280 Location 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5280.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA03773.D

Level: (low/med) LOW Date Received: 3/23/00

% Moisture: decanted: (Y/N) N Date Extracted: 3/28/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/28/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	12.82	50	JN
2. 000610-72-0	Benzoic acid, 2,5-dimethyl-	15.76	19	JN
3. 019550-46-0	1,3-Dimethyl cyclopentanol	5.90	260	JN
4. 004911-70-0	2-Pentanol, 2,3-dimethyl-	6.81	200	JN
5.	unknown	7.06	570	J
6.	unknown	7.40	81	J
7.	unknown	8.85	140	J
8.	unknown	9.04	64	J
9. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.50	300	JN
10. 000095-36-3	1,2,4-Trimethylbenzene	9.62	170	JN
11. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.84	110	JN
12.	unknown	10.00	57	J
13. 000108-67-8	Benzene, 1,3,5-trimethyl-	10.12	350	JN
14. 001940-18-7	Cyclohexanol, 1-ethyl-	10.34	25	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	10.64	200	JN
16.	unknown	10.83	24	J
17. 000496-11-7	Indane	10.90	110	JN
18.	unknown	11.07	31	J
19. 000099-87-6	Benzene, 1-methyl-4-(1-methylet	11.23	38	JN
20. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.56	20	JN
21. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	11.70	26	JN
22. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	12.30	20	JN
23. 027133-93-3	2,3-Dihydro-1-methylindene	12.63	27	JN

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK498
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	3/29/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/3/00
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	0.0007	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 # :**	5283.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/23/00
	Bldg. 173	**Extraction Date:**	3/29/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/3/00
Analysis:	EPA Method 608	**Location :**	M18
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	0.0007	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 # :**	5280.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/23/00
	Bldg. 173	**Extraction Date:**	3/29/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/3/00
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0283MW02
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 #: 5280
Sample Prepared: 04/05/00

Site: 283

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	04/05/00	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 #: 5283.02
Sample Received: 03/23/00
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)	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	2.92	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	29.7	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	04/05/00	ND	2	0.1
Nickel	04/06/00	ND	100	0.5
Potassium	04/06/00	48.8	NLE	20.0
Selenium	04/06/00	ND	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	129	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	ND	NLE	1.0
Zinc	04/06/00	3.76	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 #: 5280.01
Sample Received: 03/23/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	04/06/00	241	200	10.0
Antimony	04/06/00	ND	20	2.0
Arsenic	04/06/00	ND	8	2.0
Barium	04/06/00	38.5	2000	0.5
Beryllium	04/06/00	ND	20	0.5
Cadmium	04/06/00	ND	4	0.5
Calcium	04/06/00	3590	NLE	20.0
Chromium	04/06/00	1.51	100	0.5
Cobalt	04/06/00	ND	NLE	0.5
Copper	04/06/00	ND	1000	3.0
Iron	04/06/00	2010	300	10.0
Lead	04/06/00	15.3	10	2.0
Magnesium	04/06/00	1320	NLE	20.0
Manganese	04/06/00	11.9	50	0.5
Mercury	04/05/00	0.2	2	0.1
Nickel	04/06/00	6.43	100	0.5
Potassium	04/06/00	1820	NLE	20.0
Selenium	04/06/00	7.29	50	3.0
Silver	04/06/00	ND	20	3.0
Sodium	04/06/00	10600	50000	20.0
Thallium	04/06/00	ND	10	3.0
Vanadium	04/06/00	1.68	NLE	1.0
Zinc	04/06/00	43.1	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

LTM

	Lab	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	2-Methyl naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	30	1	1000	700	40	4000	100	NLE	NLE	-
09/20/1999	FMETL	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	25.25	V,S,P,M
12/27/1999	FMETL	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	26.28	V,S,P,M
03/23/2000	FMETL	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	7.43	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/23/2000

NOTES:

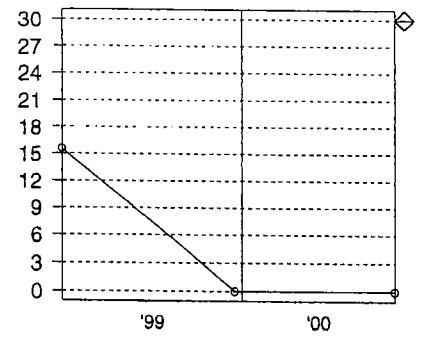
Page 1 of 2.

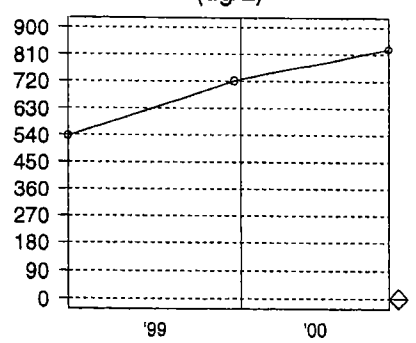
FORT MONMOUTH

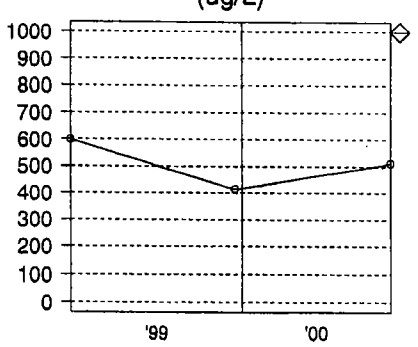
GW MONITORING
BLDG. 283

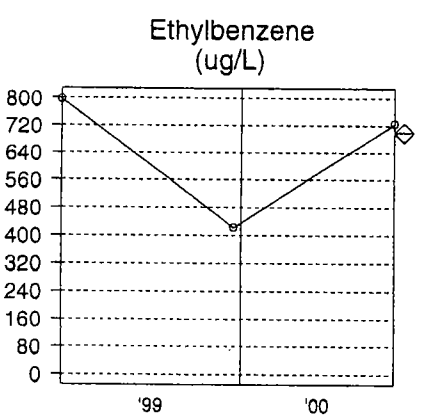
Well 1 of 1

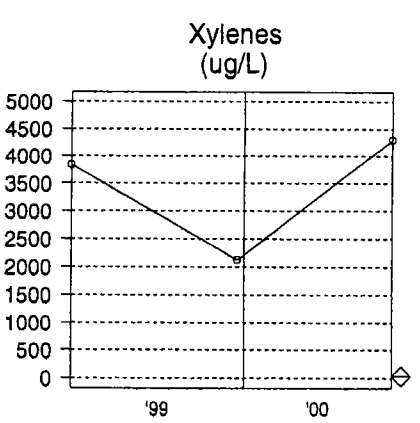
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

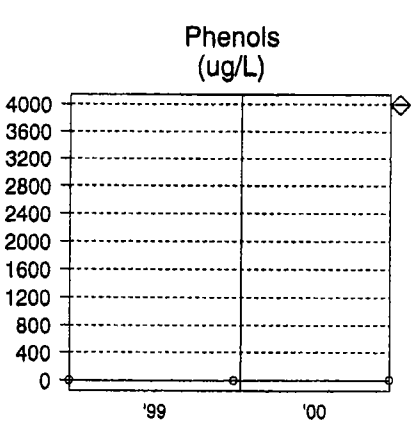


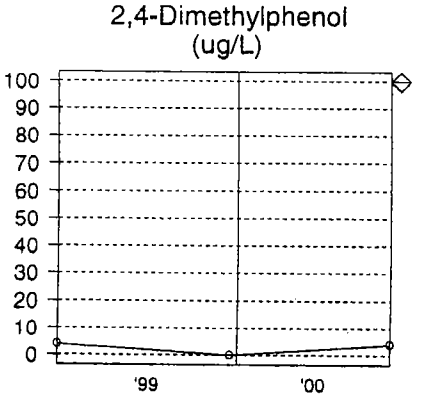


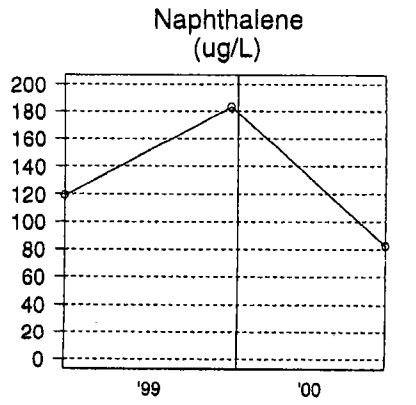


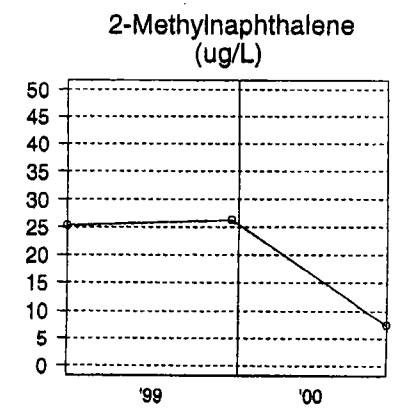












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/23/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

05-02-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	8	300	10	10	50	2	100	50	NLE	-
09/20/1999	FMETL	4.74	2330	22.0	8.76	14.5	ND	4.11	6.49	7.20	V,S,P,M
12/27/1999	FMETL	ND	2060	6.92	ND	44.0	0.3	3.62	4.73	6.81	V,S,P,M
03/23/2000	FMETL	ND	2010	15.3	ND	11.9	0.2	6.43	7.29	6.38	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/23/2000

NOTES:

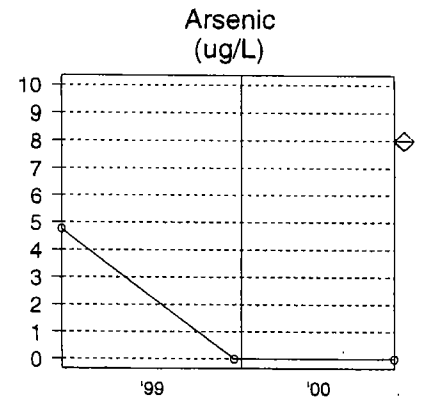
Page 2 of 2.

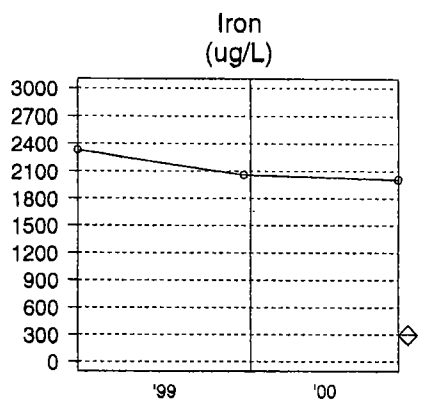
FORT MONMOUTH

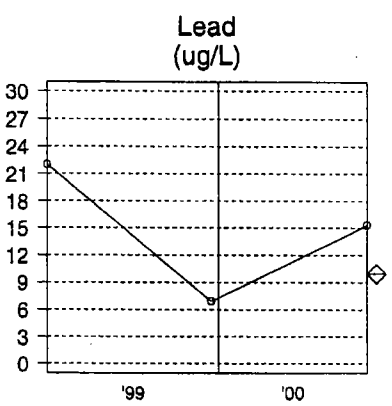
GW MONITORING
BLDG. 283

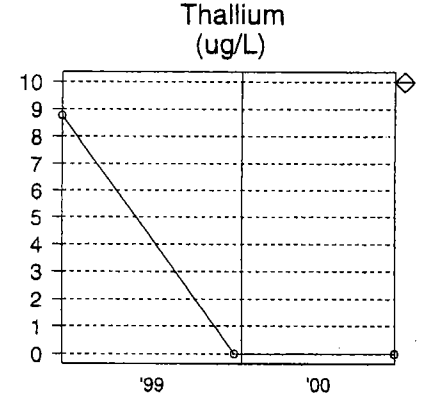
Well 1 of 1

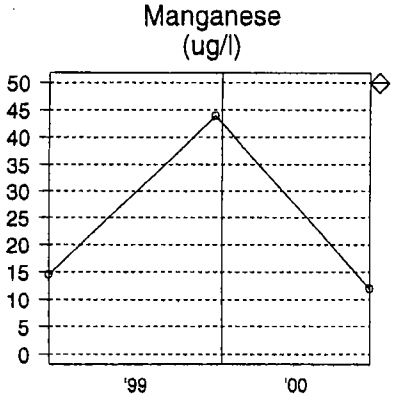
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

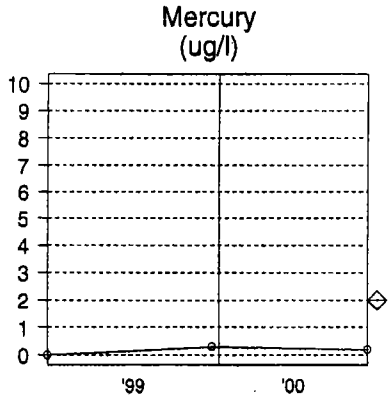


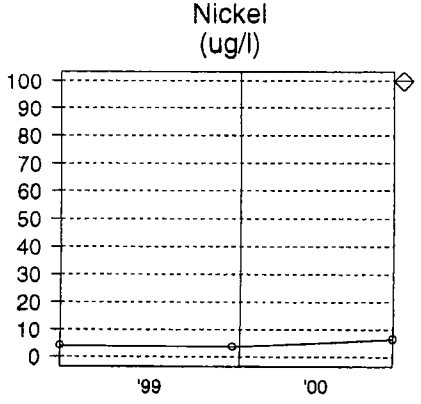


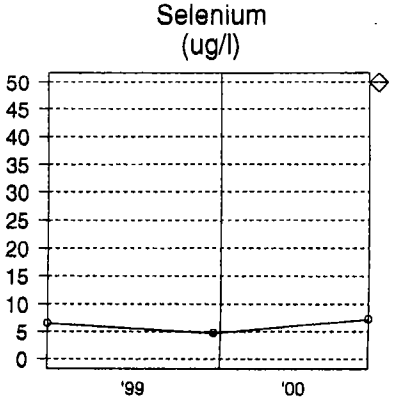


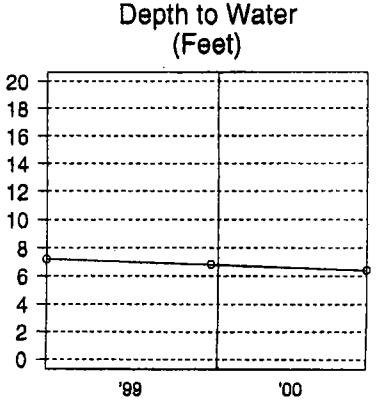












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/23/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

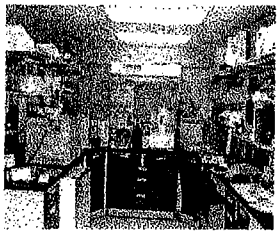
Well 1 of 1, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

05-02-2000 x:\mtech46\fm\283\gw\283.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: UST/Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5505.01	0283MW02	29-40887	06/28/00
5505.02	0283MW01	29-40367	06/28/00
5505.03	0283MW03	29-41650	06/28/00

NJDEP Laboratory Certification # 13461

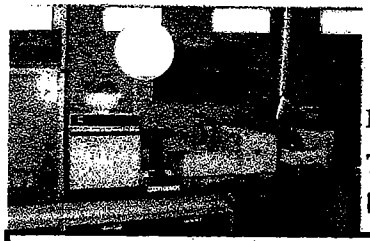
7-26-00

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:

Phone #:

( )DERA ( )OMA ( )Other:_____

Project No:

Location: 283 wells 2nd Qtr '00

Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA's	THL nitrs	Pest / PCB	BNA 625				Hno3 Pres'd	Remarks / Preservation Method
5505 ,01	0283 mw02	6/28/00	1025	AQ	5	✓	✓	✓	✓				0.0	29-40887
↓ ,02	0283 mw01 2nd		1042	↓	5	✓	✓	✓	✓				0.0	29-40367
↓ ,03	0283 mw03 Back	↓	1129	↓	5	✓	✓	✓	✓				0.0	29-41650

Comments: HCL/HNO3/4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	6/28/00 1700				
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 T/F@D from 296 Sure date. com

Tide: H-70

print legibly

Coc.xls6/16/00

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 06/28/00
WEATHER: Overcast, windy.
TIDE: High-outgoing.

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.31 ft
DEPTH OF WELL: 19.38 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.07 ft
(13.07) X .65 X 3 = 25.48
GALLONS OF H2O TO BE PURGED: 25 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: 08:53
pH 6.94 su — TEMP 13.4 °C
DISSOLVED O2 6.12 ppm — SPECIFIC CONDUCTIVITY 191 us/cm

PURGE END TIME: 10:41
pH 6.91 su — TEMP 13.2 °C
DISSOLVED O2 5.33 ppm — SPECIFIC CONDUCTIVITY 193 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: 25 gal

SAMPLE START TIME: 10:42
pH 6.90 su — TEMP 13.2 °C
DISSOLVED O2 5.30 ppm — SPECIFIC CONDUCTIVITY 194 us/cm

SAMPLE END TIME: 10:45

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 06/28/00
WEATHER: Overcast, windy.
TIDE: High-outgoing.

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 7.83 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 11.86 ft
(11.86) X .65 X 3 =23.12
GALLONS OF H2O TO BE PURGED: 23 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: 08:44
pH 6.84 su — TEMP 13.5 °C
DISSOLVED O2 5.97 ppm — SPECIFIC CONDUCTIVITY 187 us/cm

PURGE END TIME: 10:24
pH 6.86 su — TEMP 13.2 °C
DISSOLVED O2 4.21 ppm — SPECIFIC CONDUCTIVITY 185 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 8.33 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 23 gal

SAMPLE START TIME: 10:25
pH 6.85 su — TEMP 13.1 °C
DISSOLVED O2 4.17 ppm — SPECIFIC CONDUCTIVITY 185 us/cm

SAMPLE END TIME: 10:29

COMMENTS: Strong odor, No Hnu.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 06/28/00
WEATHER: Sunny,Overcast.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 7.12 ft
DEPTH OF WELL: 24.45 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 17.33 ft
(17.33) X .65 X 3 = 33.79
GALLONS OF H2O TO BE PURGED: 34 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: 09:01
pH 6.93 su
DISSOLVED O2 6.01 ppm
TEMP 13.5 °C
SPECIFIC CONDUCTIVITY 170 us/cm

PURGE END TIME: 11:28
pH 6.96 su
DISSOLVED O2 5.21 ppm
TEMP 13.2 °C
SPECIFIC CONDUCTIVITY 173 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 8.61 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 34 gal

SAMPLE START TIME: 11:29
pH 6.97 su
DISSOLVED O2 5.17 ppm
TEMP 13.2 °C
SPECIFIC CONDUCTIVITY 173 us/cm

SAMPLE END TIME: 11:34

COMMENTS: Turned very cloudy, green.

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	**VB007463.D**	Sample Name	**Vblk225**
Operator	**Skelton**	Field ID	**Vblk225**
Date Acquired	**7 Jul 2000 5:33 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

7/21/00 11:50 AM

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk225**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5505 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk225

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007463.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: not dec. Date Analyzed: 7/7/00

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 #13461

Data File	**VB007492.D**	Sample Name	**Vblk226**
Operator	**Skelton**	Field ID	**Vblk226**
Date Acquired	**11 Jul 2000 11:27 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			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

7/21/00 11:46 AM

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk226**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5505 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk226

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007492.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: not dec. Date Analyzed: 7/11/00

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	**VB007494.D**	Sample Name	**5505.02**
Operator	**Skelton**	Field ID	**0283MW01**
Date Acquired	**11 Jul 2000 1:06 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	
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

7/25/00 10:50 AM

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5505 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5505.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007494.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: not dec. Date Analyzed: 7/11/00

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	**VB007483.D**	Sample Name	**5505.01**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**8 Jul 2000 7:10 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	
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	9.10	51149	7.16 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	18.77	27682867	514.15 ug/L	1	0.23 ug/L	E
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	23.78	22581689	386.93 ug/L	1000	0.37 ug/L	E
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	27.62	28623926	398.06 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.83	32141222	1098.36 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.92	32608888	597.46 ug/L	nle	0.62 ug/L	E
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

7/21/00 11:47 AM

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007493.D**	Sample Name	**5505.01s**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**11 Jul 2000 12:07 pm**	Sample Multiplier	**50**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	92.50 ug/L	
107131	Acrylonitrile			not detected	50	139.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	426.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	8.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	12.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	84.00 ug/L	
74-87-3	Chloromethane			not detected	30	58.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	53.00 ug/L	
74-83-9	Bromomethane			not detected	10	55.00 ug/L	
75-00-3	Chloroethane			not detected	nle	50.50 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	25.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	12.00 ug/L	
67-64-1	Acetone			not detected	700	68.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	23.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	12.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	8.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	6.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	39.00 ug/L	
78-93-3	2-Butanone			not detected	300	31.00 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	8.50 ug/L	
67-66-3	Chloroform			not detected	6	15.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	11.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	23.50 ug/L	
71-43-2	Benzene	18.76	1225809	908.16 ug/L	1	11.50 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	9.00 ug/L	
79-01-6	Trichloroethene			not detected	1	11.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	20.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	27.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	32.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	34.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	29.50 ug/L	
108-88-3	Toluene	23.77	970868	663.58 ug/L	1000	18.50 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	43.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	24.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	16.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	35.50 ug/L	
126-48-1	Dibromochloromethane			not detected	10	43.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	19.50 ug/L	
100-41-4	Ethylbenzene	27.61	1822333	1129.23 ug/L	700	32.50 ug/L	D
1330-20-7	m+p-Xylenes	27.81	2639178	4018.70 ug/L	nle	57.00 ug/L	D
1330-20-7	o-Xylene	28.90	2378709	1942.00 ug/L	nle	31.00 ug/L	D
100-42-5	Styrene			not detected	100	28.00 ug/L	
75-25-2	Bromoform			not detected	4	35.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	23.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	27.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	28.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	32.00 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

7/25/00 10:43 AM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5505 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5505.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007483.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: not dec. Date Analyzed: 7/8/00

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: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.50	200	J
2. 000109-66-0	Pentane	7.34	160	JN
3.	unknown	11.74	120	J
4. 000096-37-7	Cyclopentane, methyl-	15.36	150	JN
5. 000110-82-7	Cyclohexane	17.61	160	JN
6. 000108-87-2	Cyclohexane, methyl-	20.62	120	JN
7.	unknown	21.49	76	J
8.	unknown	26.11	75	J
9.	unknown	29.10	110	J
10. 000622-96-8	Benzene, 1-ethyl-4-methyl-	30.98	690	JN
11. 000108-67-8	Benzene, 1,3,5-trimethyl-	31.13	290	JN
12. 000611-14-3	Benzene, 1-ethyl-2-methyl-	31.75	220	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	32.07	850	JN
14. 000095-36-3	1,2,4-Trimethylbenzene	33.17	350	JN
15. 000496-11-7	Indane	33.91	280	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007485.D**	Sample Name	**5505.03**
Operator	**Skelton**	Field ID	**0283MW03**
Date Acquired	**8 Jul 2000 8:32 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			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	18.76	636031	9.25 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			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

7/21/00 11:48 AM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5505 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5505.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007485.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: not dec. Date Analyzed: 7/8/00

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	**BN04415.D**	Sample Name	**Sblk392**
Operator	**Bhaskar**	Misc Info	**Sblk392 A 000703**
Date Acquired	**3-Jul-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	**BN04415.D**	Sample Name	**Sblk392**
Operator	**Bhaskar**	Misc Info	**Sblk392 A 000703**
Date Acquired	**3-Jul-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: **Sblk392**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5505 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: Sblk392

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04415.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 7/3/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/3/00

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	**BN04418.D**	Sample Name	**5505.02**
Operator	**Bhaskar**	Misc Info	**0283MW 01**
Date Acquired	**4-Jul-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	**BN04418.D**	Sample Name	**5505.02**
Operator	**Bhaskar**	Misc Info	**0283MW01**
Date Acquired	**4-Jul-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: 0283MW01

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5505 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5505.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04418.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: decanted: (Y/N) N Date Extracted: 7/3/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/4/00

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	33.18	40	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04417.D**	Sample Name	**5505.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**4-Jul-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	14.92	7744117	171.51 ug/L	NLE	1.27	ug/L	E
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	17.02	674777	25.10 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
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Data File Name	**BN04417.D**	Sample Name	**5505.01**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**4-Jul-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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04423.D**	Sample Name	**5505.01 (1:4)**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**5-Jul-00**	Sample Multiplier	**4**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	7.32	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	3.64	ug/L	
62-53-3	Aniline			not detected	NLE	6.52	ug/L	
108-95-2	Phenol			not detected	4000	3.28	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	5.12	ug/L	
95-57-8	2-Chlorophenol			not detected	40	8.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	4.84	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	4.76	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	4.08	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	4.52	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	4.68	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	5.56	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.40	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	3.20	ug/L	
67-72-1	Hexachloroethane			not detected	10	6.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	3.88	ug/L	
78-59-1	Isophorone			not detected	100	4.04	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	7.68	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	10.48	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	4.84	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	5.32	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	7.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	4.88	ug/L	
91-20-3	Naphthalene	14.91	1911944	174.92 ug/L	NLE	5.08	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	4.36	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	2.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	5.56	ug/L	
91-57-6	2-Methylnaphthalene	17.02	159920	24.57 ug/L	NLE	4.32	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	5.28	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	7.12	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	5.12	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	4.04	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	3.16	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	6.08	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	3.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	3.24	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	3.16	ug/L	
83-32-9	Acenaphthene			not detected	400	4.40	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	5.76	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	4.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	4.24	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN04423.D**	Sample Name	**5505.01 (1:4)**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**5-Jul-00**	Sample Multiplier	**4**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	3.48	ug/L	
84-66-2	Diethylphthalate			not detected	5000	6.48	ug/L	
86-73-7	Fluorene			not detected	300	3.96	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	4.40	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	4.20	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	7.92	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	4.04	ug/L	
103-33-3	Azobenzene			not detected	NLE	2.68	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	3.04	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	3.76	ug/L	
87-86-5	Pentachlorophenol			not detected	1	5.68	ug/L	
85-01-8	Phenanthrene			not detected	NLE	4.92	ug/L	
120-12-7	Anthracene			not detected	2000	4.48	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	6.80	ug/L	
206-44-0	Fluoranthene			not detected	300	6.56	ug/L	
92-87-5	Benzidine			not detected	50	16.72	ug/L	
129-00-0	Pyrene			not detected	200	5.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	4.20	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	4.76	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	7.00	ug/L	
218-01-9	Chrysene			not detected	20	5.52	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	6.96	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	5.76	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	5.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	5.16	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	4.20	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	3.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	2.56	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	3.36	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: **0283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5505 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5505.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04417.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 7/3/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/4/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 001462-03-9	Cyclopentanol, 1-methyl-	6.17	340	JN
2. 000625-23-0	2-Hexanol, 2-methyl-	6.89	290	JN
3.	unknown	7.18	780	J
4.	unknown	7.96	54	J
5.	unknown	8.90	210	J
6. 005582-82-1	3-Heptanol, 3-methyl-	9.13	86	JN
7.	unknown	9.30	72	J
8.	unknown	9.38	140	J
9. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.65	340	JN
10. 000108-67-8	Benzene, 1,3,5-trimethyl-	9.81	170	JN
11. 000611-14-3	Benzene, 1-ethyl-2-methyl-	10.04	110	JN
12.	unknown	10.18	69	J
13. 000095-36-3	1,2,4-Trimethylbenzene	10.37	320	JN
14. 001940-18-7	Cyclohexanol, 1-ethyl-	10.72	46	JN
15. 000095-63-6	Benzene, 1,2,4-trimethyl-	10.97	220	JN
16.	unknown	11.15	39	J
17.	unknown	11.30	150	J
18.	unknown	11.52	41	J
19. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	11.65	55	JN
20. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	12.34	59	JN
21. 000767-58-8	Indan, 1-methyl-	13.78	35	JN
22. 027133-93-3	2,3-Dihydro-1-methylindene	14.01	49	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04419.D**	Sample Name	**5505.03**
Operator	**Bhaskar**	Misc Info	**0283MW03**
Date Acquired	**4-Jul-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	

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Data File Name	**BN04419.D**	Sample Name	**5505.03**
Operator	**Bhaskar**	Misc Info	**0283MW 03**
Date Acquired	**4-Jul-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: 0283MW03

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5505 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5505.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04419.D

Level: (low/med) LOW Date Received: 6/28/00

% Moisture: decanted: (Y/N) N Date Extracted: 7/3/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/4/00

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

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK454
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	7/5/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	7/6/00
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
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 # :**	5505.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	6/28/00
	Bldg. 173	**Extraction Date:**	7/5/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	7/6/00
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0283MW01
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
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 # :**	5505.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	6/28/00
	Bldg. 173	**Extraction Date:**	7/5/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	7/6/00
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0283MW02
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**
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 # :**	5505.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	6/28/00
	Bldg. 173	**Extraction Date:**	7/5/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	7/6/00
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	0283MW03
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
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 #: 5505
Sample Prepared: 07/06/00

Site: 283

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	07/06/00	ND	200	10.0
Antimony	07/06/00	3.01	20	2.0
Arsenic	07/06/00	ND	8	2.0
Barium	07/06/00	5.24	2000	0.5
Beryllium	07/06/00	ND	20	0.5
Cadmium	07/06/00	ND	4	0.5
Calcium	07/06/00	150	NLE	20.0
Chromium	07/06/00	4.24	100	0.5
Cobalt	07/06/00	ND	NLE	0.5
Copper	07/06/00	63.8	1000	3.0
Iron	07/06/00	28.3	300	10.0
Lead	07/06/00	ND	10	2.0
Magnesium	07/06/00	23.1	NLE	20.0
Manganese	07/06/00	ND	50	0.5
Mercury	07/06/00	ND	2	0.1
Nickel	07/06/00	3.43	100	0.5
Potassium	07/06/00	ND	NLE	20.0
Selenium	07/06/00	ND	50	3.0
Silver	07/06/00	ND	20	3.0
Sodium	07/06/00	ND	50000	20.0
Thallium	07/06/00	ND	10	3.0
Vanadium	07/06/00	ND	NLE	1.0
Zinc	07/06/00	11.4	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

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 #: 5505.02
Sample Received: 03/23/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	07/06/00	2070	200	10.0
Antimony	07/06/00	ND	20	2.0
Arsenic	07/06/00	ND	8	2.0
Barium	07/06/00	71.1	2000	0.5
Beryllium	07/06/00	0.682	20	0.5
Cadmium	07/06/00	ND	4	0.5
Calcium	07/06/00	5040	NLE	20.0
Chromium	07/06/00	9.79	100	0.5
Cobalt	07/06/00	3.28	NLE	0.5
Copper	07/06/00	16.9	1000	3.0
Iron	07/06/00	1450	300	10.0
Lead	07/06/00	ND	10	2.0
Magnesium	07/06/00	11800	NLE	20.0
Manganese	07/06/00	22.2	50	0.5
Mercury	07/06/00	ND	2	0.1
Nickel	07/06/00	10.4	100	0.5
Potassium	07/06/00	5220	NLE	20.0
Selenium	07/06/00	ND	50	3.0
Silver	07/06/00	ND	20	3.0
Sodium	07/06/00	35600	50000	20.0
Thallium	07/06/00	ND	10	3.0
Vanadium	07/06/00	2.74	NLE	1.0
Zinc	07/06/00	53.0	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 #: 5505.01
Sample Received: 03/23/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	07/06/00	81.4	200	10.0
Antimony	07/06/00	ND	20	2.0
Arsenic	07/06/00	ND	8	2.0
Barium	07/06/00	45.9	2000	0.5
Beryllium	07/06/00	ND	20	0.5
Cadmium	07/06/00	ND	4	0.5
Calcium	07/06/00	2240	NLE	20.0
Chromium	07/06/00	1.38	100	0.5
Cobalt	07/06/00	0.718	NLE	0.5
Copper	07/06/00	41.1	1000	3.0
Iron	07/06/00	2130	300	10.0
Lead	07/06/00	11.5	10	2.0
Magnesium	07/06/00	1230	NLE	20.0
Manganese	07/06/00	8.31	50	0.5
Mercury	07/06/00	ND	2	0.1
Nickel	07/06/00	6.01	100	0.5
Potassium	07/06/00	1730	NLE	20.0
Selenium	07/06/00	4.36	50	3.0
Silver	07/06/00	ND	20	3.0
Sodium	07/06/00	15100	50000	20.0
Thallium	07/06/00	ND	10	3.0
Vanadium	07/06/00	1.17	NLE	1.0
Zinc	07/06/00	18.1	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 #: 5505.03
Sample Received: 03/23/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	07/06/00	3920	200	10.0
Antimony	07/06/00	ND	20	2.0
Arsenic	07/06/00	ND	8	2.0
Barium	07/06/00	99.5	2000	0.5
Beryllium	07/06/00	0.566	20	0.5
Cadmium	07/06/00	ND	4	0.5
Calcium	07/06/00	11700	NLE	20.0
Chromium	07/06/00	50.7	100	0.5
Cobalt	07/06/00	2.38	NLE	0.5
Copper	07/06/00	ND	1000	3.0
Iron	07/06/00	21000	300	10.0
Lead	07/06/00	ND	10	2.0
Magnesium	07/06/00	4080	NLE	20.0
Manganese	07/06/00	36.9	50	0.5
Mercury	07/06/00	ND	2	0.1
Nickel	07/06/00	9.39	100	0.5
Potassium	07/06/00	12200	NLE	20.0
Selenium	07/06/00	ND	50	3.0
Silver	07/06/00	ND	20	3.0
Sodium	07/06/00	7350	50000	20.0
Thallium	07/06/00	ND	10	3.0
Vanadium	07/06/00	18.2	NLE	1.0
Zinc	07/06/00	28.7	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	Aluminum	Iron	Manganese	Nickel	Depth to Water					Notes
Units:	-	ug/L	ug/L	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	200	300	50	100	NLE					-
06/28/2000	FMETL	2070	1450	22.2	10.4	6.31					V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 06/28/2000

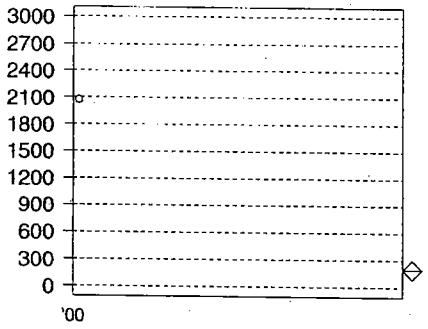
NOTES:

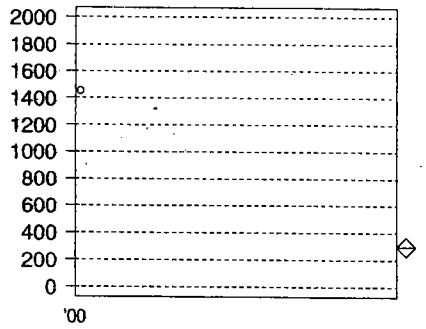
FORT MONMOUTH

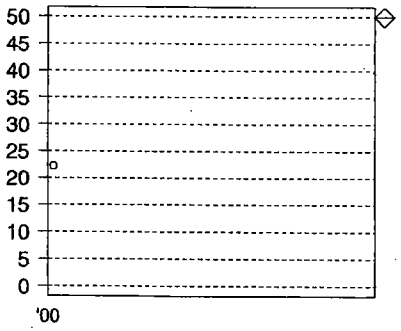
GW MONITORING
BLDG. 283

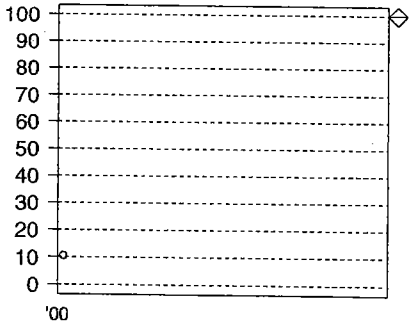
Well 2 of 3

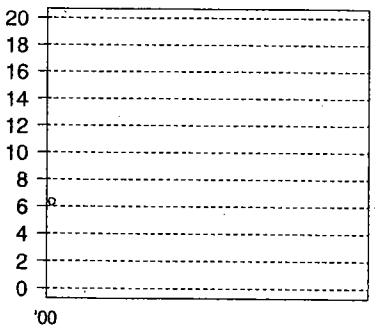
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 06/28/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

07-25-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 06/28/2000

NOTES:

Page 1 of 3.

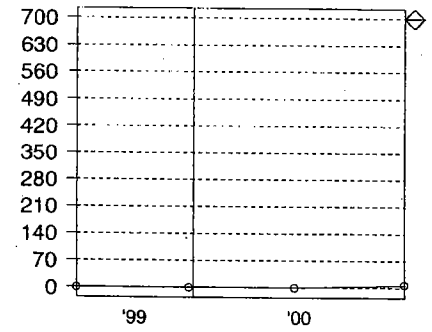
FORT MONMOUTH

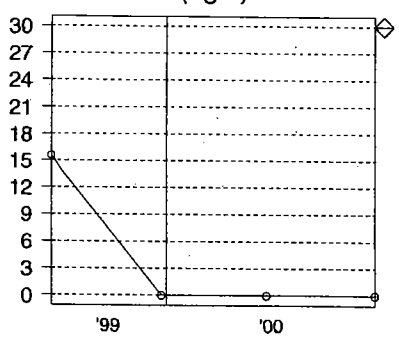
GW MONITORING
BLDG. 283

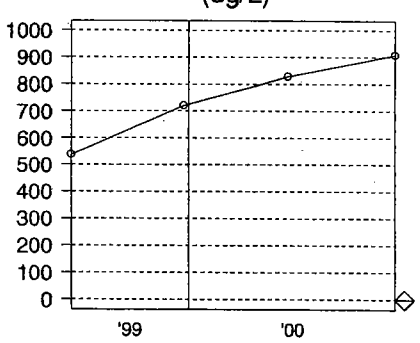
Well 1 of 3

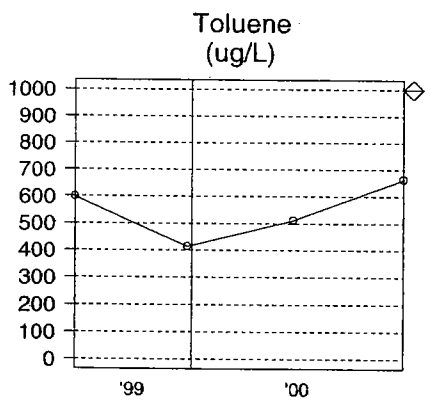
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

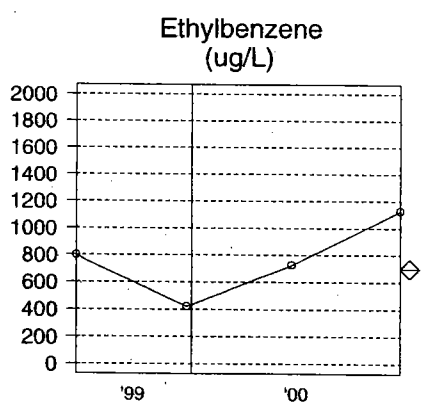
07-25-2000 x:\mtech46\fm\283\gw\283.wsf

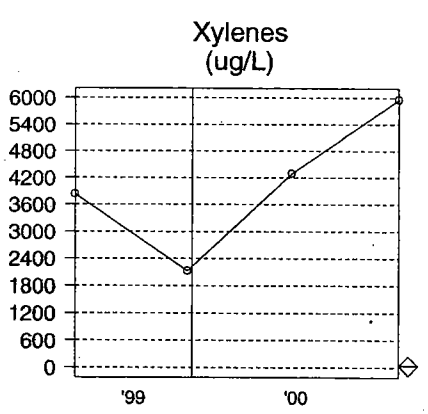


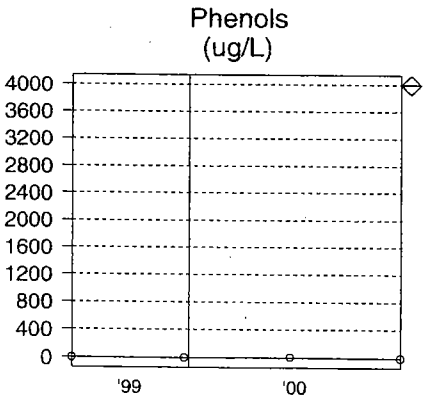


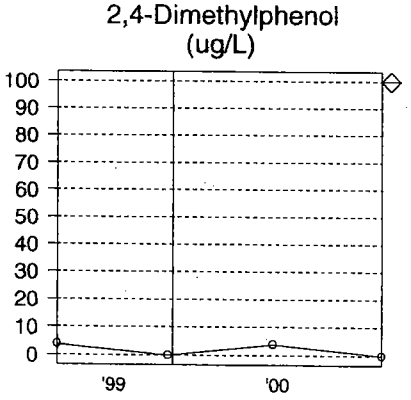


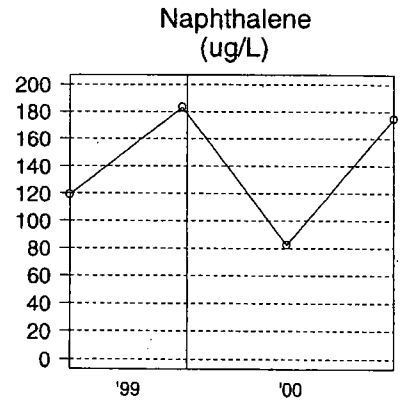












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 06/28/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

07-25-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	2-Methyl naphthalene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Nickel	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	-
NJDEP Criteria:	-	NLE	200	8	300	10	10	50	2	100	-
09/20/1999	FMETL	25.25	309	4.74	2330	22.0	8.76	14.5	ND	4.11	V,S,P,M
12/27/1999	FMETL	26.28	123	ND	2060	6.92	ND	44.0	0.3	3.62	V,S,P,M
03/23/2000	FMETL	7.43	241	ND	2010	15.3	ND	11.9	0.2	6.43	V,S,P,M
06/28/2000	FMETL	25.10	81.4	ND	2130	11.5	ND	8.31	ND	6.01	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 06/28/2000

NOTES:

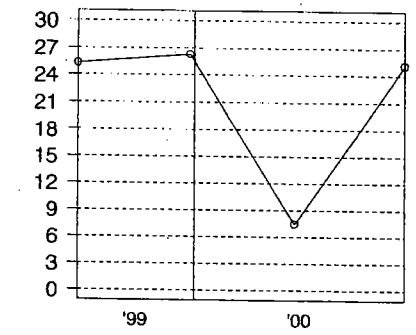
Page 2 of 3.

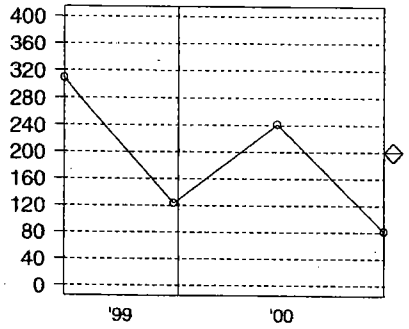
FORT MONMOUTH

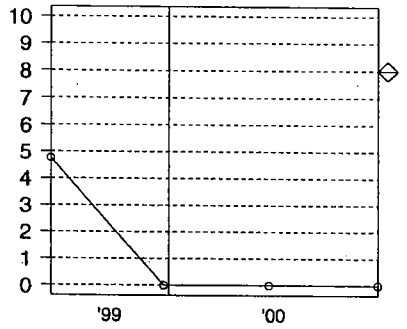
GW MONITORING
BLDG. 283

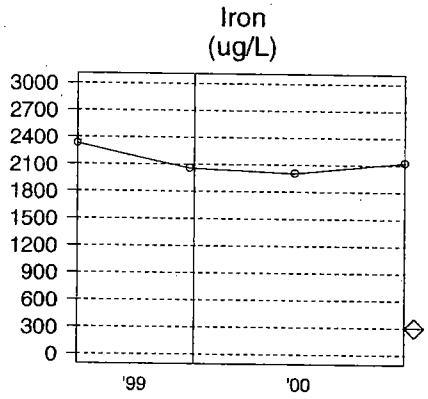
Well 1 of 3

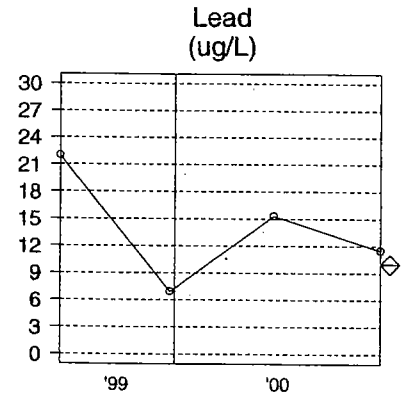
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

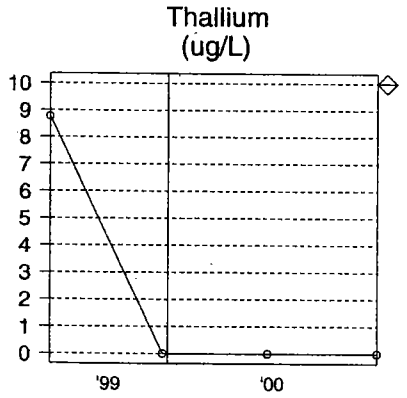


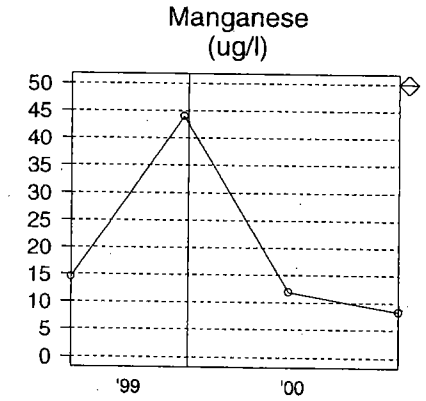


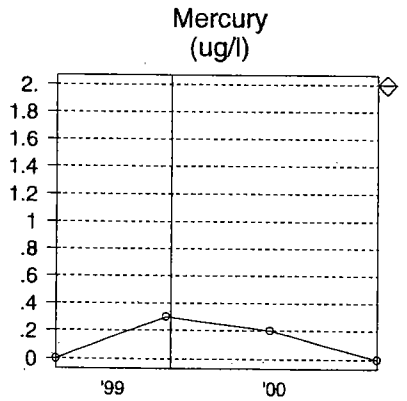


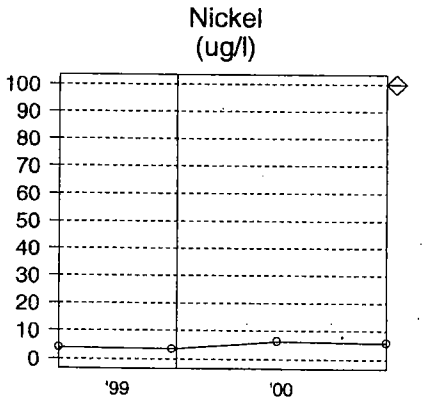












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 06/28/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

07-25-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Selenium	Depth to Water								Notes
Units:	-	ug/l	Feet								-
NJDEP Criteria:	-	50	NLE								-
09/20/1999	FMETL	6.49	7.20								V,S,P,M
12/27/1999	FMETL	4.73	6.81								V,S,P,M
03/23/2000	FMETL	7.29	6.38								V,S,P,M
06/28/2000	FMETL	4.36	7.83								V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 06/28/2000

NOTES:

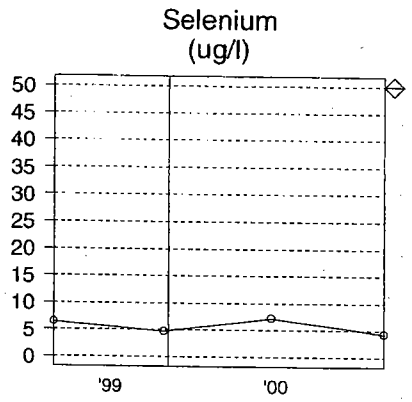
Page 3 of 3.

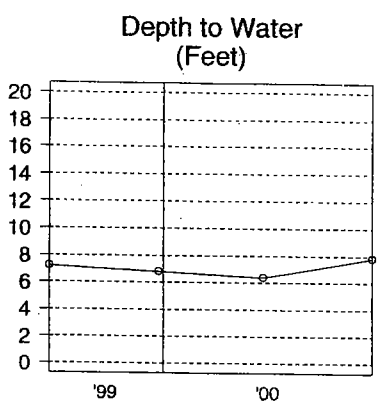
FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV





SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 06/28/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

07-25-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Iron	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	1	200	300	50	100	NLE				-
06/28/2000	FMETL	9.25	3920	21000	36.9	9.39	7.12				V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 06/28/2000

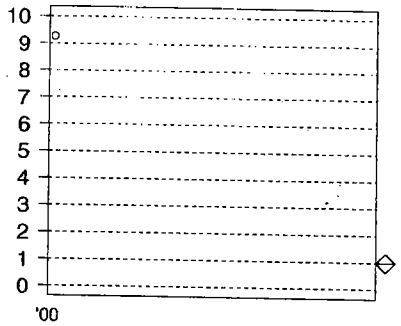
NOTES:

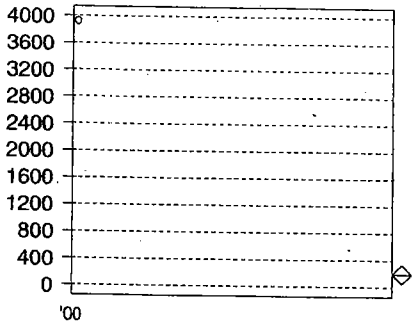
FORT MONMOUTH

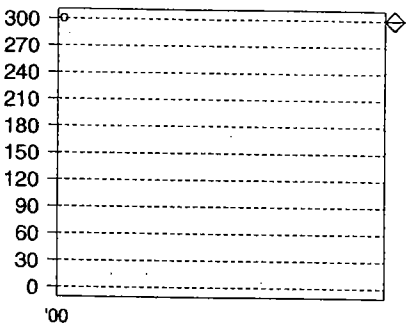
GW MONITORING
BLDG. 283

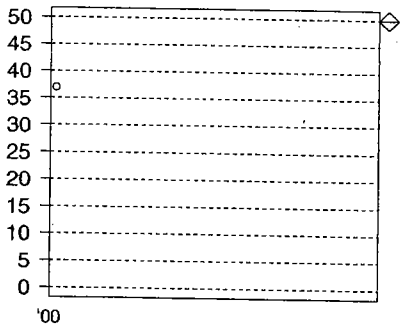
Well 3 of 3

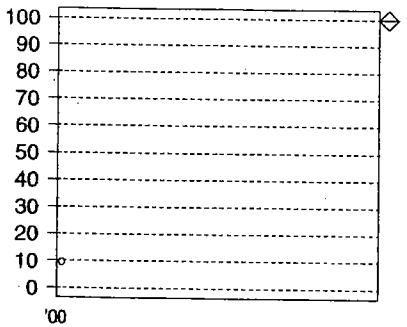
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

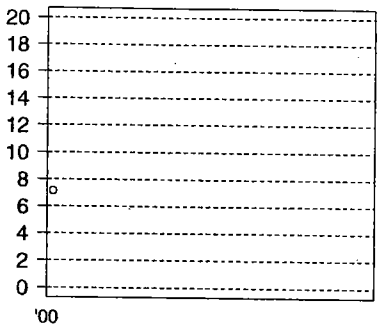












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 06/28/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 3 of 3; Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

07-25-2000 x:\mtech46\fm\283\gw\283.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. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5619.01	0283MW01	29-40367	08/10/00
5619.02	0283MW02	29-40887	08/10/00
5619.03	0283MW03	29-41650	08/10/00

NJDEP Laboratory Certification # 13461

9-6-00

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. Hallow/UST DERA
Phone #: x216223
( )DERA ( )OMA ( )Other:_____
Project No:
Location: 1122 New Wells Rnd 1
Samplers Name / Company: Corey McCormack, TVS

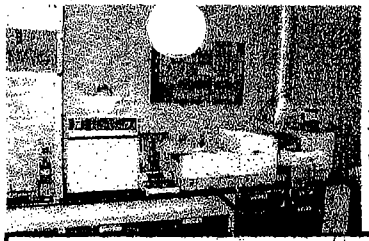
Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA +15	TAL MTLS	Pest/PCB	BNA +25				Hnu Read	Remarks / Preservation Method
30620.01	Trip	8/10/00	0737	AQ	2	✓							—	
.02	Field Blank		1100		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	1122 mw 03		1120		5	✓	✓	✓	✓				0.0	~~29-33754~~
.05	1122 mw 04		1110		5	✓	✓	✓	✓				0.0	~~29-33754~~
.06	1122 mw 05 *	↓	1126	↓	5	✓	✓	✓	✓				0.0	

Comments: HCL/HNO_3/<4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/10/00 1600				
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 T/FB/D w/ 283 Qtly wells Sine date. cm
Tide: L→T



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
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells 3rd 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 + 25				Hnu Read	Remarks / Preservation Method
56191 .01	283 MW 01	8/10/00	1505	AQ	5	✓	✓	✓	✓				0.0	29-40367
.02	283 MW 02	↓	1446	↓	5	✓	✓	✓	✓				0.0	29-40887
.03	283 MW 03	↓	1540	↓	5	✓	✓	✓	✓				0.0	29-41650

Analysis Parameters

Comments: HCL / HNO_3 / 4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/10/00 1600	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 T/F6 10 from 1122 New wells some diff. con
Tide: N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/10/00
WEATHER: Sunny, warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 5.54 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 14.21 ft
(14.21) X .65 X 3 =27.70
GALLONS OF H2O TO BE PURGED: 23 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 3.84 su
TEMP 19.5 °C
DISSOLVED O2 5.91 ppm
SPECIFIC CONDUCTIVITY 259 us/cm

PURGE END TIME: 13:04
pH 3.72 su
TEMP 19.3 °C
DISSOLVED O2 4.09 ppm
SPECIFIC CONDUCTIVITY 256 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 5.95 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 28 gal

SAMPLE START TIME: 15:05
pH 3.70 su
TEMP 19.3 °C
DISSOLVED O2 4.07 ppm
SPECIFIC CONDUCTIVITY 256 us/cm

SAMPLE END TIME: 15:10

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/10/00
WEATHER: Sunny, warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.28 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.41 ft
(13.41) X .65 X 3 =26.14
GALLONS OF H2O TO BE PURGED: 26 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: 12:52
pH 5.29 su — TEMP 23.7 °C
DISSOLVED O2 5.89 ppm — SPECIFIC CONDUCTIVITY 756 us/cm

PURGE END TIME: 14:45
pH 5.26 su — TEMP 22.3 °C
DISSOLVED O2 4.17 ppm — SPECIFIC CONDUCTIVITY 757 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.37 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 26 gal

SAMPLE START TIME: 14:46
pH 5.25 su — TEMP 22.4 °C
DISSOLVED O2 4.11 ppm — SPECIFIC CONDUCTIVITY 756 us/cm

SAMPLE END TIME: 14:53

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/10/00
WEATHER: Sunny, warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.41 ft
DEPTH OF WELL: 24.51 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 18.10 ft
(18.10) X .65 X 3 = 35.29
GALLONS OF H2O TO BE PURGED: 35 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 5.80 su — TEMP 19.9 °C
DISSOLVED O2 5.98 ppm — SPECIFIC CONDUCTIVITY 113.4 us/cm

PURGE END TIME: 15:39
pH 5.76 su — TEMP 19.1 °C
DISSOLVED O2 4.27 ppm — SPECIFIC CONDUCTIVITY 113.9 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 8.61 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 35 gal

SAMPLE START TIME: 15:40
pH 5.75 su — TEMP 19.0 °C
DISSOLVED O2 4.23 ppm — SPECIFIC CONDUCTIVITY 113.8 us/cm

SAMPLE END TIME: 15:47

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	**VB007872.D**	Sample Name	**Vblk235**
Operator	**Skelton**	Field ID	**Vblk235**
Date Acquired	**14 Aug 2000 12:10 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.: **Vblk235**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk235

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007872.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/14/00

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	**VB007907.D**	Sample Name	**Vblk236**
Operator	**Skelton**	Field ID	**Vblk236**
Date Acquired	**17 Aug 2000 10:17 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk236**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk236

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007907.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/17/00

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	**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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk237**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5620 Location: 1122 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: 8/10/00

% 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	VB007914.D	Sample Name	5620.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	17 Aug 2000 3:38 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	9.08	8197109	1582.15 ug/L	700	1.36 ug/L	B
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	16.42	60055	1.95 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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007918.D	Sample Name	5620.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	23 Aug 2000 7:38 pm	Sample Multiplier	50

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	92.50 ug/L	
107131	Acrylonitrile			not detected	50	139.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	426.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	8.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	12.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	84.00 ug/L	
74-87-3	Chloromethane			not detected	30	58.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	53.00 ug/L	
74-83-9	Bromomethane			not detected	10	55.00 ug/L	
75-00-3	Chloroethane			not detected	nle	50.50 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	25.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	12.00 ug/L	
67-64-1	Acetone	9.07	960237	3299.56 ug/L	700	68.00 ug/L	D
75-15-0	Carbon Disulfide			not detected	nle	23.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	12.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	8.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	6.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	39.00 ug/L	
78-93-3	2-Butanone			not detected	300	31.00 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	8.50 ug/L	
67-66-3	Chloroform			not detected	6	15.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	11.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	23.50 ug/L	
71-43-2	Benzene			not detected	1	11.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	9.00 ug/L	
79-01-6	Trichloroethene			not detected	1	11.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	20.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	27.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	32.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	34.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	29.50 ug/L	
108-88-3	Toluene			not detected	1000	18.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	43.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	24.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	16.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	35.50 ug/L	
126-48-1	Dibromochloromethane			not detected	10	43.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	19.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	32.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	57.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	31.00 ug/L	
100-42-5	Styrene			not detected	100	28.00 ug/L	
75-25-2	Bromoform			not detected	4	35.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	23.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	27.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	28.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	32.00 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Trip Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5620 Location: 1122 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5620.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007914.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/17/00

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	VB007915.D	Sample Name	5620.02
Operator	Skelton	Field ID	Field Blank
Date Acquired	17 Aug 2000 4:19 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	9.08	18058652	3746.05 ug/L	700	1.36 ug/L	B
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	16.42	56012	1.96 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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007919.D	Sample Name	5620.02
Operator	Skelton	Field ID	Field Blank
Date Acquired	23 Aug 2000 8:18 pm	Sample Multiplier	50

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	92.50 ug/L	
107131	Acrylonitrile			not detected	50	139.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	426.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	8.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	12.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	84.00 ug/L	
74-87-3	Chloromethane			not detected	30	58.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	53.00 ug/L	
74-83-9	Bromomethane			not detected	10	55.00 ug/L	
75-00-3	Chloroethane			not detected	nle	50.50 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	25.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	12.00 ug/L	
67-64-1	Acetone	9.08	378692	1342.19 ug/L	700	68.00 ug/L	D
75-15-0	Carbon Disulfide			not detected	nle	23.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	12.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	8.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	6.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	39.00 ug/L	
78-93-3	2-Butanone			not detected	300	31.00 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	8.50 ug/L	
67-66-3	Chloroform			not detected	6	15.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	11.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	23.50 ug/L	
71-43-2	Benzene			not detected	1	11.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	9.00 ug/L	
79-01-6	Trichloroethene			not detected	1	11.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	20.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	27.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	32.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	34.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	29.50 ug/L	
108-88-3	Toluene			not detected	1000	18.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	43.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	24.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	16.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	35.50 ug/L	
126-48-1	Dibromochloromethane			not detected	10	43.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	19.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	32.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	57.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	31.00 ug/L	
100-42-5	Styrene			not detected	100	28.00 ug/L	
75-25-2	Bromoform			not detected	4	35.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	23.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	27.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	28.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	32.00 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5620 Location: 1122 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5620.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007915.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/17/00

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	**VB007910.D**	Sample Name	**5619.01**
Operator	**Skelton**	Field ID	**0283MW01**
Date Acquired	**17 Aug 2000 12:56 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5619.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007910.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/17/00

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	**VB007883.D**	Sample Name	**5619.02**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**15 Aug 2000 8:46 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	9.09	144347	15.55 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	18.77	13892042	112.95 ug/L	1	0.23 ug/L	E
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	23.78	27599490	213.08 ug/L	1000	0.37 ug/L	E
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	27.62	38374751	263.30 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.83	40645838	667.31 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.92	42776281	403.90 ug/L	nle	0.62 ug/L	E
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

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007908.D**	Sample Name	**5619.02**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**17 Aug 2000 11:18 am**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	18.50 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	
71-43-2	Benzene	18.84	1101405	152.00 ug/L	1	2.30 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	5.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	
108-88-3	Toluene	23.85	2908765	381.19 ug/L	1000	3.70 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	
126-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	
100-41-4	Ethylbenzene	27.69	8312274	1040.91 ug/L	700	6.50 ug/L	E D
1330-20-7	m+p-Xylenes	27.88	9943066	2979.34 ug/L	nle	11.40 ug/L	E D
1330-20-7	o-Xylene	28.98	11573370	1994.40 ug/L	nle	6.20 ug/L	D
100-42-5	Styrene			not detected	100	5.60 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB007909.D**	Sample Name	**5619.02**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**17 Aug 2000 12:15 pm**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.81	471730	130.80 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.81	1233220	324.70 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.65	3593968	717.50 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.84	4218199	2015.04 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.94	5043502	1385.61 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5619.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007883.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/15/00

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: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.50	270	J
2. 000109-66-0	Pentane	7.34	250	JN
3. 000107-83-5	Pentane, 2-methyl-	10.73	220	JN
4.	unknown	11.74	260	J
5. 000110-54-3	Hexane	12.78	150	JN
6. 000096-37-7	Cyclopentane, methyl-	15.36	540	JN
7. 000110-82-7	Cyclohexane	17.62	530	JN
8. 000108-87-2	Cyclohexane, methyl-	20.63	260	JN
9. 000620-14-4	Benzene, 1-ethyl-3-methyl-	30.99	680	JN
10. 000108-67-8	Benzene, 1,3,5-trimethyl-	31.13	340	JN
11. 000620-14-4	Benzene, 1-ethyl-3-methyl-	31.74	240	JN
12.	unknown	32.07	770	J
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	33.17	340	JN
14.	unknown hydrocarbon	33.68	110	J
15. 000496-11-7	Indane	33.90	240	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VB007911.D	Sample Name	5619.03
Operator	Skelton	Field ID	0283MW03
Date Acquired	17 Aug 2000 1:37 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	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	18.80	684286	11.76 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			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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **0283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5619.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB007911.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: not dec. Date Analyzed: 8/17/00

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	**BNA04357.D**	Sample Name	**Sblk409**
Operator	**Bhaskar**	Misc Info	**Sblk409 A 000814**
Date Acquired	**14-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	**BNA04357.D**	Sample Name	**Sblk409**
Operator	**Bhaskar**	Misc Info	**Sblk409 A 000814**
Date Acquired	**14-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: **Sblk409**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Sblk409

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04357.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/14/00

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	6.89	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04362.D**	Sample Name	**5620.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**14-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
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Data File Name	**BNA04362.D**	Sample Name	**5620.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**14-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.: 5620 Location: 1122 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5620.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04362.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/14/00

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	6.88	6	J
2. 001892-12-2	Cyclododecanemethanol	33.02	18	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04359.D**	Sample Name	**5619.01**
Operator	**Bhaskar**	Misc Info	**283MW01**
Date Acquired	**14-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
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Data File Name	**BNA04359.D**	Sample Name	**5619.01**
Operator	**Bhaskar**	Misc Info	**283MW01**
Date Acquired	**14-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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5619.01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04359.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/14/00

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	6.89	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04360.D**	Sample Name	**5619.02**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**14-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	11.68	20690	1.17 ug/L	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	12.60	23679	1.48 ug/L	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	13.27	3635595	101.97 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	14.92	620361	25.13 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			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	

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Data File Name	**BNA04360.D**	Sample Name	**5619.02**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**14-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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5619.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04360.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/14/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 001462-03-9	Cyclopentanol, 1-methyl-	5.71	40	JN
2.	unknown	6.64	49	J
3.	unknown	6.85	170	J
4. 000098-82-8	Benzene, (1-methylethyl)-	8.61	28	JN
5.	unknown	8.68	36	J
6. 000104-63-2	Ethanol, 2-[(phenylmethyl)amino]-	9.18	30	JN
7. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.35	270	JN
8. 000095-36-3	1,2,4-Trimethylbenzene	9.48	150	JN
9. 000095-63-6	Benzene, 1,2,4-trimethyl-	9.97	340	JN
10. 000108-67-8	Benzene, 1,3,5-trimethyl-	10.49	170	JN
11. 000496-11-7	Indane	10.74	92	JN
12. 001074-43-7	Benzene, 1-methyl-3-propyl-	10.96	51	JN
13. 025340-17-4	Benzene, diethyl-	11.03	16	JN
14. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.08	44	JN
15. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.41	26	JN
16. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	11.44	23	JN
17. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.56	41	JN
18. 000488-23-3	Benzene, 1,2,3,4-tetramethyl-	12.08	23	JN
19. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	12.15	30	JN
20. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	12.48	40	JN
21. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	12.68	65	JN
22. 022393-99-3	9-Octadecenoic acid (Z)-, 9-hexa	33.03	24	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04361.D**	Sample Name	**5619.03**
Operator	**Bhaskar**	Misc Info	**283MW03**
Date Acquired	**14-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	**BNA04361.D**	Sample Name	**5619.03**
Operator	**Bhaskar**	Misc Info	**283MW03**
Date Acquired	**14-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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5619 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5619.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04361.D

Level: (low/med) LOW Date Received: 8/10/00

% Moisture: decanted: (Y/N) N Date Extracted: 8/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/14/00

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	6.89	5	J
2. 003687-45-4	9-Octadecenoic acid (Z)-, 9-octad	33.04	40	JN

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK562
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	8/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/14/00
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
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 # :**	5620.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/10/00
	Bldg. 173	**Extraction Date:**	8/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/14/00
Analysis:	EPA Method 608	**Location :**	1122 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 # :**	5619.01
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/10/00
	Bldg. 173	**Extraction Date:**	8/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/14/00
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW01
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 # :**	5619.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/10/00
	Bldg. 173	**Extraction Date:**	8/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/14/00
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW02
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 # :**	5619.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	8/10/00
	Bldg. 173	**Extraction Date:**	8/11/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/14/00
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW03
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 #: 5619
Sample Prepared: 08/30/00

Site: 283

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	2.0
Iron	08/30/00	ND	300	2.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	10.0
Manganese	08/30/00	ND	50	0.5
Mercury	08/29/00	ND	2	0.1
Nickel	08/30/00	ND	100	1.0
Potassium	08/30/00	ND	NLE	40.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	1.0
Sodium	08/30/00	109	50000	20.0
Thallium	08/30/00	ND	10	2.0
Vanadium	08/30/00	ND	NLE	0.5
Zinc	08/30/00	8.85	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 #: 5620
Sample Prepared: 08/30/00

Site: 1122

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	2.0
Iron	08/30/00	ND	300	2.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	10.0
Manganese	08/30/00	ND	50	0.5
Mercury	08/29/00	ND	2	0.1
Nickel	08/30/00	ND	100	1.0
Potassium	08/30/00	ND	NLE	40.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	1.0
Sodium	08/30/00	109	50000	20.0
Thallium	08/30/00	ND	10	2.0
Vanadium	08/30/00	ND	NLE	0.5
Zinc	08/30/00	8.85	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 #: 5620.02
Sample Received: 08/10/00
Sample Matrix: Aqueous

Site: 1122

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	2.0
Iron	08/30/00	ND	300	2.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	ND	NLE	10.0
Manganese	08/30/00	ND	50	0.5
Mercury	08/29/00	ND	2	0.1
Nickel	08/30/00	ND	100	1.0
Potassium	08/30/00	ND	NLE	40.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	1.0
Sodium	08/30/00	ND	50000	20.0
Thallium	08/30/00	ND	10	2.0
Vanadium	08/30/00	ND	NLE	0.5
Zinc	08/30/00	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 #: 5619.01
Sample Received: 08/10/00
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	1930	200	10.0
Antimony	08/30/00	3.92	20	2.0
Arsenic	08/30/00	ND	8	2.0
Barium	08/30/00	64.1	2000	0.5
Beryllium	08/30/00	0.562	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	5390	NLE	20.0
Chromium	08/30/00	4.20	100	0.5
Cobalt	08/30/00	3.08	NLE	0.5
Copper	08/30/00	ND	1000	2.0
Iron	08/30/00	739	300	2.0
Lead	08/30/00	2.38	10	2.0
Magnesium	08/30/00	11400	NLE	10.0
Manganese	08/30/00	23.8	50	0.5
Mercury	08/29/00	ND	2	0.1
Nickel	08/30/00	5.91	100	1.0
Potassium	08/30/00	5370	NLE	40.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	1.0
Sodium	08/30/00	25400	50000	20.0
Thallium	08/30/00	ND	10	2.0
Vanadium	08/30/00	1.41	NLE	0.5
Zinc	08/30/00	73.5	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 #: 5619.02
Sample Received: 08/10/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	812	200	10.0
Antimony	08/30/00	4.14	20	2.0
Arsenic	08/30/00	3.40	8	2.0
Barium	08/30/00	21.7	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	1010	NLE	20.0
Chromium	08/30/00	3.31	100	0.5
Cobalt	08/30/00	ND	NLE	0.5
Copper	08/30/00	ND	1000	2.0
Iron	08/30/00	2060	300	2.0
Lead	08/30/00	31.9	10	2.0
Magnesium	08/30/00	532	NLE	10.0
Manganese	08/30/00	5.97	50	0.5
Mercury	08/29/00	ND	2	0.1
Nickel	08/30/00	ND	100	1.0
Potassium	08/30/00	1170	NLE	40.0
Selenium	08/30/00	8.40	50	3.0
Silver	08/30/00	ND	20	1.0
Sodium	08/30/00	10100	50000	20.0
Thallium	08/30/00	ND	10	2.0
Vanadium	08/30/00	2.84	NLE	0.5
Zinc	08/30/00	43.9	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 #: 5619.03
Sample Received: 08/10/00
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/30/00	302	200	10.0
Antimony	08/30/00	ND	20	2.0
Arsenic	08/30/00	3.56	8	2.0
Barium	08/30/00	64.8	2000	0.5
Beryllium	08/30/00	ND	20	0.5
Cadmium	08/30/00	ND	4	0.5
Calcium	08/30/00	10400	NLE	20.0
Chromium	08/30/00	2.22	100	0.5
Cobalt	08/30/00	1.03	NLE	0.5
Copper	08/30/00	ND	1000	2.0
Iron	08/30/00	7090	300	2.0
Lead	08/30/00	ND	10	2.0
Magnesium	08/30/00	1940	NLE	10.0
Manganese	08/30/00	30.8	50	0.5
Mercury	08/29/00	ND	2	0.1
Nickel	08/30/00	2.93	100	1.0
Potassium	08/30/00	ND	NLE	40.0
Selenium	08/30/00	ND	50	3.0
Silver	08/30/00	ND	20	1.0
Sodium	08/30/00	5730	50000	20.0
Thallium	08/30/00	ND	10	2.0
Vanadium	08/30/00	1.17	NLE	0.5
Zinc	08/30/00	33.0	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

LTM

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	7.20
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	6.81
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	6.38
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	7.83
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	6.28

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

NOTES:

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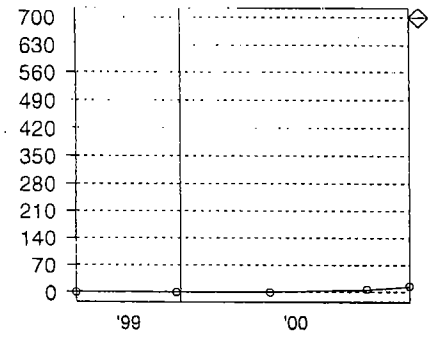
FORT MONMOUTH

GW MONITORING
BLDG. 283

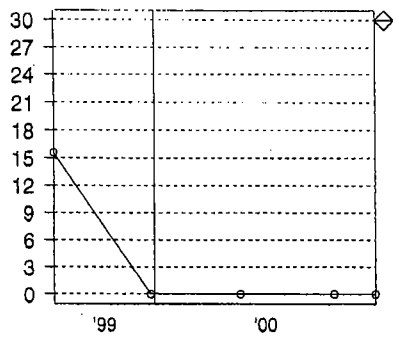
Well 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

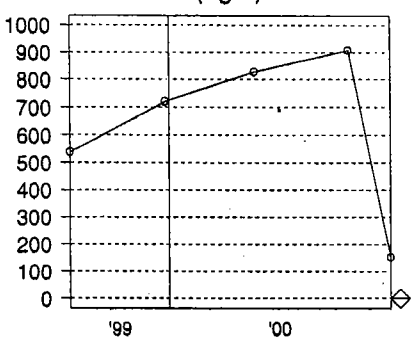
Acetone
(ug/L)



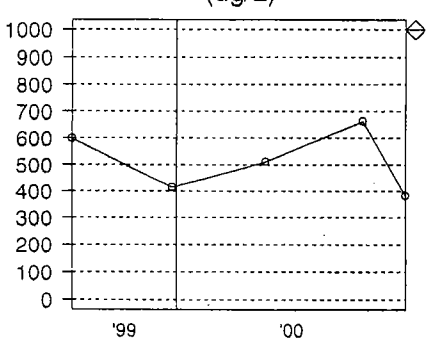
Chloromethane
(ug/L)



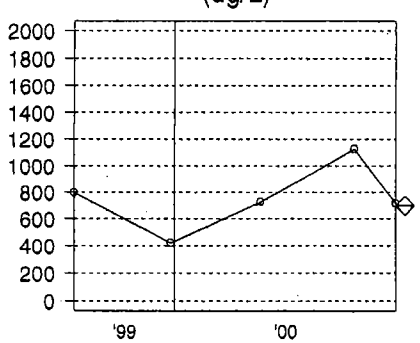
Benzene
(ug/L)



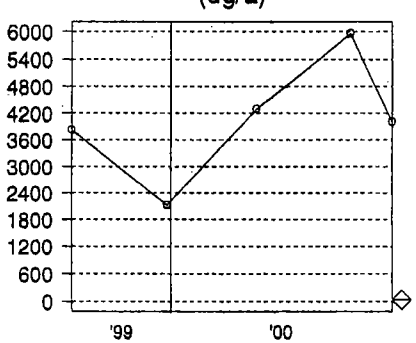
Toluene
(ug/L)



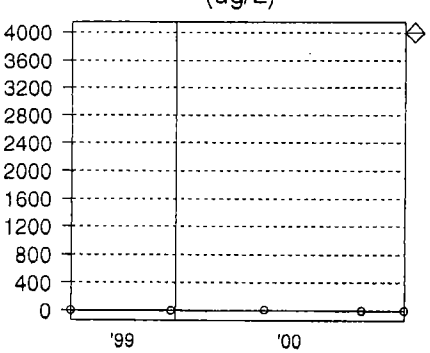
Ethylbenzene
(ug/L)



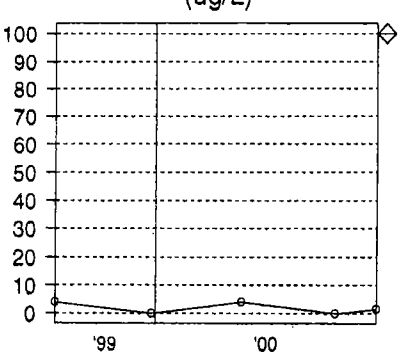
Xylenes
(ug/L)



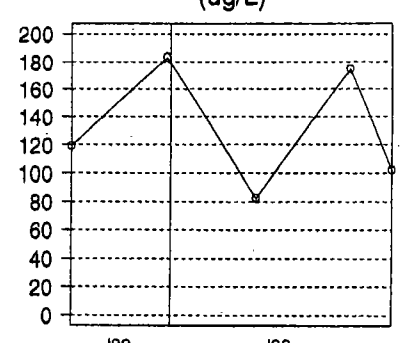
Phenols
(ug/L)



2,4-Dimethylphenol
(ug/L)



Naphthalene
(ug/L)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-01-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	2-Methyl naphthalene	Nitro benzene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	-
NJDEP Criteria:	-	NLE	10	200	8	300	10	10	50	2	-
09/20/1999	FMETL	25.25	ND	309	4.74	2330	22.0	8.76	14.5	ND	7.20
12/27/1999	FMETL	26.28	ND	123	ND	2060	6.92	ND	44.0	0.3	6.81
03/23/2000	FMETL	7.43	ND	241	ND	2010	15.3	ND	11.9	0.2	6.38
06/28/2000	FMETL	25.10	ND	81.4	ND	2130	11.5	ND	8.31	ND	7.83
08/10/2000	FMETL	25.13	1.17	812	3.40	2060	31.9	ND	5.97	ND	6.28

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

NOTES:

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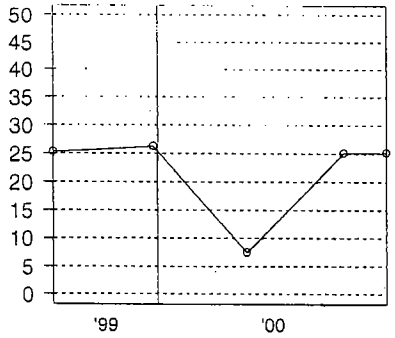
FORT MONMOUTH

GW MONITORING
BLDG. 283

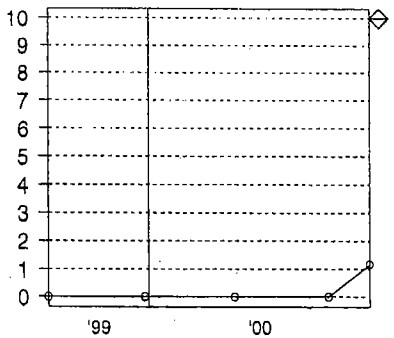
Well 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

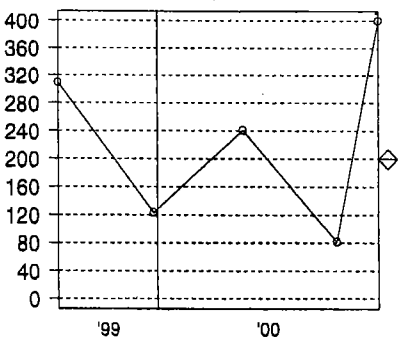
2-Methylnaphthalene
(ug/L)



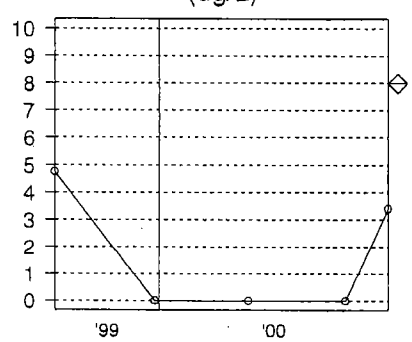
Nitrobenzene
(ug/L)



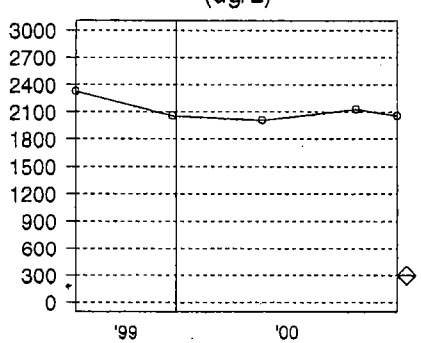
Aluminum
(ug/L)



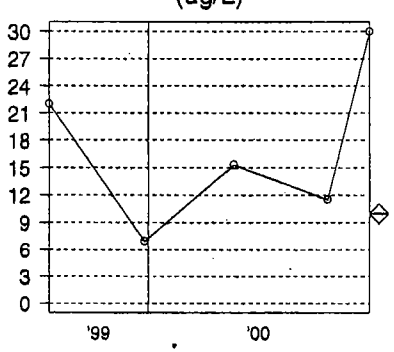
Arsenic
(ug/L)



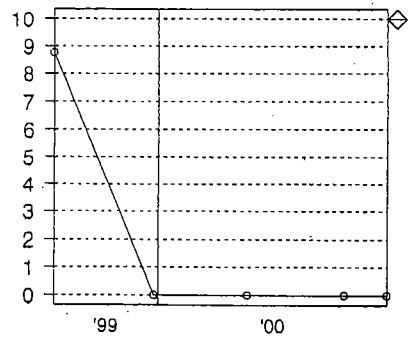
Iron
(ug/L)



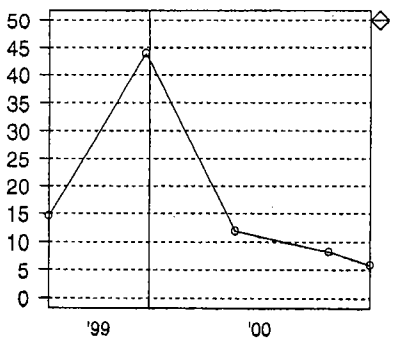
Lead
(ug/L)



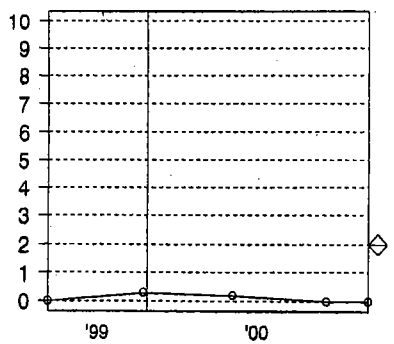
Thallium
(ug/L)



Manganese
(ug/l)



Mercury
(ug/l)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-01-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Nickel	Selenium	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:	-	100	50	NLE							-
09/20/1999	FMETL	4.11	6.49	7.20							7.20
12/27/1999	FMETL	3.62	4.73	6.81							6.81
03/23/2000	FMETL	6.43	7.29	6.38							6.38
06/28/2000	FMETL	6.01	4.36	7.83							7.83
08/10/2000	FMETL	ND	8.40	6.28							6.28

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

NOTES:

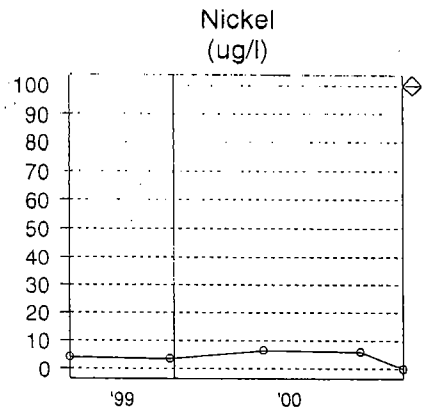
Page 3 of 3.

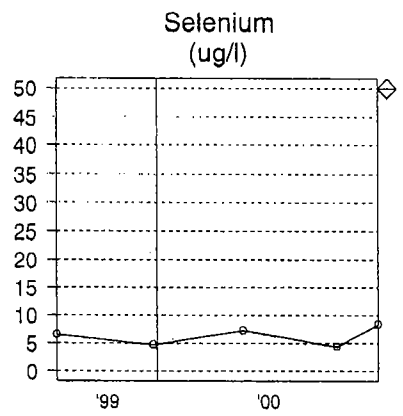
FORT MONMOUTH

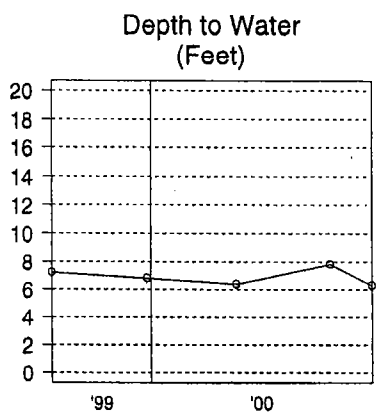
GW MONITORING
BLDG. 283

Well 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV







SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-01-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Aluminum	Iron	Lead	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	200	300	10	50	100	NLE				-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	6.31				6.31
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	5.54				5.54

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 08/10/2000

NOTES:

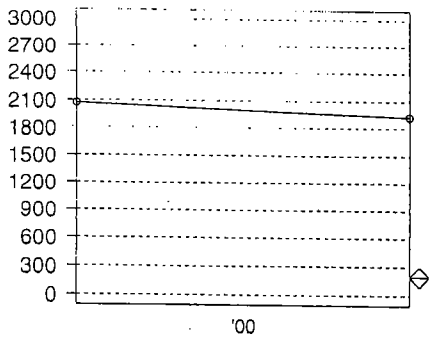
Page 1 of 1.

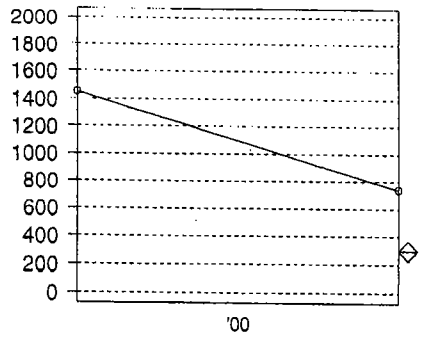
FORT MONMOUTH

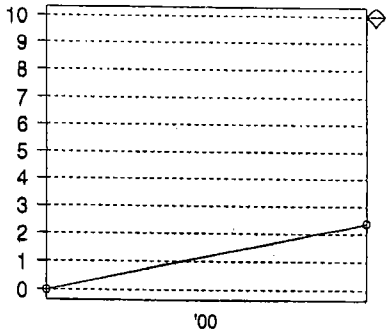
GW MONITORING
BLDG. 283

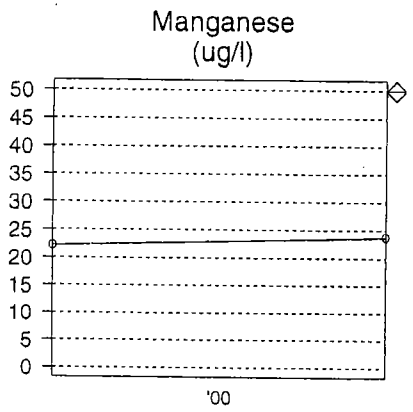
Well 2 of 3

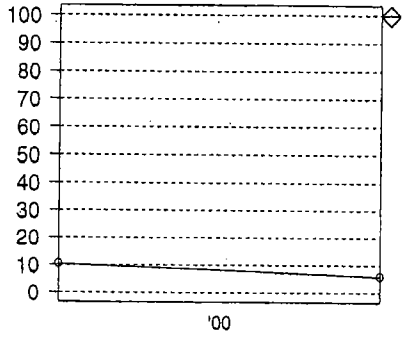
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

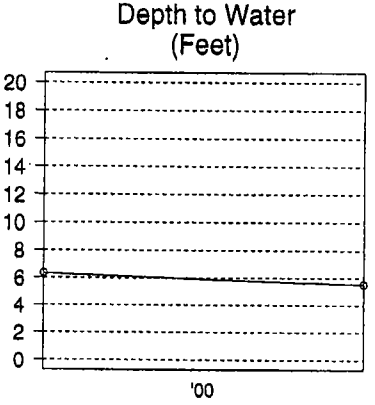












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 08/10/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG: 283

Well 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-01-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	1	200	8	50	100	NLE				-
06/28/2000	FMETL	9.25	3920	ND	36.9	9.39	7.12				7.12
08/10/2000	FMETL	11.76	302	3.56	30.8	2.93	6.41				6.41

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 08/10/2000

NOTES:

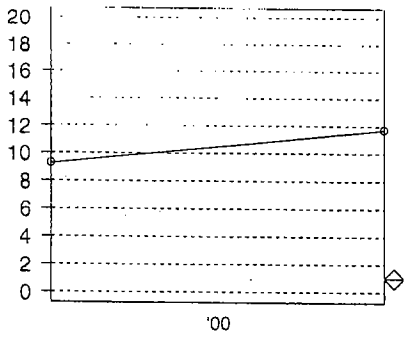
Page 1 of 1.

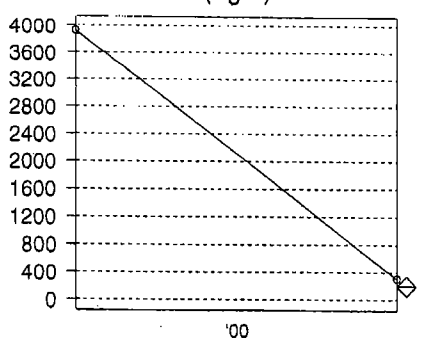
FORT MONMOUTH

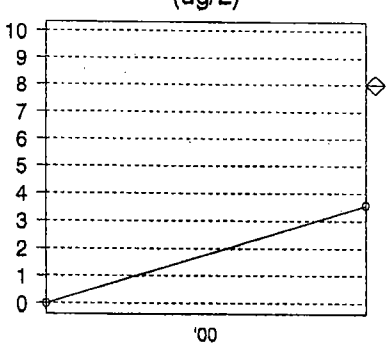
GW MONITORING
BLDG. 283

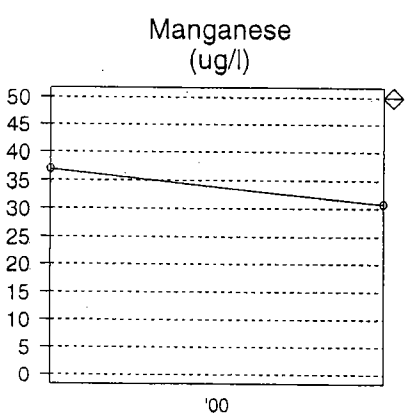
Well 3 of 3

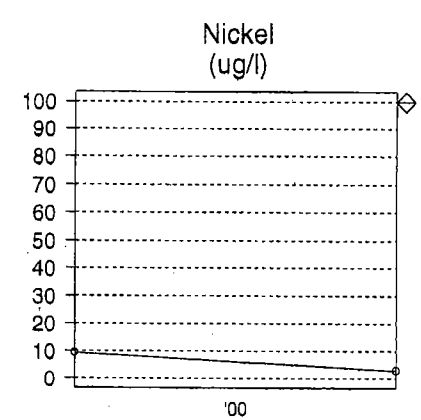
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

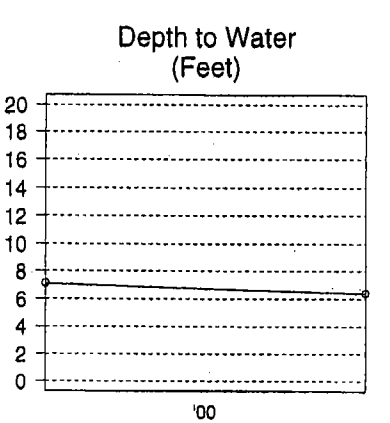












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 08/10/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

09-01-2000 x:\mtech46\fm\283\gw\283.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
Low Flow/Round I

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5681.03	0283MW01	29-40367	08/31/00
5681.04	0283MW02	29-40887	08/31/00
5681.02	0283MW03	29-41650	08/31/00

NJDEP Laboratory Certification # 13461

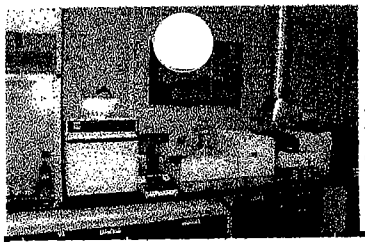
9-21-00

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 #: 26223
(√)DERA ( )OMA ( )Other:_____
Project No: Low Flow
Location: Bldg. 283
Samplers Name / Company: Mark Laura - TVS. PWS07

Lab Sample I.D.		Sample Location	Date	Time	Sample Type	# bottles	TAL METALS								Comments: Remarks / Preservation Method
5768	1	F.B.	8-31-00	0940	AQ.	1	X								HNO3
1	2	283MW03		1055											
	3	283MW01		1220											
	4	283MW02		1355											
	5	F.D.	↓	—	↓	↓	↓								↓

Analysis Parameters

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	8-31-00 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: (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. 283
MW#: 0283MW01
NJDEP ID#29-40367
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Mark Laura
DATE: 08/31/00
WEATHER: Overcast, hot, and humid.
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 2.4 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: 5.75 ft
Before Purge Start: 5.75 ft **Previous Day: 5.73 ft** **After Sampling: 5.65 ft**
DEPTH OF WELL: 19.7 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 15 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 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: 11:25
pH 3.41 su
DISSOLVED O_2 0.02 mg/L
TEMP 20.50 °C
SPECIFIC CONDUCTIVITY 415.3 ms/cm

PURGE END TIME: 12:21
pH 3.48 su
DISSOLVED O_2 0.01 mg/L
TEMP 19.80 °C
SPECIFIC CONDUCTIVITY 411.6 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 5.65 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 12:16
pH 3.48 su
DISSOLVED O_2 0.01 mg/L
TEMP 19.80 °C
SPECIFIC CONDUCTIVITY 411.4 ms/cm

SAMPLE END TIME: 12:20
ANALYTES: TAL Metals
COMMENTS:

FIELD READINGS

MW: 0283MW01
NJDEP ID#: 29-40367
DATE: 8/31/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
11:30	3.41	20.5	379.6	415.3	0.02	3	5.9	350	Clear
11:35	3.42	20.46	379.5	415.6	0.02	2.94	5.95	350	Clear
11:40	3.45	20.43	379.3	415.5	0.01	2.54	5.95	350	Clear
11:45	3.46	20.3	377.5	414.8	0.01	2.64	5.95	350	Clear
11:50	3.47	20.22	376.6	414.4	0.01	2.32	5.95	350	Clear
11:55	3.47	20.31	376.6	413.7	0.01	1.93	5.95	350	Clear
12:00	3.47	20.04	373.9	413.1	0.01	1.97	5.95	350	Clear
12:05	3.48	19.91	371.9	411.9	0.01	1.59	5.95	350	Clear
12:10	3.48	19.88	371.4	411.6	0.01	1.59	5.95	350	Clear
12:15	3.48	19.8	370.6	411.4	0.01	1.49	5.95	350	Clear

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1130	3.00	5.9	350
1135	2.94	5.95	350
1140	2.54	5.95	350
1145	2.64	5.95	350
1150	2.32	5.95	350
1155	1.93	5.95	350
1200	1.98	5.95	350
1205	1.97	5.95	350
1210	1.59	5.95	350
1215	1.49	5.95	350

283mw1

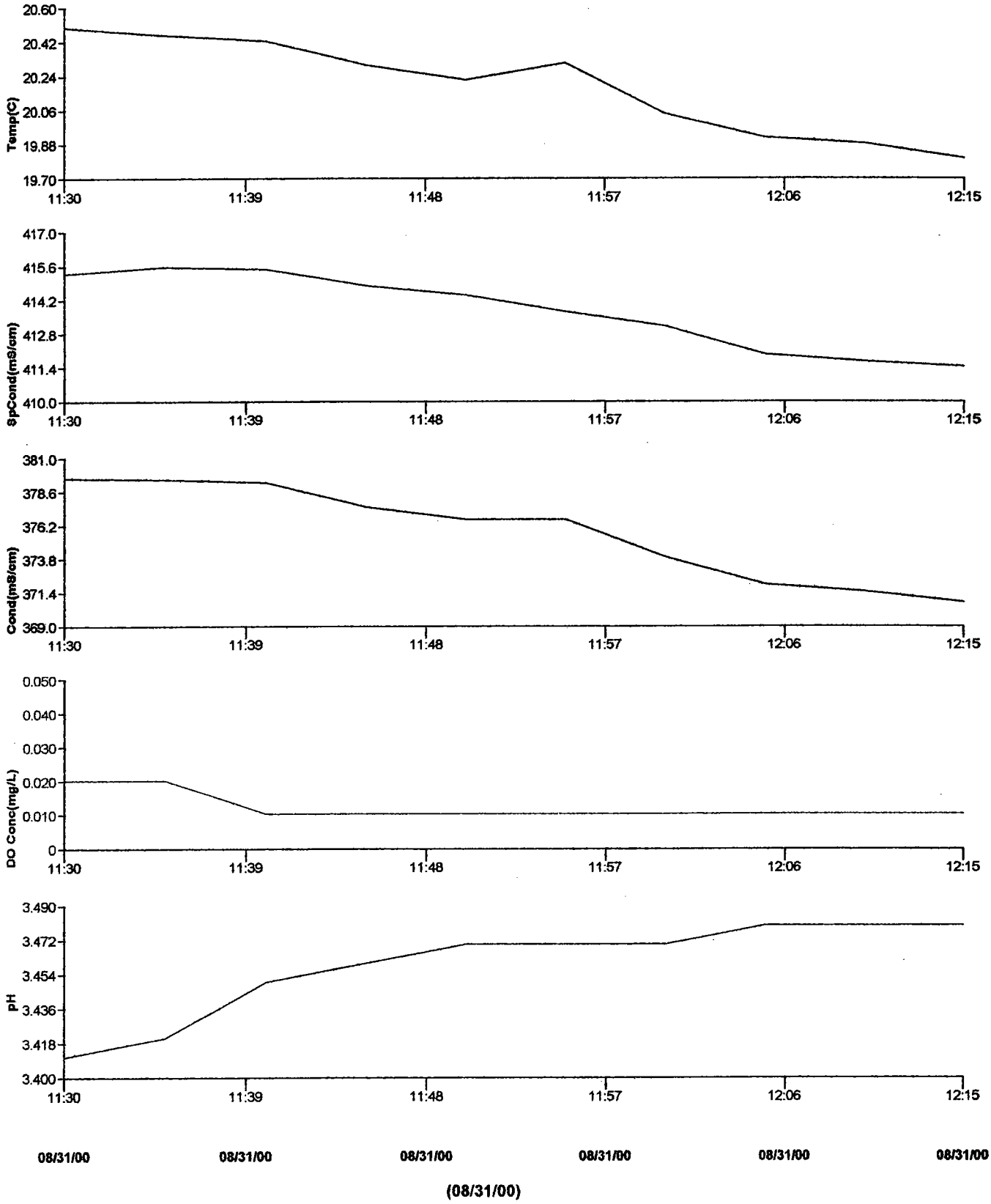
283MW1 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 08/31/00 11:30 to 08/31/00 12:15
Number of samples: 10

08/31/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
08/31/00 11:30	20.50	415.300	379.600	0.02	3.41
08/31/00 11:35	20.46	415.600	379.500	0.02	3.42
08/31/00 11:40	20.43	415.500	379.300	0.01	3.45
08/31/00 11:45	20.30	414.800	377.500	0.01	3.46
08/31/00 11:50	20.22	414.400	376.600	0.01	3.47
08/31/00 11:55	20.31	413.700	376.600	0.01	3.47
08/31/00 12:00	20.04	413.100	373.900	0.01	3.47
08/31/00 12:05	19.91	411.900	371.900	0.01	3.48
08/31/00 12:10	19.88	411.600	371.400	0.01	3.48
08/31/00 12:15	19.80	411.400	370.600	0.01	3.48

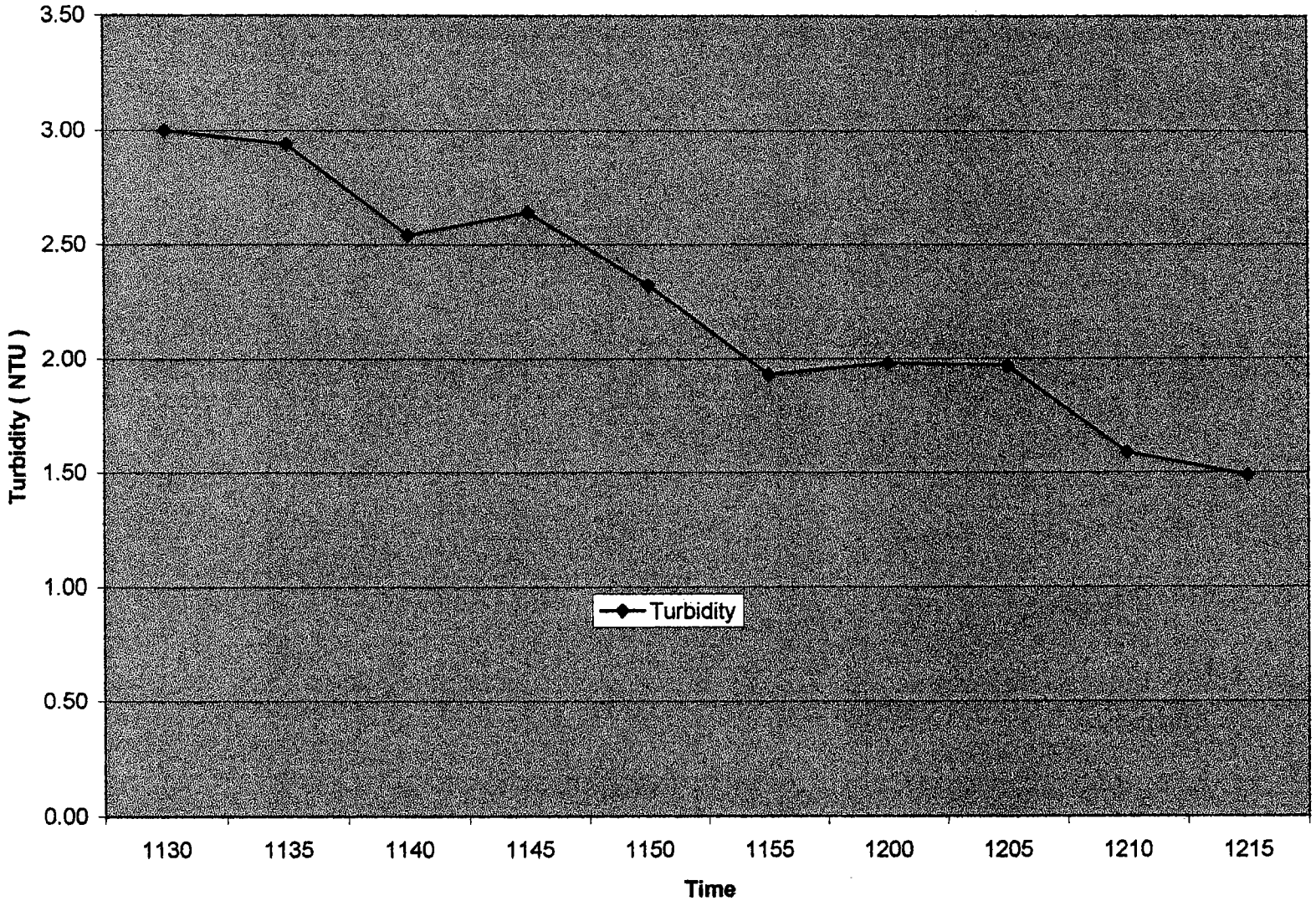
283MW1 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH

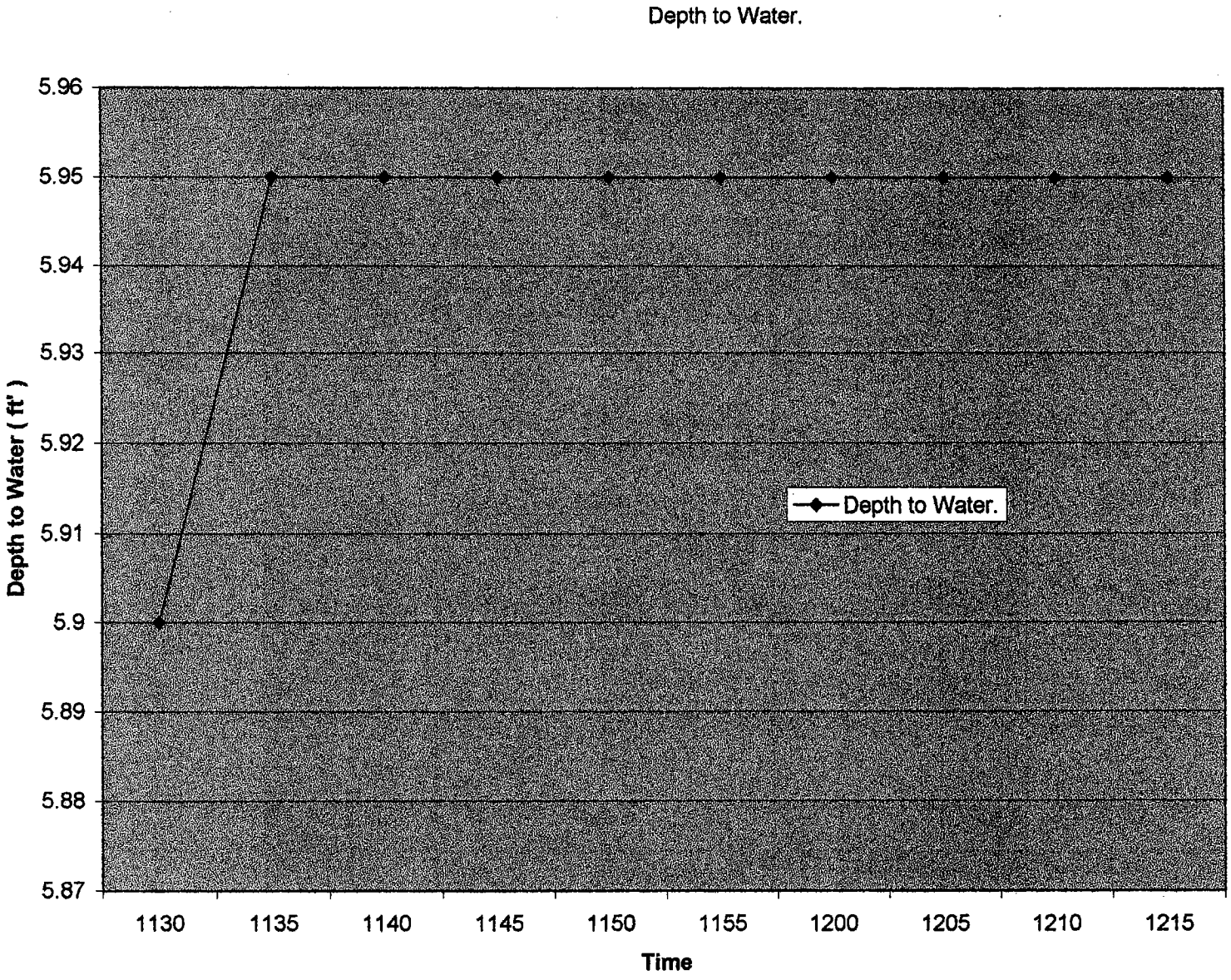


BLDG283
Permit #: 29-40367
8/31/00

Turbidity

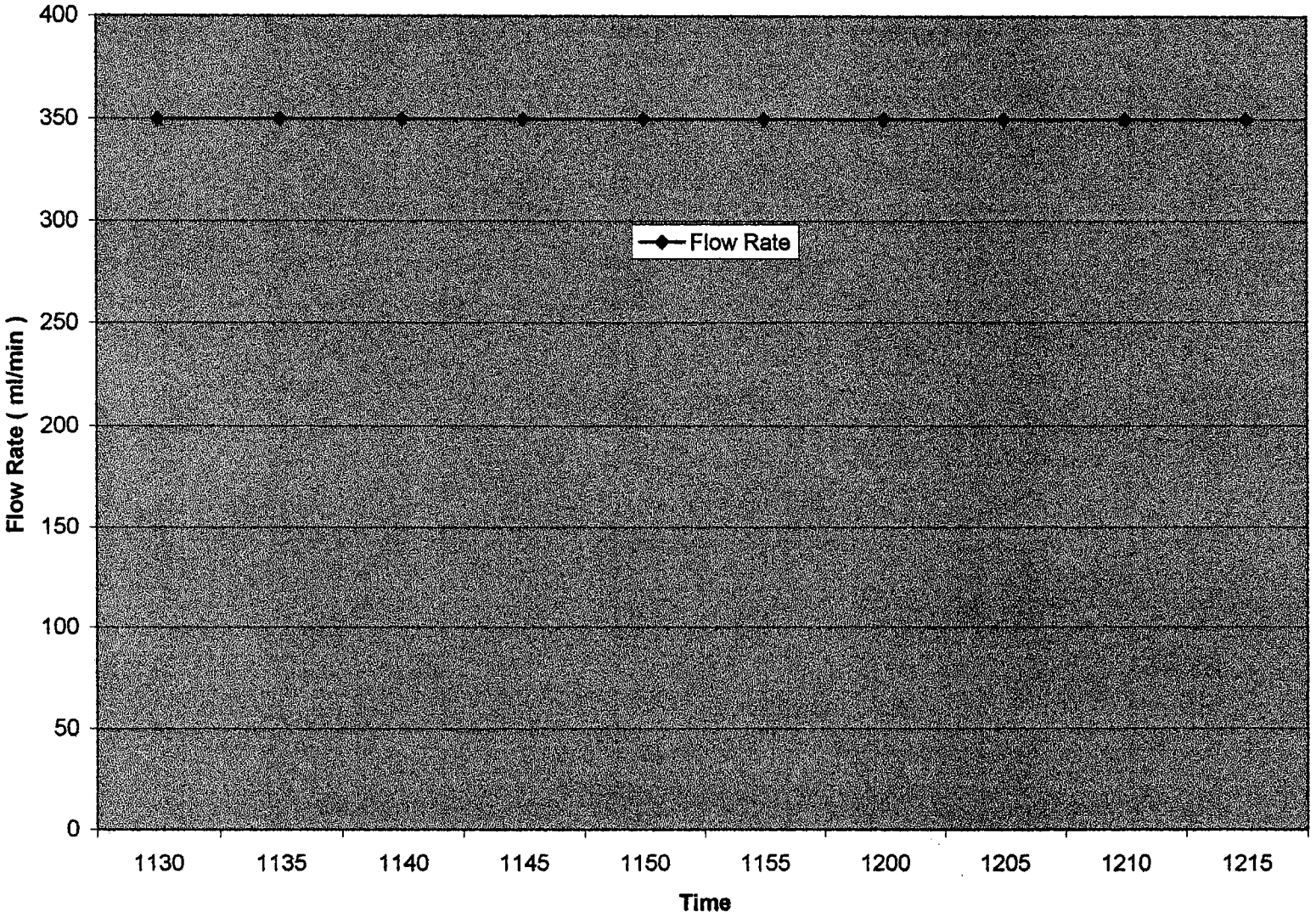


BLDG283
Permit #: 29-40367
8/31/00



BLDG283
Permit #: 29-40367
8/31/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg. 283
MW#: 0283MW02
NJDEP ID#29-40887
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Mark Laura
DATE: 08/31/00
WEATHER: Overcast, sun showers and humid.
TIDE: N/A
WELL CONDITION: Good
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 2.4 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: 6.82 ft
Before Purge Start: 6.82 ft **Previous Day: 6.80 ft** **After Sampling: 7.65 ft**
DEPTH OF WELL: 19.65 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 15 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 300 mL/Min or Gal/Min. (ml to gal.: ml(.0002642)=gal)
PURGE RATE: gpm
Hnu READING: 10 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 13:10
pH 4.84 su
TEMP 18.01 °C
DISSOLVED O_2 0.28 mg/L
SPECIFIC CONDUCTIVITY 87.58 ms/cm

PURGE END TIME: 13:56
pH 4.82 su
TEMP 18.12 °C
DISSOLVED O_2 0.14 mg/L
SPECIFIC CONDUCTIVITY 87.96 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 7.65 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 13:51
pH 4.81 su
TEMP 18.20 °C
DISSOLVED O_2 0.13 mg/L
SPECIFIC CONDUCTIVITY 87.96 ms/cm

SAMPLE END TIME: 13:55
ANALYTES: TAL Metals
COMMENTS: Gasoline odor while bailing.

FIELD READINGS

MW: 0283MW02
NJDEP ID#: 29-40887
DATE: 8/31/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
13:15	4.84	18.01	75.89	97.58	0.28	5.67	7.11	300	Clear
13:25	4.82	18.04	75.77	87.39	0.21	5.16	7.35	300	Clear
13:25	4.82	18.19	75.75	87.08	0.2	5.41	7.35	300	Clear
13:30	4.82	18.34	75.86	86.93	0.19	5.17	7.35	300	Clear
13:35	4.83	18.27	75.58	86.72	0.17	4.97	7.35	300	Clear
13:40	4.82	18.26	76.33	87.6	0.15	5.25	7.35	300	Clear
13:45	4.82	18.12	76.75	88.37	0.14	5.67	7.35	300	Clear
13:50	4.81	18.2	76.54	87.96	0.13	5.6	7.35	300	Clear

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1315	5.67	7.11	300
1320	5.16	7.35	300
1325	5.41	7.35	300
1330	5.17	7.35	300
1335	4.97	7.35	300
1340	5.25	7.35	300
1345	5.67	7.35	300
1350	5.60	7.35	300

283mw2

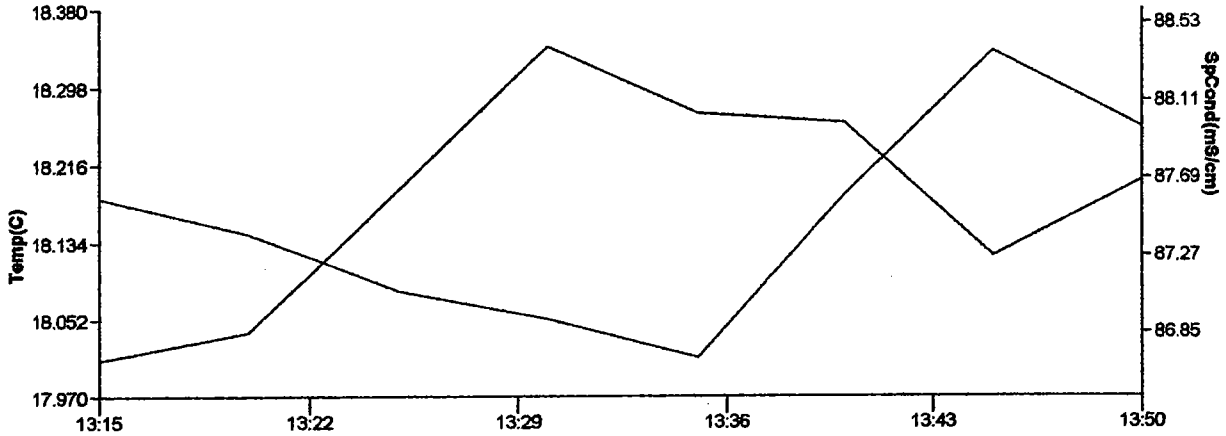
283MW2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

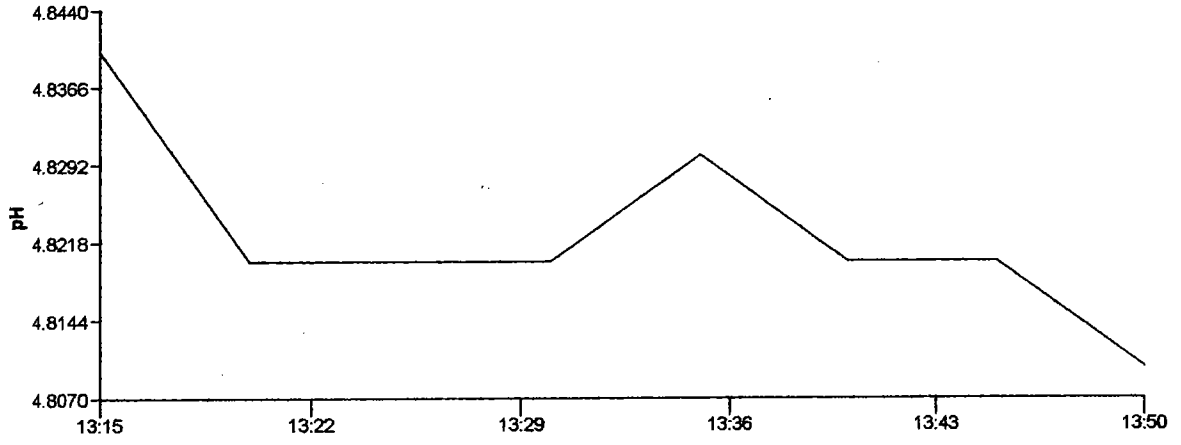
From 08/31/00 13:15 to 08/31/00 13:50
Number of samples: 8

08/31/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
08/31/00 13:15	18.01	87.580	75.890	0.28	4.84
08/31/00 13:20	18.04	87.390	75.770	0.21	4.82
08/31/00 13:25	18.19	87.080	75.750	0.20	4.82
08/31/00 13:30	18.34	86.930	75.860	0.19	4.82
08/31/00 13:35	18.27	86.720	75.580	0.17	4.83
08/31/00 13:40	18.26	87.600	76.330	0.15	4.82
08/31/00 13:45	18.12	88.370	76.750	0.14	4.82
08/31/00 13:50	18.20	87.960	76.540	0.13	4.81

283MW2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH



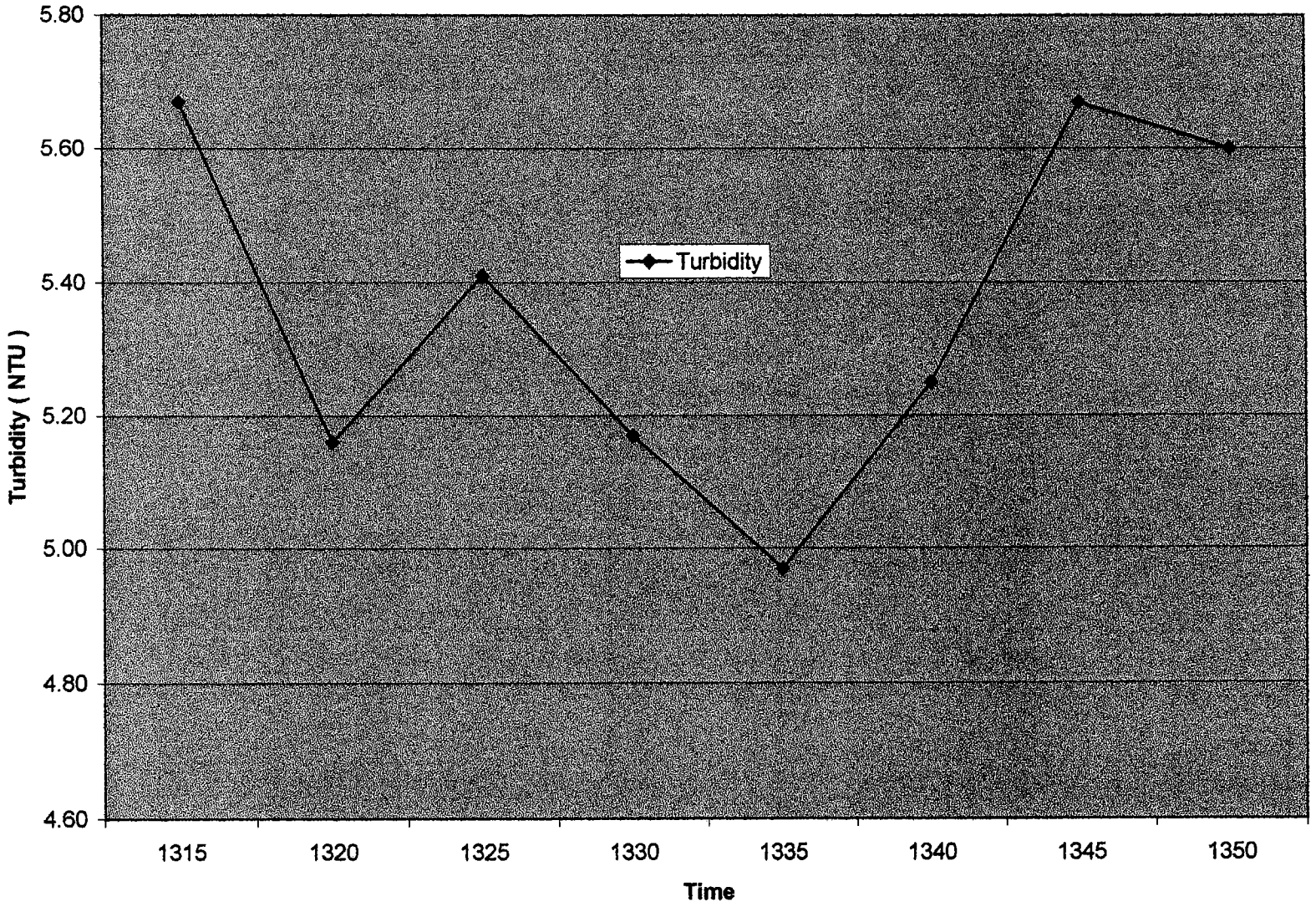


08/31/00 08/31/00 08/31/00 08/31/00 08/31/00 08/31/00

(08/31/00)

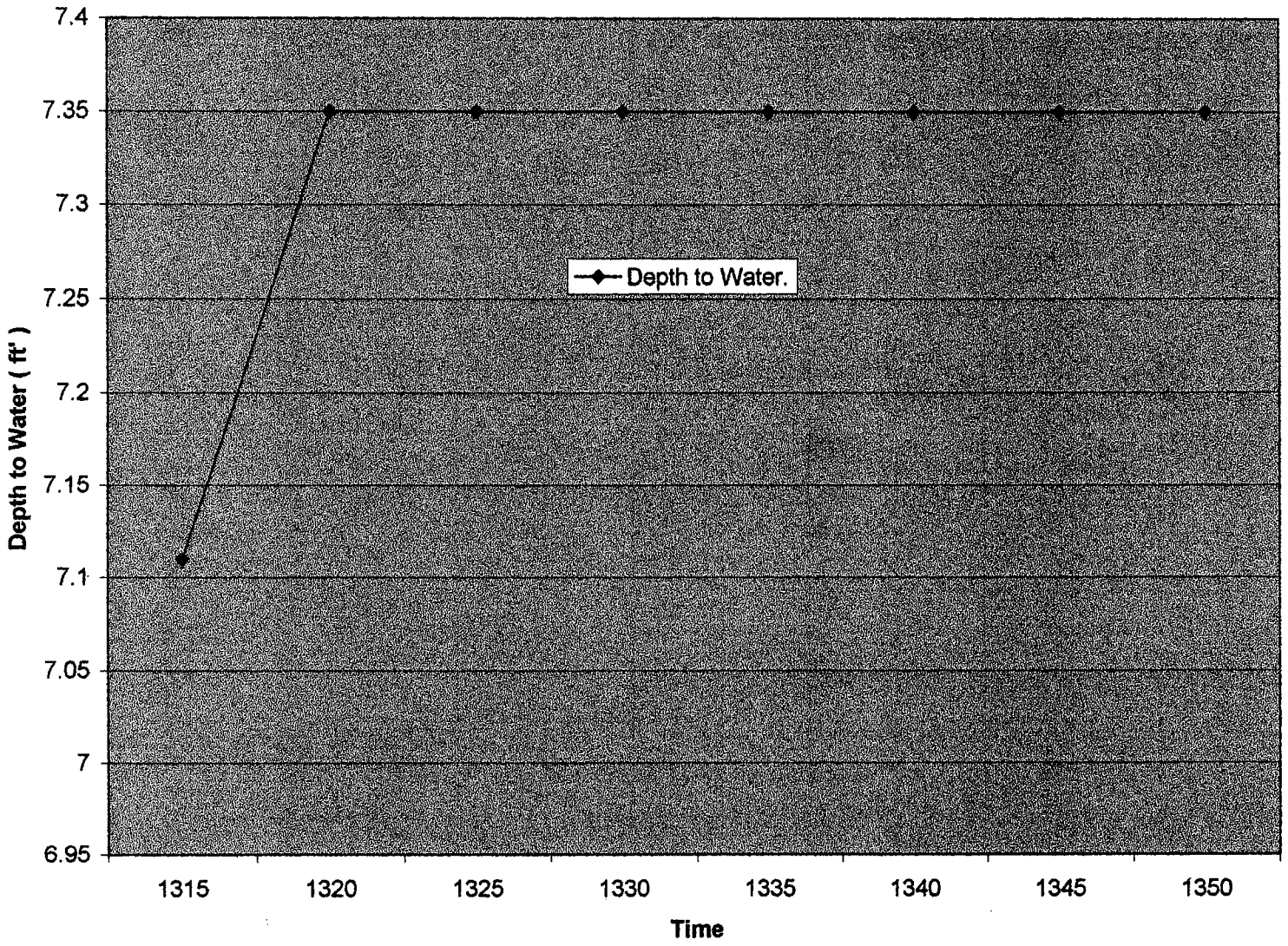
BLDG283MW02
Permit #: 29-40887
8/31/00

Turbidity



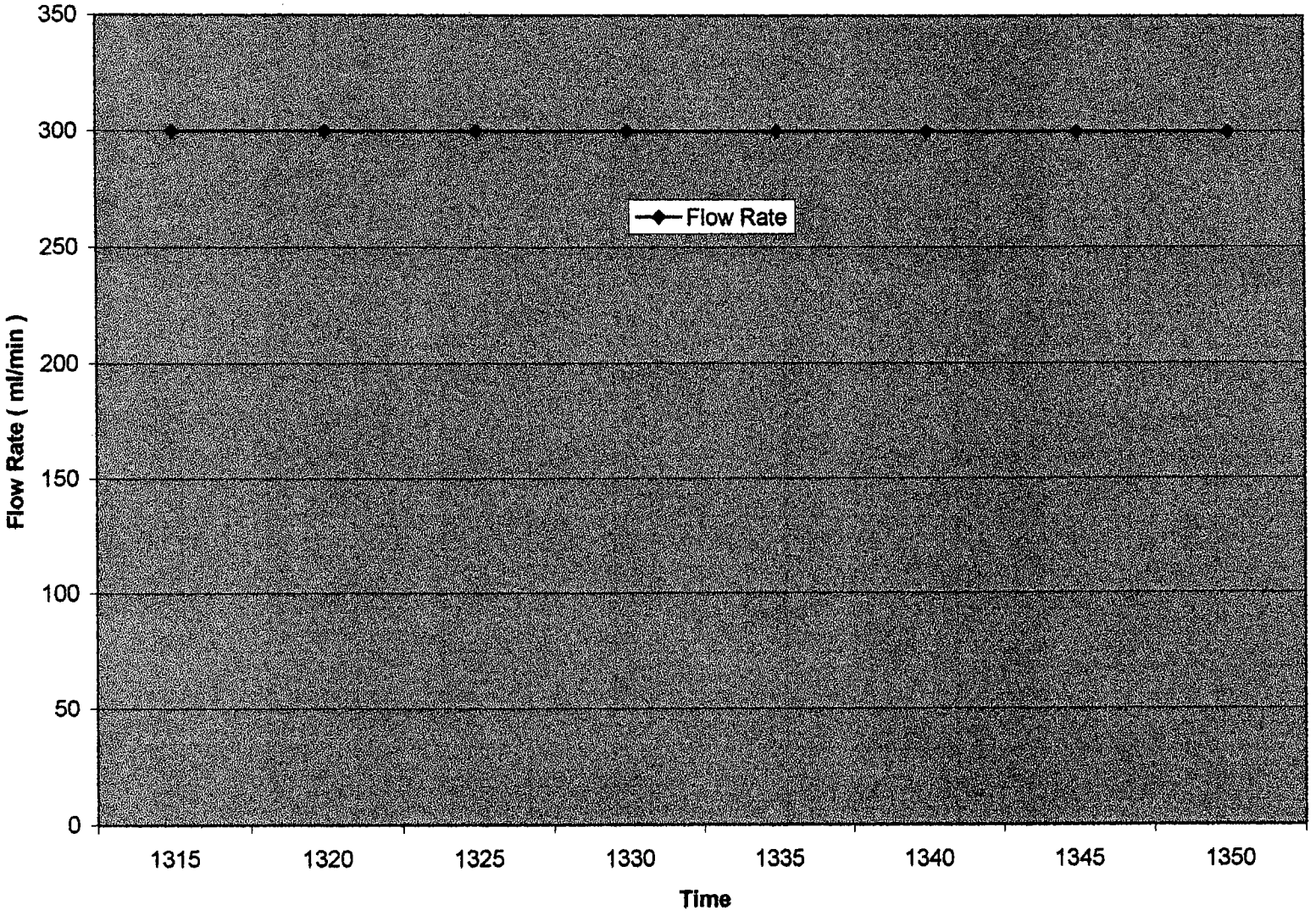
BLDG283
Permit #: 29-40887
8/31/00

Depth to Water.



BLDG283
Permit #: 29-40887
8/31/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg. 283
MW#: 0283MW03
NJDEP ID#29-41650
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Mark Laura
DATE: 08/31/00
WEATHER: Overcast, and humid.
TIDE: N/A

Hnu Calibration: Span 2.4 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

WELL CONDITION: Flush mount/Good.
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 6.7 ft
Before Purge Start: 6.7 ft **Previous Day: 6.7 ft** **After Sampling: 6.95 ft**
DEPTH OF WELL: 25.45 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 21 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 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: 09:45
pH 5.37 su
DISSOLVED O_2 0.37 mg/L
TEMP 18.37 °C
SPECIFIC CONDUCTIVITY 148.5 ms/cm

PURGE END TIME: 10:56
pH 5.40 su
DISSOLVED O_2 0.09 mg/L
TEMP 18.54 °C
SPECIFIC CONDUCTIVITY 144.9 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 6.95 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 10:51
pH 5.40 su
DISSOLVED O_2 0.09 mg/L
TEMP 18.54 °C
SPECIFIC CONDUCTIVITY 144.9 ms/cm

SAMPLE END TIME: 10:55
ANALYTES: TAL Metals
COMMENTS:

FIELD READINGS

MW: 0283MW03
NJDEP ID#: 29-41650
DATE: 8/31/00

Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
10:00	5.37	18.37	129.7	148.5	0.37	4.93	6.95	350	Clear
10:05	5.36	18.45	129.1	147.6	0.29	5.85	7	350	Clear
10:10	5.38	18.55	129.5	147.7	0.23	7.16	7	350	Clear
10:15	5.4	18.81	129.1	146.4	0.18	6.97	7	350	Clear
10:20	5.4	18.62	128.6	146.5	0.15	6.65	7	350	Clear
10:25	5.41	18.62	128.2	146	0.13	5.83	7	350	Clear
10:30	5.42	18.58	128.2	146.2	0.12	5.01	7	350	Clear
10:35	5.41	18.66	128.3	146.3	0.11	4.46	7	350	Clear
10:40	5.4	18.63	128.2	145.9	0.1	3.9	7	350	Clear
10:45	5.4	18.6	127.1	144.8	0.1	4	7	350	Clear
10:50	5.4	18.54	127	144.9	0.09	3.89	7	350	Clear

Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1000	4.93	6.95	350
1005	5.85	7	350
1010	7.16	7	350
1015	6.97	7	350
1020	6.65	7	350
1025	5.83	7	350
1030	5.01	7	350
1035	4.46	7	350
1040	3.90	7	350
1045	4.00	7	350
1050	3.89	7	350

283mw3

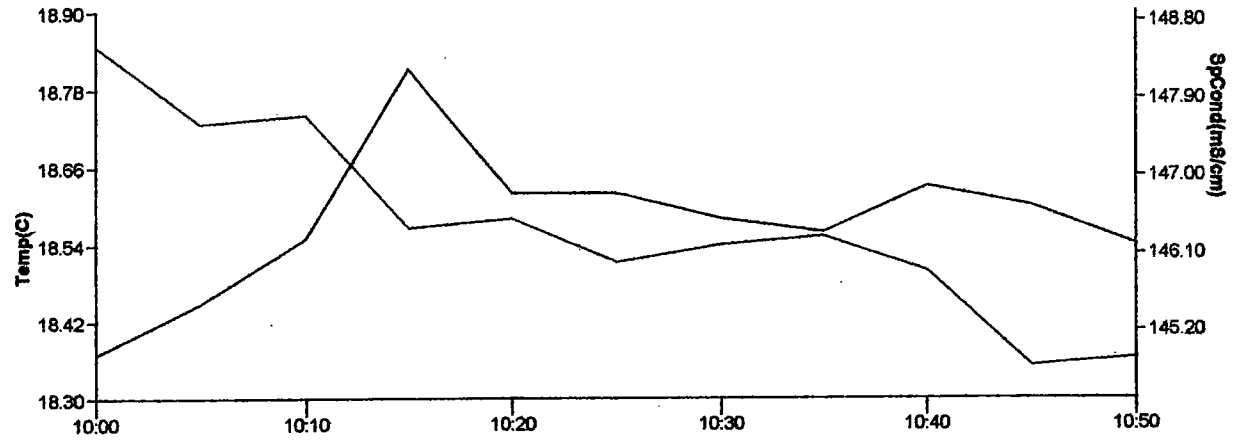
283MW3 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

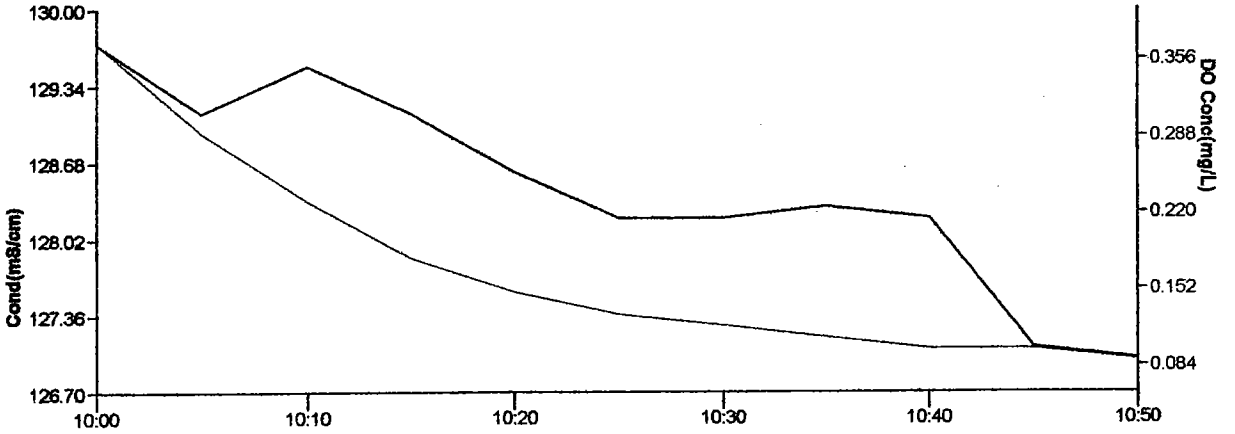
From 08/31/00 10:00 to 08/31/00 10:50
Number of samples: 11

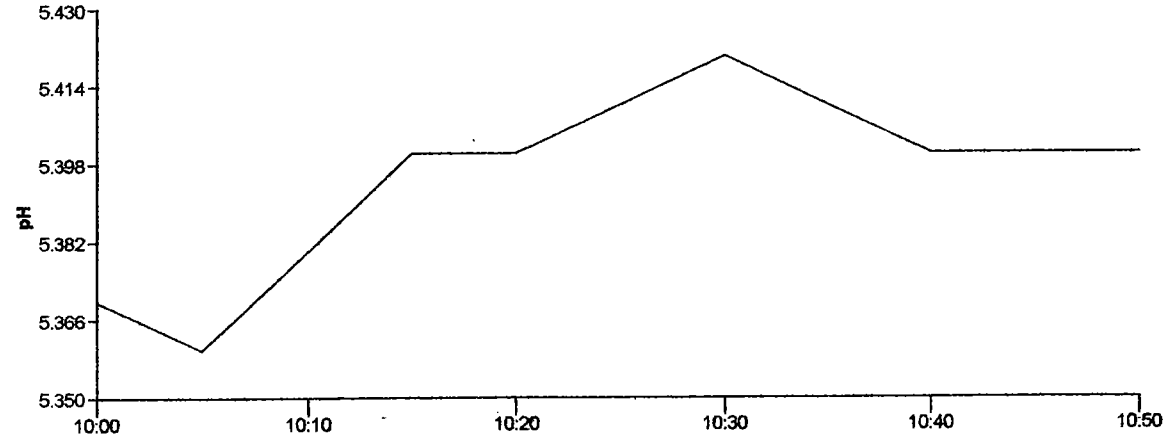
08/31/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
08/31/00 10:00	18.37	148.500	129.700	0.37	5.37
08/31/00 10:05	18.45	147.600	129.100	0.29	5.36
08/31/00 10:10	18.55	147.700	129.500	0.23	5.38
08/31/00 10:15	18.81	146.400	129.100	0.18	5.40
08/31/00 10:20	18.62	146.500	128.600	0.15	5.40
08/31/00 10:25	18.62	146.000	128.200	0.13	5.41
08/31/00 10:30	18.58	146.200	128.200	0.12	5.42
08/31/00 10:35	18.56	146.300	128.300	0.11	5.41
08/31/00 10:40	18.63	145.900	128.200	0.10	5.40
08/31/00 10:45	18.60	144.800	127.100	0.10	5.40
08/31/00 10:50	18.54	144.900	127.000	0.09	5.40

283MW3 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH



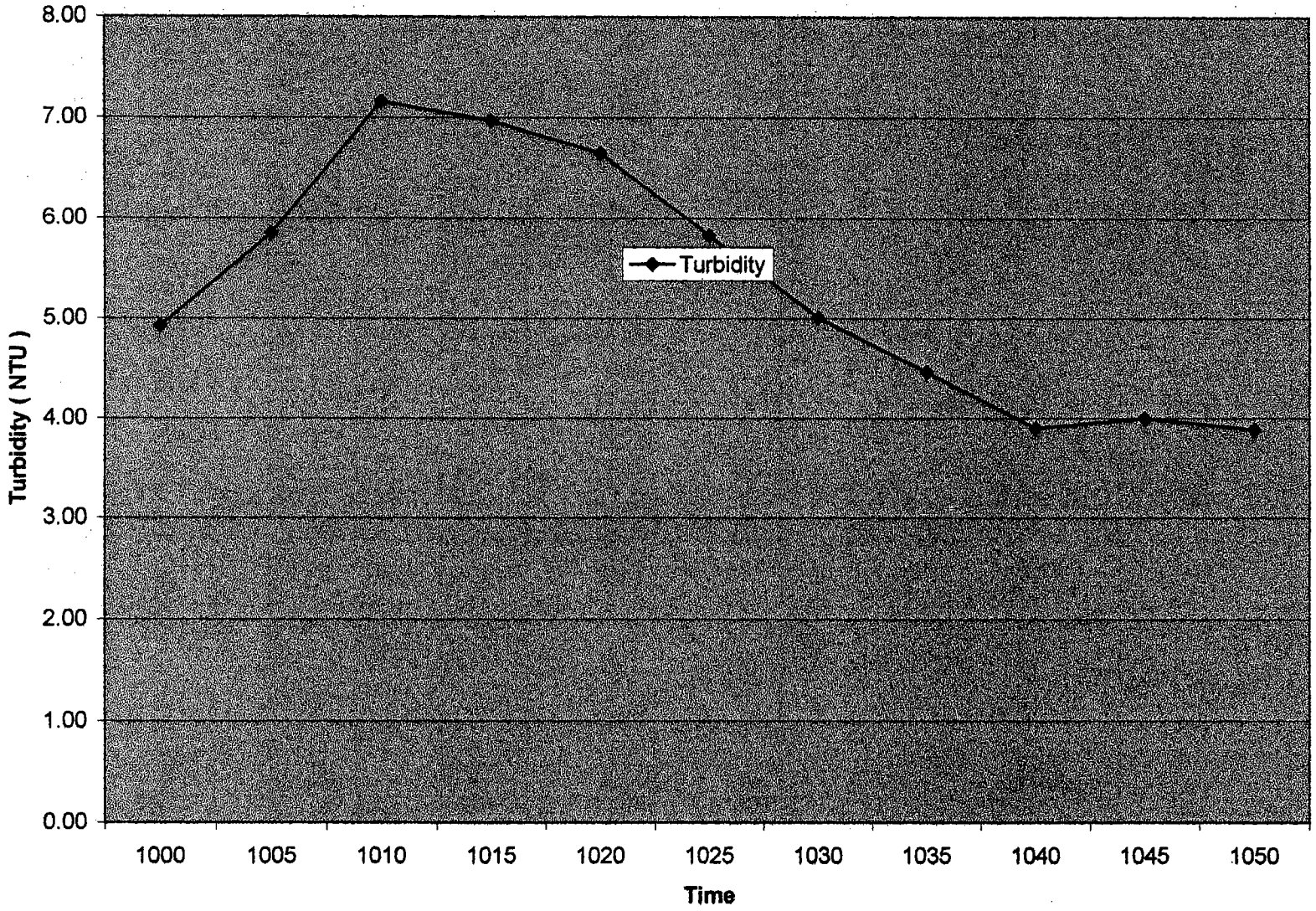




08/31/00 08/31/00 08/31/00 08/31/00 08/31/00 08/31/00

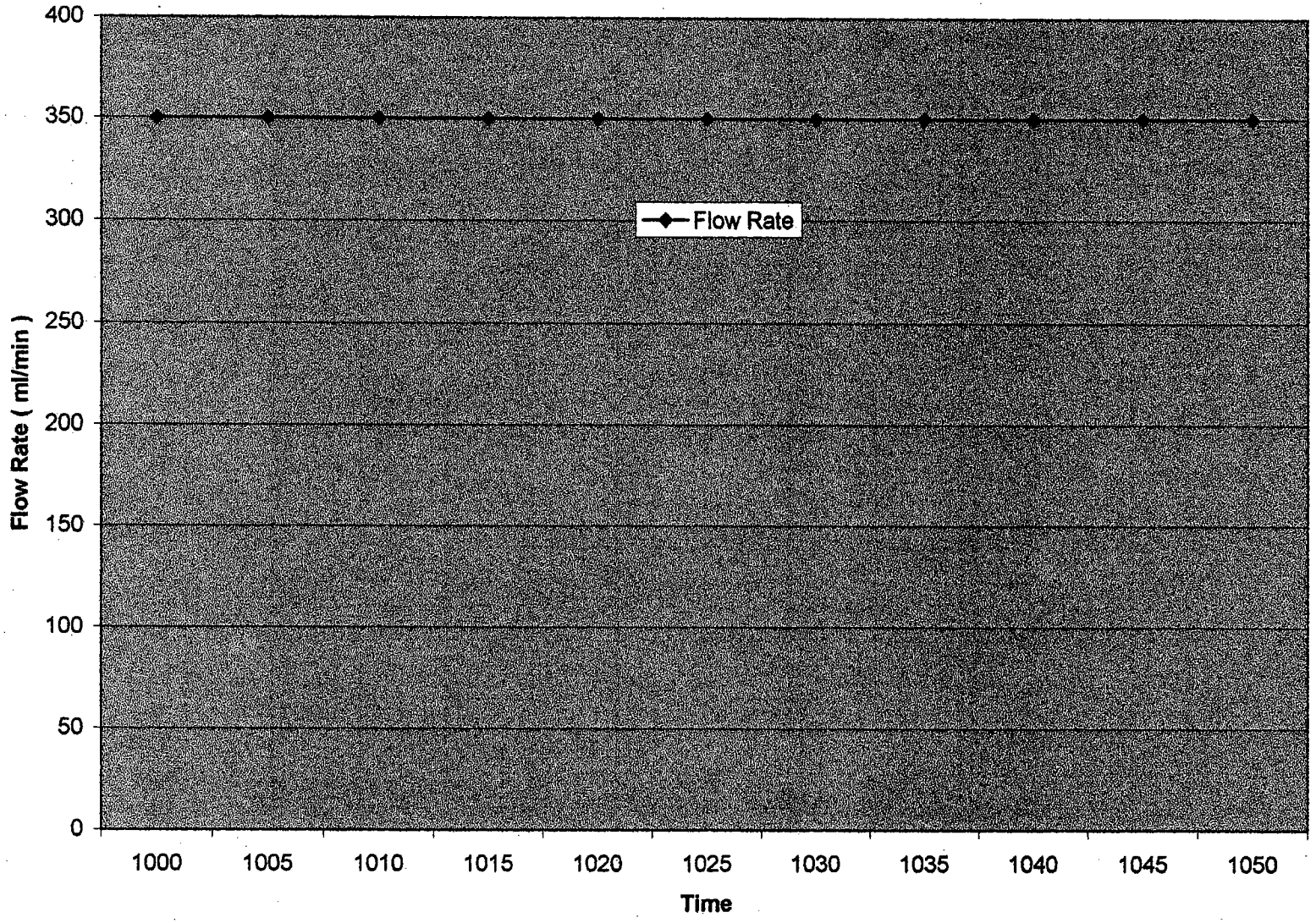
(08/31/00)

BLDG283MW03
Permit #: 29-41650
8/31/00



BLDG283MW03
Permit #: 29-41650
8/31/00

Flow Rate



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 #: 5681
Sample Prepared: 09/18/00

Site: 283

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	2.0
Lead	09/19/00	ND	10	2.0
Magnesium	09/19/00	ND	NLE	10.0
Manganese	09/19/00	ND	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	ND	100	1.0
Potassium	09/19/00	ND	NLE	40.0
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	2.0
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 #: 5681.01
Sample Received: 08/31/00
Sample Matrix: Aqueous

Site: 283

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	2.0
Lead	09/19/00	ND	10	2.0
Magnesium	09/19/00	ND	NLE	10.0
Manganese	09/19/00	ND	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	ND	100	1.0
Potassium	09/19/00	ND	NLE	40.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	ND	50000	20.0
Thallium	09/19/00	ND	10	2.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	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 #: 5681.05
Sample Received: 08/31/00
Sample Matrix: Aqueous

Site: 283

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	374	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	59.2	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	10400	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	1.07	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	6860	300	2.0
Lead	09/19/00	9.20	10	2.0
Magnesium	09/19/00	2010	NLE	10.0
Manganese	09/19/00	24.4	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	1.43	100	1.0
Potassium	09/19/00	7450	NLE	40.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	8220	50000	20.0
Thallium	09/19/00	ND	10	2.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	103	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 #: 5681.03
Sample Received: 08/31/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	1930	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	68.8	2000	0.5
Beryllium	09/19/00	0.757	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	5710	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	3.76	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	214	300	2.0
Lead	09/19/00	1.50	10	2.0
Magnesium	09/19/00	12300	NLE	10.0
Manganese	09/19/00	16.6	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	5.06	100	1.0
Potassium	09/19/00	5880	NLE	40.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	39500	50000	20.0
Thallium	09/19/00	ND	10	2.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	78.8	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 #: 5681.04
Sample Received: 08/31/00
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	411	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	6.60	8	2.0
Barium	09/19/00	27.2	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	1120	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	1780	300	2.0
Lead	09/19/00	33.1	10	2.0
Magnesium	09/19/00	604	NLE	10.0
Manganese	09/19/00	ND	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	ND	100	1.0
Potassium	09/19/00	1180	NLE	40.0
Selenium	09/19/00	5.70	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	16100	50000	20.0
Thallium	09/19/00	ND	10	2.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	84.8	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 #: 5681.02
Sample Received: 08/31/00
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	09/19/00	298	200	10.0
Antimony	09/19/00	ND	20	2.0
Arsenic	09/19/00	ND	8	2.0
Barium	09/19/00	59.2	2000	0.5
Beryllium	09/19/00	ND	20	0.5
Cadmium	09/19/00	ND	4	0.5
Calcium	09/19/00	10600	NLE	20.0
Chromium	09/19/00	ND	100	0.5
Cobalt	09/19/00	1.09	NLE	0.5
Copper	09/19/00	ND	1000	2.0
Iron	09/19/00	6740	300	2.0
Lead	09/19/00	ND	10	2.0
Magnesium	09/19/00	2020	NLE	10.0
Manganese	09/19/00	24.2	50	0.5
Mercury	09/18/00	ND	2	0.1
Nickel	09/19/00	ND	100	1.0
Potassium	09/19/00	7540	NLE	40.0
Selenium	09/19/00	ND	50	3.0
Silver	09/19/00	ND	20	1.0
Sodium	09/19/00	7800	50000	20.0
Thallium	09/19/00	ND	10	2.0
Vanadium	09/19/00	ND	NLE	0.5
Zinc	09/19/00	20.3	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

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. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5788.03	0283MW01	29-40367	10/13/00
5788.04	0283MW02	29-40887	10/13/00
5788.05	0283MW03	29-41650	10/13/00

NJDEP Laboratory Certification # 13461

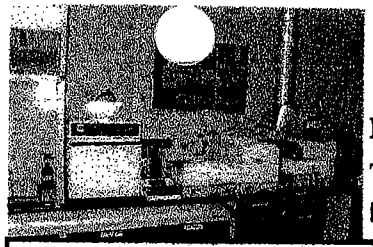
10-27-00

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
Phone #: X26223
(✓)DERA ( )OMA ( )Other:_____

Project No: Low Flow
Location: 283

Samplers Name / Company: David Sharpe - TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	Analysis Parameters: TAL METALS								Comments: Remarks / Preservation Method
5788-1	FB	10/13/00	0900	AQ	1	✓								HNO_3
2	FD	"	—	AQ	1	✓								"
3	283MW01	"	1010	AQ	1	✓								"
4	283MW02	"	1135	AQ	1	✓								"
5	283MW03	"	1250	AQ	1	✓								"

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	10/13/00 1300	[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:

- 1 -

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg. 283
MW#: 0283MW01
NJDEP ID#29-40367
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/13/00
WEATHER: Sunny, warm.
TIDE: N/A

Hnu Calibration: Span 0.0 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: 5.75 ft
Before Purge Start: 5.75 ft **Previous Day: 5.6 ft** **After Sampling: 5.9 ft**
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 16 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 13.94 ft
(13.94) X .65 X 3 =27.18 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 27 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: 09:25
pH 3.41 su
TEMP 18.69 °C
DISSOLVED O_2 0.88 mg/L
SPECIFIC CONDUCTIVITY 227.7 ms/cm

PURGE END TIME: 10:12
pH 3.32 su
TEMP 19.14 °C
DISSOLVED O_2 0.49 mg/L
SPECIFIC CONDUCTIVITY 230.9 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 5.9 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 10:06
pH 3.33 su
TEMP 19.30 °C
DISSOLVED O_2 0.53 mg/L
SPECIFIC CONDUCTIVITY 230.9 ms/cm

SAMPLE END TIME: 10:11
ANALYTES: TAL Metals
COMMENTS: DUP. Here.

FIELD READINGS

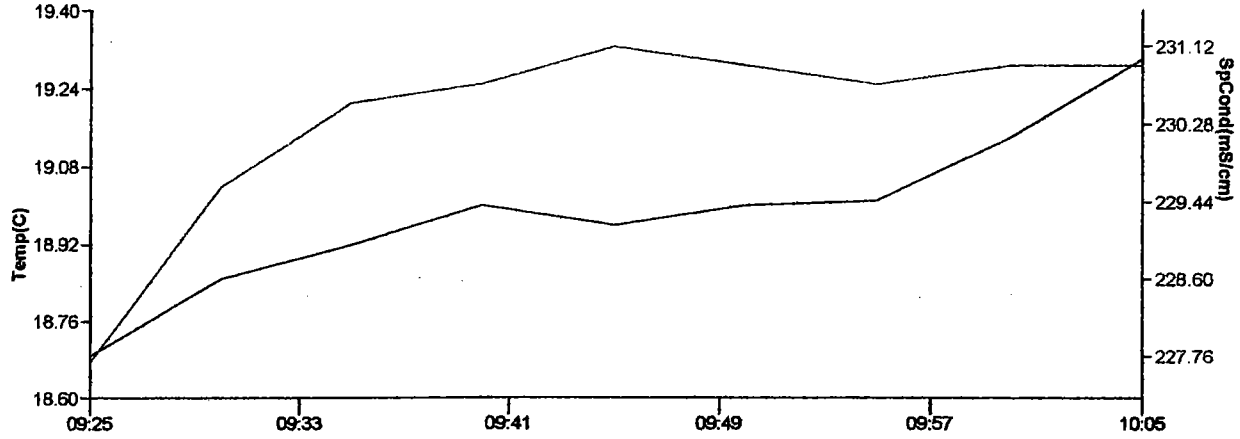
MW: 0283MW01
NJDEP ID#: 29-40367
DATE: 10/13/00

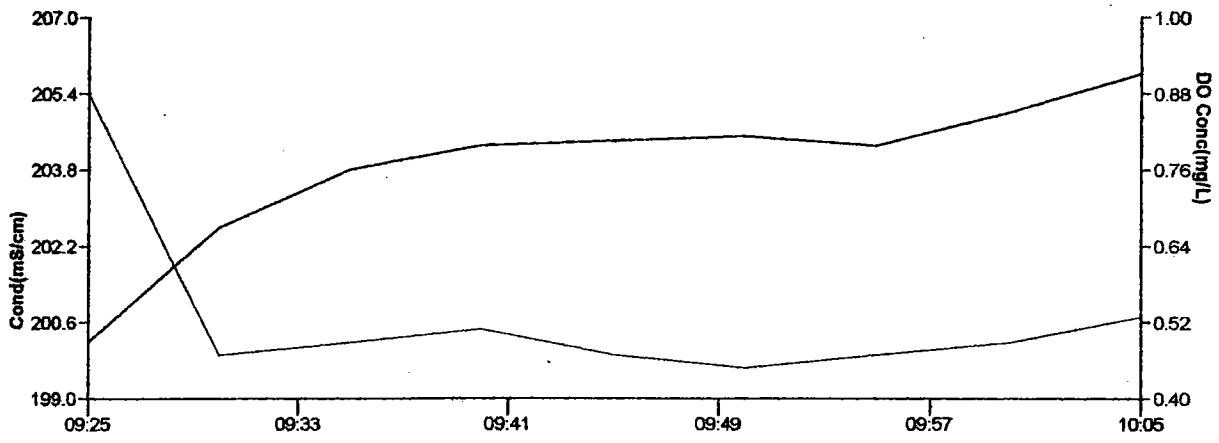
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
9:25	3.41	18.69	200.2	227.7	0.88	3.78	5.75	300	
9:30	3.31	18.85	202.6	229.6	0.47	1.75	5.75	300	
9:35	3.3	18.92	203.8	230.5	0.49	1.63	5.75	300	
9:40	3.31	19	204.3	230.7	0.51	1.32	5.75	300	
9:45	3.31	18.96	204.4	231.1	0.47	2.11	5.75	300	
9:50	3.31	19	204.4	230.9	0.45	1.49	5.75	300	
9:55	3.31	19.01	204.3	230.7	0.47	2.26	5.75	300	
10:00	3.32	19.14	205	230.9	0.49	2.46	5.75	300	
10:05	3.33	19.3	205.8	230.9	0.53	2.6	5.9	300	

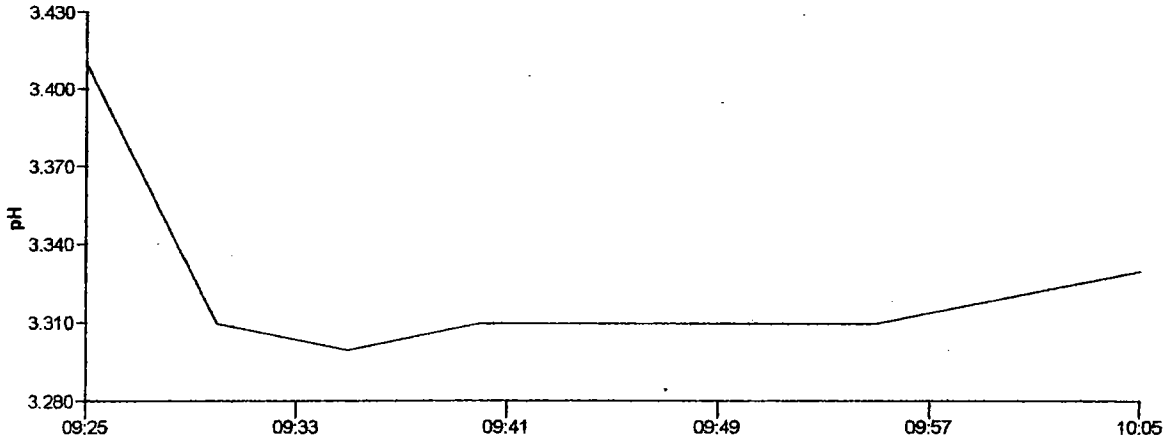
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
925	3.78	5.75	300
930	1.75	5.75	300
935	1.63	5.75	300
940	1.32	5.75	300
945	2.11	5.8	300
950	1.49	5.8	300
955	2.26	5.85	300
1000	2.46	5.85	300
1005	2.60	5.9	300

283MW01-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







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(10/13/00)

283mw01-

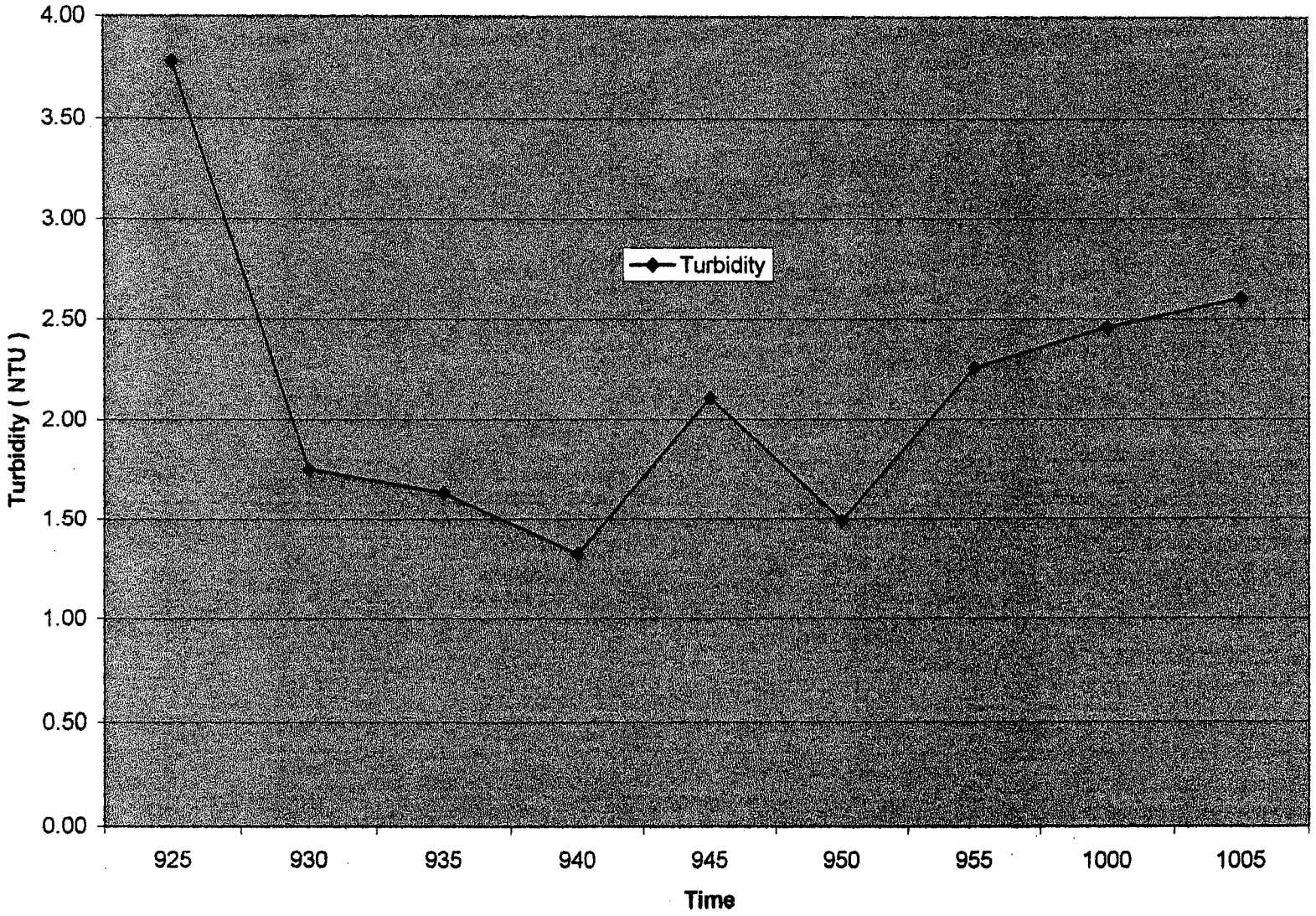
283MW01-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/13/00 09:25 to 10/13/00 10:05
Number of samples: 9

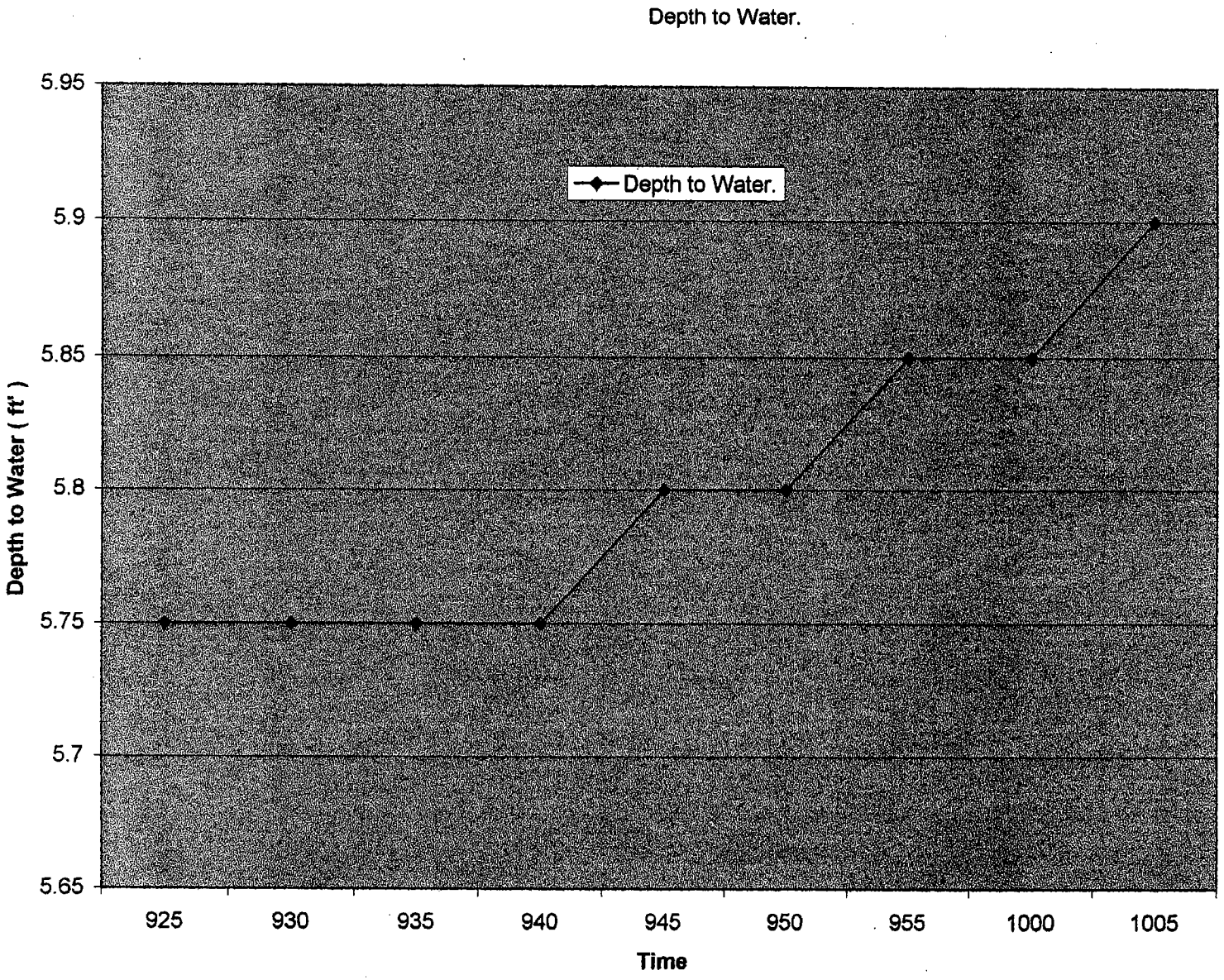
10/13/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/13/00 09:25	18.69	227.700	200.200	0.88	3.41
10/13/00 09:30	18.85	229.600	202.600	0.47	3.31
10/13/00 09:35	18.92	230.500	203.800	0.49	3.30
10/13/00 09:40	19.00	230.700	204.300	0.51	3.31
10/13/00 09:45	18.96	231.100	204.400	0.47	3.31
10/13/00 09:50	19.00	230.900	204.500	0.45	3.31
10/13/00 09:55	19.01	230.700	204.300	0.47	3.31
10/13/00 10:00	19.14	230.900	205.000	0.49	3.32
10/13/00 10:05	19.30	230.900	205.800	0.53	3.33

283MW01
Permit #: 29-40367
10/13/00

Turbidity

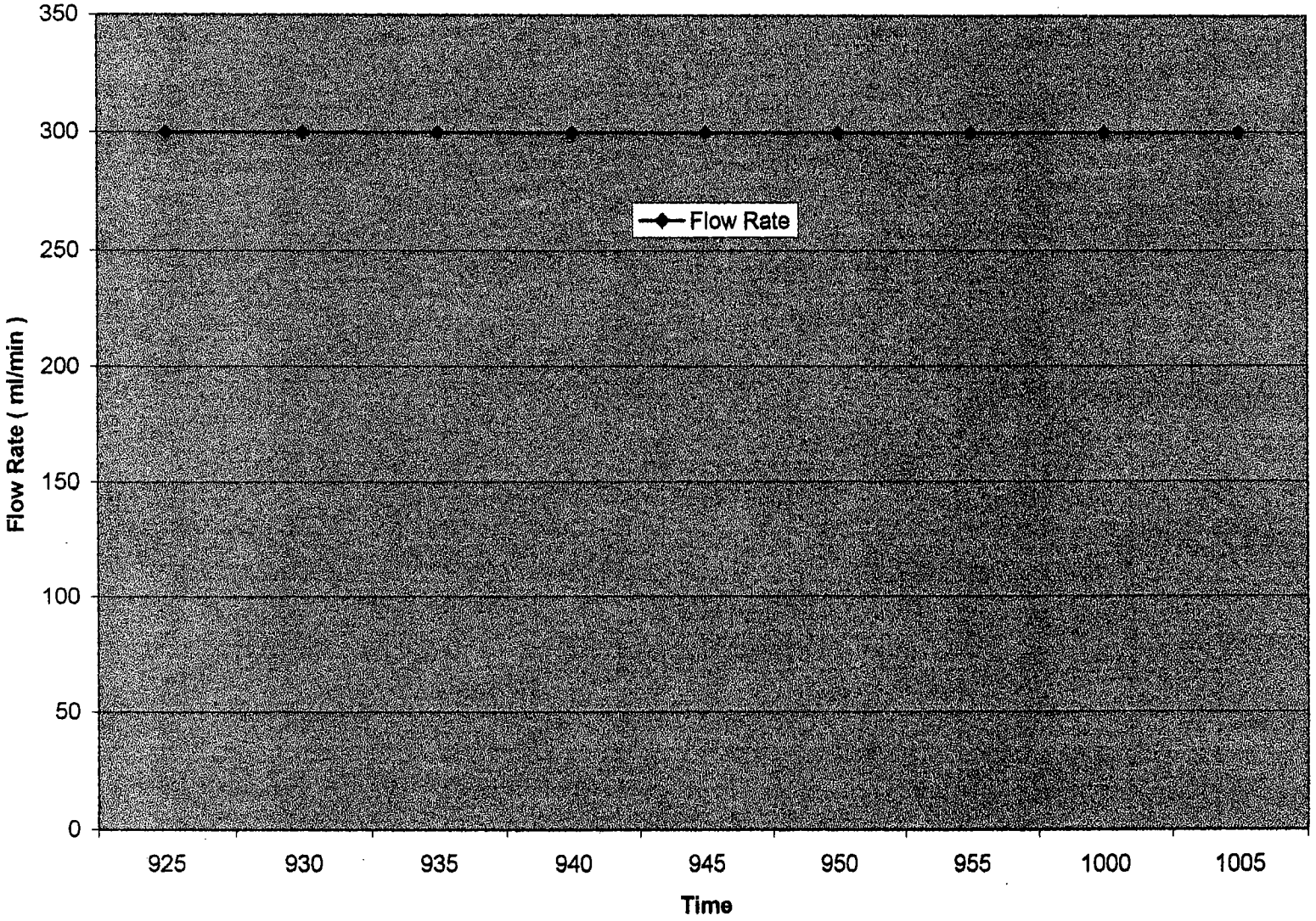


283MW01
Permit #: 29-40367
10/13/00



283MW01
Permit #: 29-40367
10/13/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg. 283
MW#: 0283MW02
NJDEP ID#29-40887
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/13/00
WEATHER: Sunny, warm.
TIDE: N/A

Hnu Calibration: Span 2.4 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

WELL CONDITION: Good
LNAPLs: N
DNAPLs: N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4 INCH
DEPTH TO WATER: 6.9 ft
Before Purge Start: 6.9 ft **Previous Day: 6.9 ft** **After Sampling: 7.0 ft**
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 16.5 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 12.79 ft
(12.79) X .65 X 3 = 24.94 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 25 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: 10 ppm (Well)
Hnu READING: 0 ppm (Well Cap)

PURGE START TIME: 12:05
pH 4.83 su
DISSOLVED O_2 4.30 mg/L
TEMP 18.20 °C
SPECIFIC CONDUCTIVITY 48.77 ms/cm

PURGE END TIME: 12:50
pH 4.79 su
DISSOLVED O_2 1.40 mg/L
TEMP 18.42 °C
SPECIFIC CONDUCTIVITY 48.60 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 7.0 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 12:45
pH 4.78 su
DISSOLVED O_2 1.30 mg/L
TEMP 18.32 °C
SPECIFIC CONDUCTIVITY 48.55 ms/cm

SAMPLE END TIME: 12:49
ANALYTES: TAL Metals
COMMENTS:

FIELD READINGS

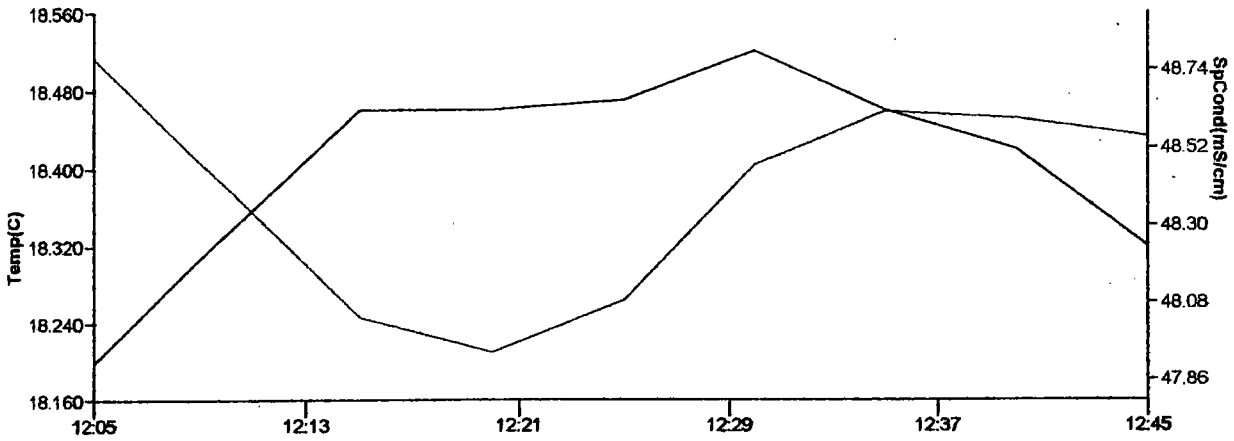
MW: 0283MW02
NJDEP ID#: 29-40887
DATE: 10/13/00

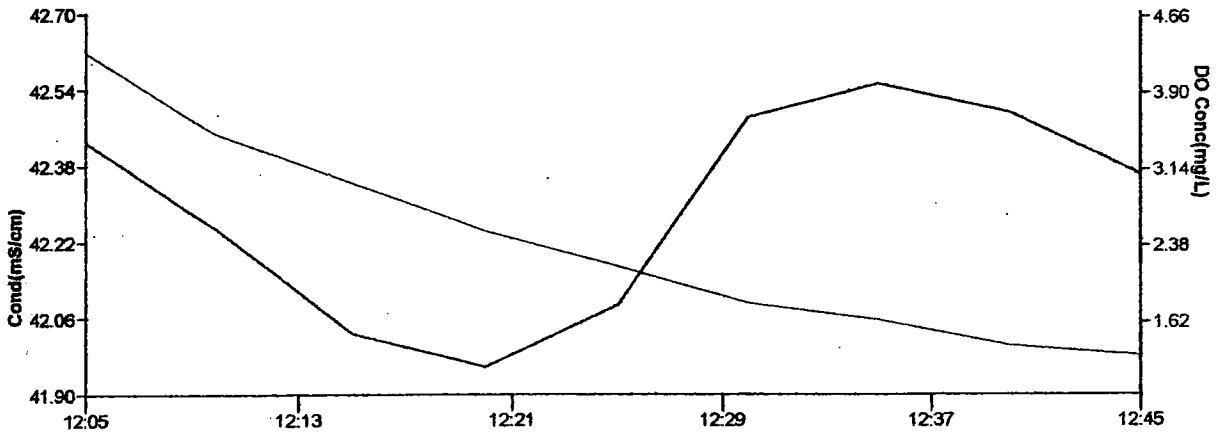
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
12:05	4.83	18.2	42.43	48.77	4.3	3.48	6.9	300	
12:10	4.89	18.33	42.25	48.42	3.5	3.23	6.9	300	
12:15	4.84	18.46	42.03	48.04	3.01	3.63	6.9	300	
12:20	4.82	18.46	41.96	47.94	2.53	3.71	6.9	300	
12:25	4.81	18.47	42.09	48.09	2.18	3.44	6.9	300	
12:30	4.8	18.52	42.48	48.47	1.82	3.76	6.9	300	
12:35	4.81	18.46	42.55	48.62	1.65	3.77	6.9	300	
12:40	4.79	18.42	42.49	48.6	1.4	4.47	6.9	300	
12:45	4.78	18.32	42.36	48.55	1.3	4.32	7	300	

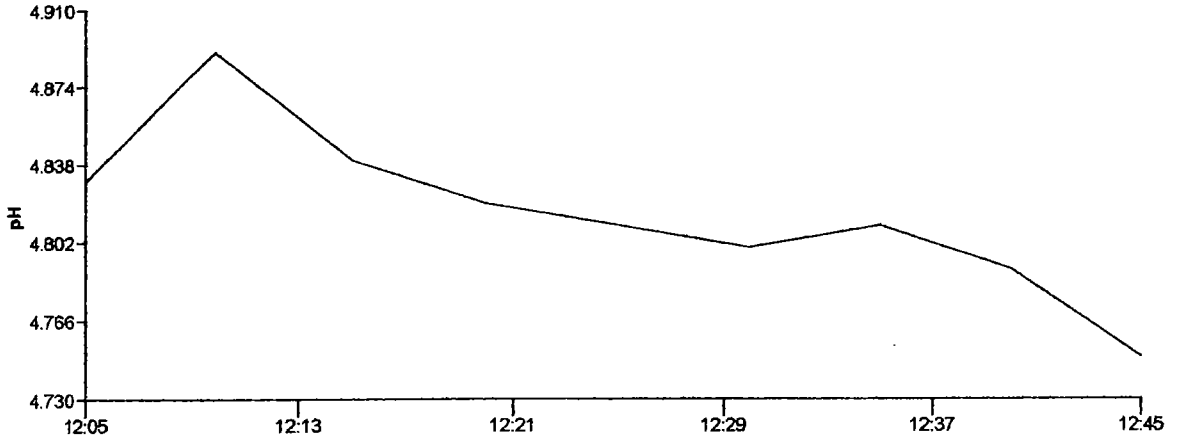
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1205	3.48	6.9	300
1210	3.23	6.9	300
1215	3.63	6.9	300
1220	3.71	6.9	300
1225	3.44	6.9	300
1230	3.76	7	300
1235	3.77	7	300
1240	4.47	7	300
1245	4.42	7	300

283MW02-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







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283mw02-

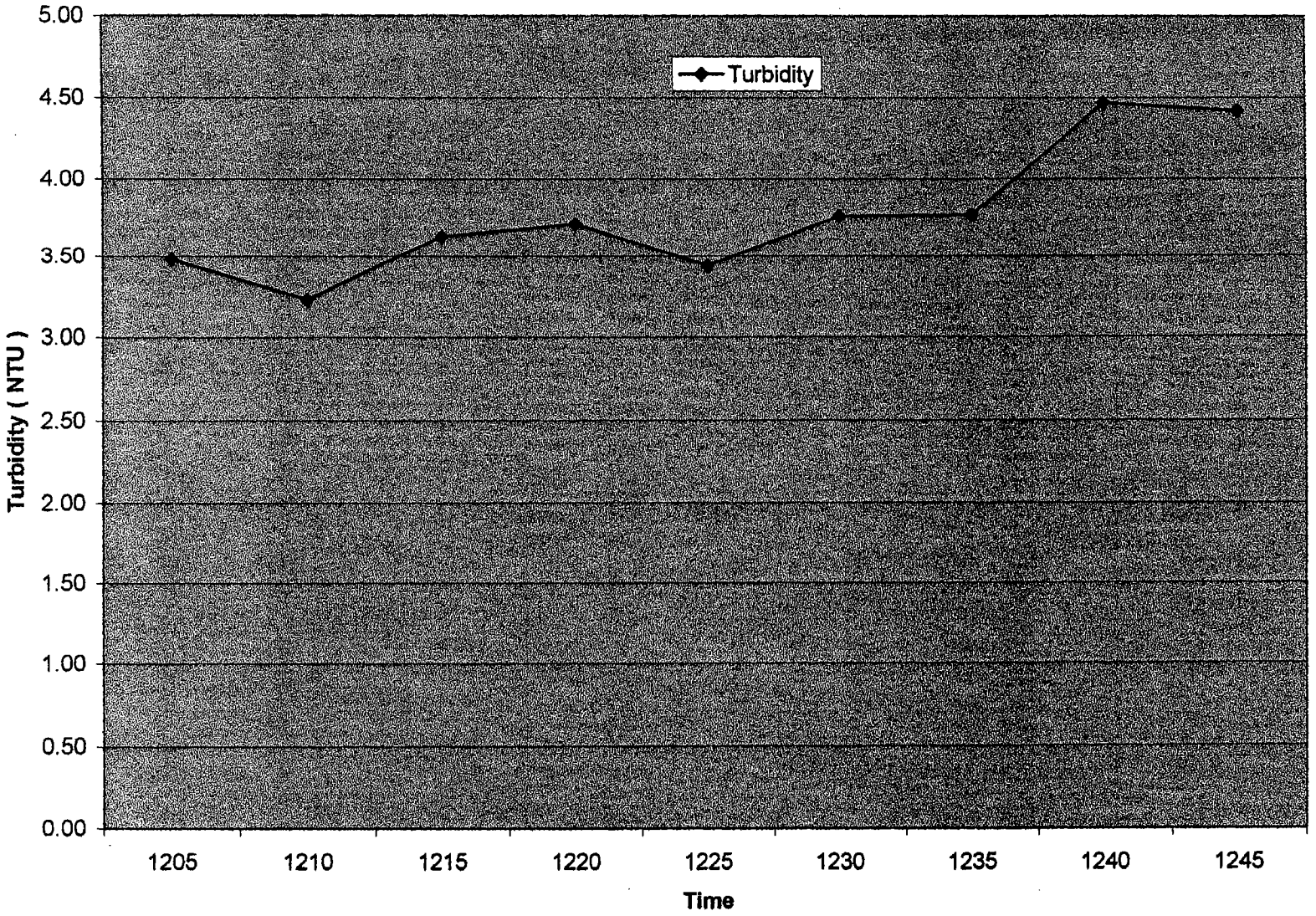
283MW02-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/13/00 12:05 to 10/13/00 12:45
Number of samples: 9

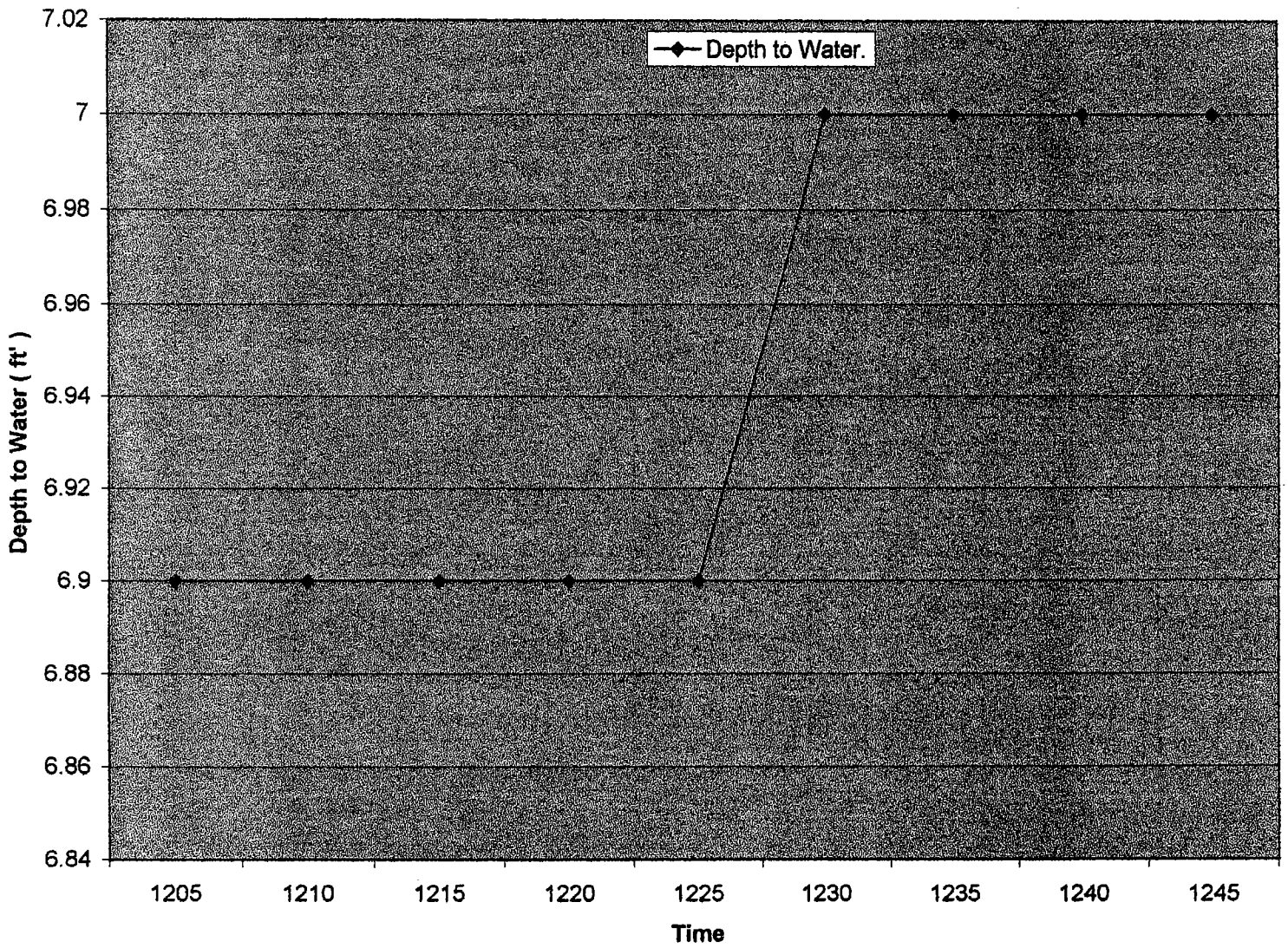
10/13/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/13/00 12:05	18.20	48.770	42.430	4.30	4.83
10/13/00 12:10	18.33	48.420	42.250	3.50	4.89
10/13/00 12:15	18.46	48.040	42.030	3.01	4.84
10/13/00 12:20	18.46	47.940	41.960	2.53	4.82
10/13/00 12:25	18.47	48.090	42.090	2.18	4.81
10/13/00 12:30	18.52	48.470	42.480	1.82	4.80
10/13/00 12:35	18.46	48.620	42.550	1.65	4.81
10/13/00 12:40	18.42	48.600	42.490	1.40	4.79
10/13/00 12:45	18.32	48.550	42.360	1.30	4.75

283MW02
Permit #: 29-40887
10/13/00

Turbidity

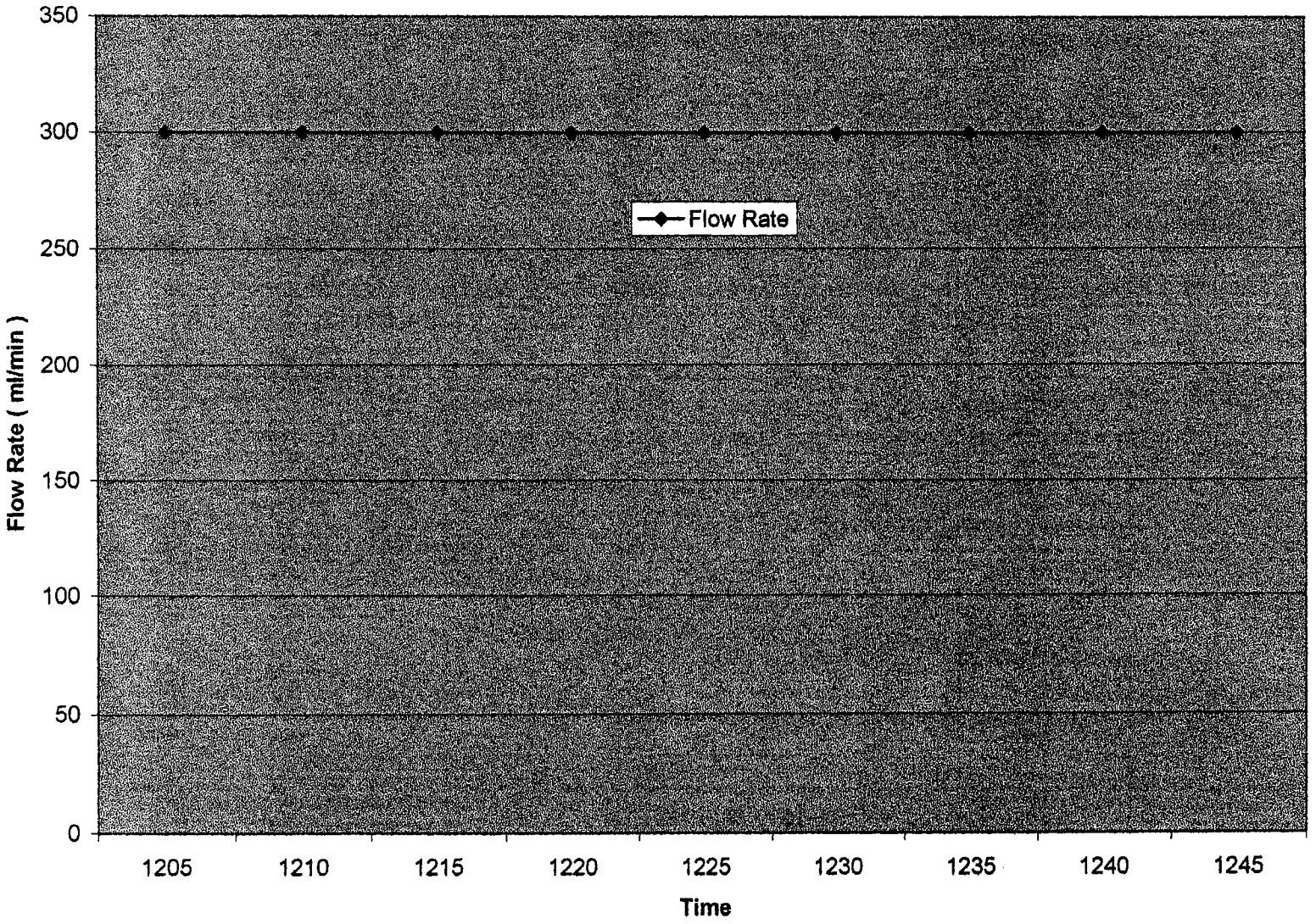


283MW02
Permit #: 29-40887
10/13/00



283MW02
Permit #: 29-40887
10/13/00

Flow Rate



U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: Bldg. 283
MW#: 0283MW03
NJDEP ID#29-41650
NJDEP CERT # 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 10/13/00
WEATHER: Sunny, warm.
TIDE: N/A
WELL CONDITION: Good.
LNAPLs: N
DNAPLs: N

Hnu Calibration: Span 1.4 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: 6.8 ft
Before Purge Start: 6.8 ft **Previous Day: 6.75 ft** **After Sampling: 6.9 ft**
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: N/A ft
DEPTH OF PUMP/TUBE INTAKE: 21.0 ft TUBING: Food grade Polyethylene 1/4"/Silicon
HEIGHT OF WATER: 17.25 ft
(17.25) X .65 / X 3 = 33.64 ft (.65 for 4", .163 for 2")
GALLONS OF H2O TO BE PURGED: 34 Gal
PURGE METHOD:(FLOW at >100 TO <500 ml/Min): PERISTALTIC
Purged at 390 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: 10:50
pH 5.12 su TEMP 17.54 °C
DISSOLVED O_2 1.05 mg/L SPECIFIC CONDUCTIVITY 79.13 ms/cm

PURGE END TIME: 11:35
pH 5.21 su TEMP 17.38 °C
DISSOLVED O_2 1.09 mg/L SPECIFIC CONDUCTIVITY 78.91 ms/cm

DEPTH TO H2O AFTER PURGE AND SAMPLING: 6.9 ft
(SAMPLING METHOD: Through pump, Tubing with flow cell disconnected.)

SAMPLE START TIME: 11:30
pH 5.22 su TEMP 17.38 °C
DISSOLVED O_2 1.12 mg/L SPECIFIC CONDUCTIVITY 78.95 ms/cm

SAMPLE END TIME: 11:34
ANALYTES: TAL Metals
COMMENTS:

FIELD READINGS

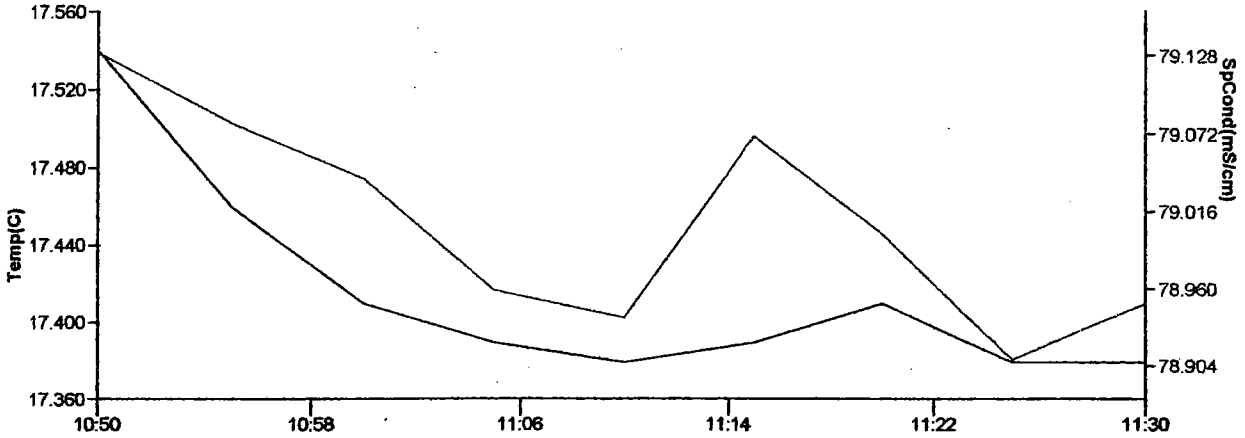
MW: 0283MW03
NJDEP ID#: 29-41650
DATE: 10/13/00

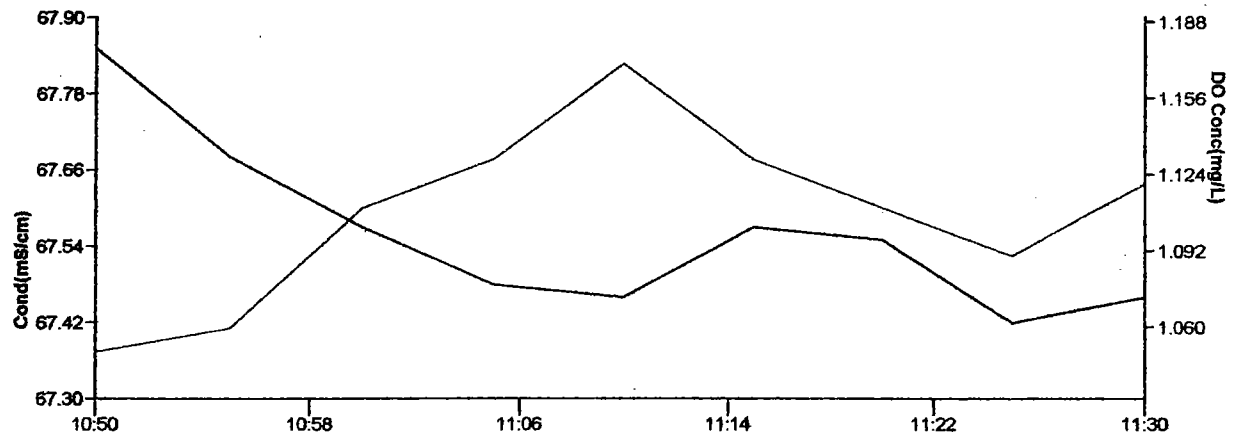
Time (Min.)	pH	Temp. (°C)	Cond.	Specific Cond.	Dissolved O_2 (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/Min)	Notes
10:50	5.12	17.54	67.85	79.13	1.05	6.99	6.8	390	
10:55	5.18	17.46	67.68	79.08	1.06	3.38	6.8	390	
11:00	5.19	17.41	67.57	79.04	1.11	4.35	6.8	390	
11:05	5.2	17.39	67.48	78.96	1.13	4.61	6.8	390	
11:10	5.22	17.38	67.46	78.94	1.17	3.27	6.8	390	
11:15	5.22	17.39	67.57	79.07	1.13	3.12	6.8	390	
11:20	5.22	17.41	67.55	79	1.11	3.01	6.8	390	
11:25	5.21	17.38	67.42	78.91	1.09	3.01	6.8	390	
11:30	5.22	17.38	67.46	78.95	1.12	2.93	6.9	390	

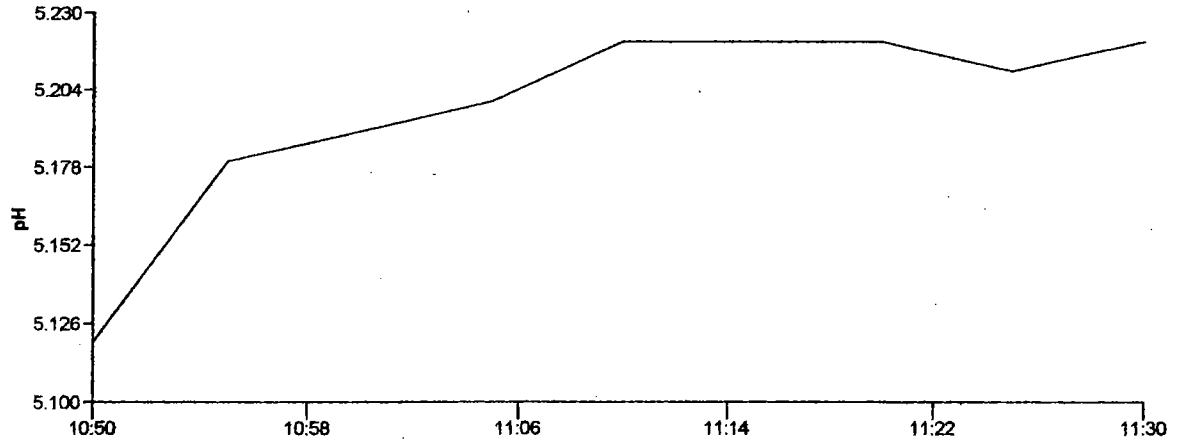
Time	Turbidity (NTU)	Depth to Water (ft)	Flow Rate (ml/min)
1050	6.99	6.8	390
1055	3.38	6.8	390
1100	4.35	6.8	390
1105	4.61	6.8	390
1110	3.27	6.8	390
1115	3.12	6.9	390
1120	3.01	6.9	390
1125	3.01	6.9	390
1130	2.93	6.9	390

283MW03-2 Low Flow Data For

Temp., Sp. Cond., Cond., D.O., pH







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(10/13/00)

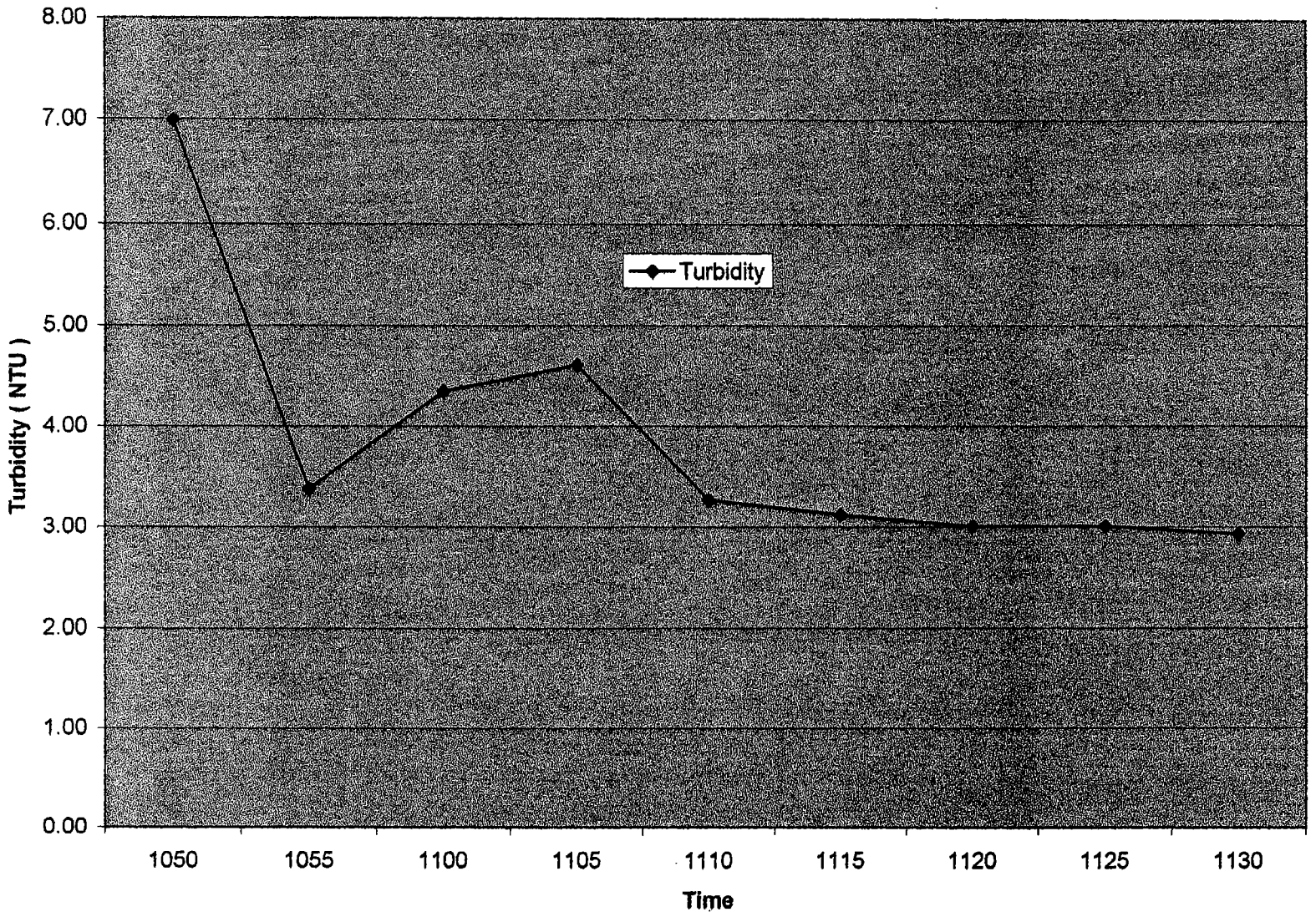
283mw03-

283MW03-2 Low Flow Data For
Temp., Sp. Cond., Cond., D.O., pH
-- Data Report --

From 10/13/00 10:50 to 10/13/00 11:30
Number of samples: 9

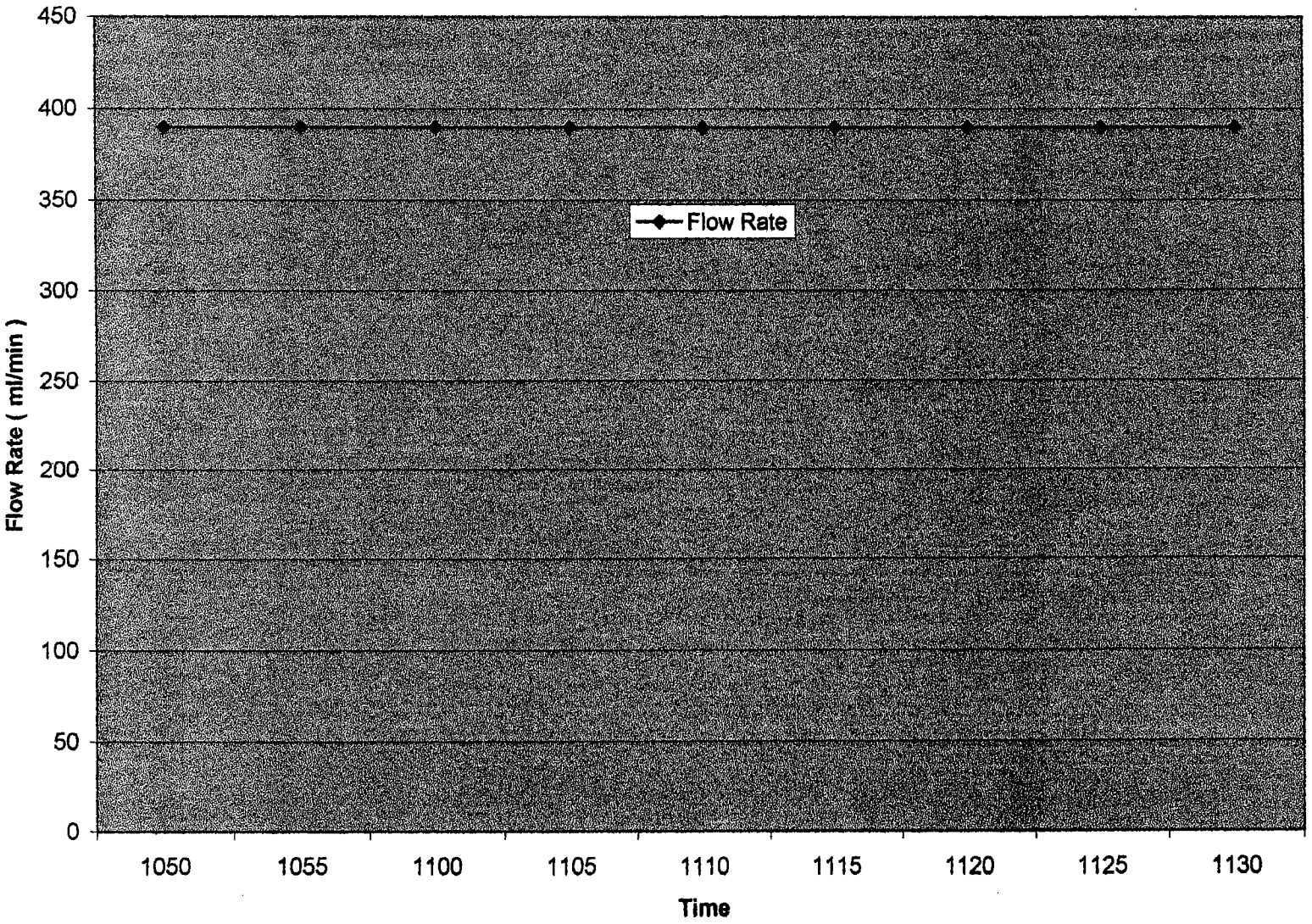
10/13/00	Temp C	SpCond mS/cm	Cond mS/cm	DO Conc mg/L	pH
10/13/00 10:50	17.54	79.130	67.850	1.05	5.12
10/13/00 10:55	17.46	79.080	67.680	1.06	5.18
10/13/00 11:00	17.41	79.040	67.570	1.11	5.19
10/13/00 11:05	17.39	78.960	67.480	1.13	5.20
10/13/00 11:10	17.38	78.940	67.460	1.17	5.22
10/13/00 11:15	17.39	79.070	67.570	1.13	5.22
10/13/00 11:20	17.41	79.000	67.550	1.11	5.22
10/13/00 11:25	17.38	78.910	67.420	1.09	5.21
10/13/00 11:30	17.38	78.950	67.460	1.12	5.22

283MW03
Permit #: 29-41650
10/13/00

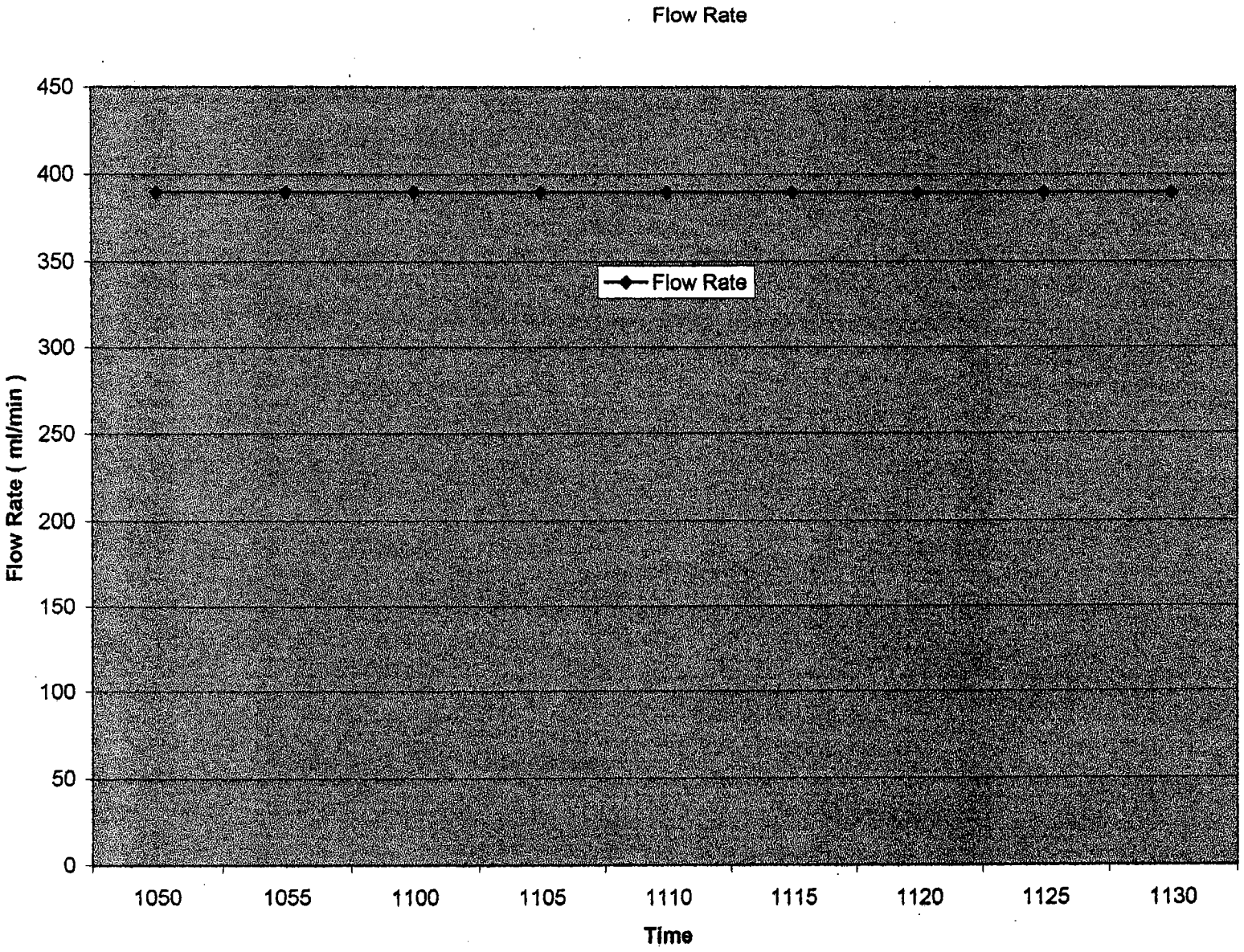


283MW03
Permit #: 29-41650
10/13/00

Flow Rate



283MW03
Permit #: 29-41650
10/13/00



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 #: 5788
Sample Prepared: 10/17/00

Site: 283

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	2.0
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 #: 5788.01
Sample Received: 10/13/00
Sample Matrix: Aqueous

Site: 283

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	ND	1000	2.0
Iron	10/19/00	ND	300	2.0
Lead	10/19/00	ND	10	2.0
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	0.726	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 #: 5788.02
Sample Received: 10/13/00
Sample Matrix: Aqueous

Site: 283

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	1790	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	72.6	2000	0.5
Beryllium	10/19/00	0.631	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	5630	NLE	20.0
Chromium	10/19/00	2.21	100	0.5
Cobalt	10/19/00	3.43	NLE	0.5
Copper	10/19/00	ND	1000	2.0
Iron	10/19/00	103	300	2.0
Lead	10/19/00	ND	10	2.0
Magnesium	10/19/00	12000	NLE	10.0
Manganese	10/19/00	22.0	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	7.66	100	1.0
Potassium	10/19/00	5270	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	36800	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	1.22	NLE	0.5
Zinc	10/19/00	54.9	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 #: 5788.03
Sample Received: 10/13/00
Sample Matrix: Aqueous

Site: 283

Field ID#:0283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	1920	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	73.1	2000	0.5
Beryllium	10/19/00	0.618	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	5800	NLE	20.0
Chromium	10/19/00	3.13	100	0.5
Cobalt	10/19/00	3.53	NLE	0.5
Copper	10/19/00	66.5	1000	2.0
Iron	10/19/00	165	300	2.0
Lead	10/19/00	20.1	10	2.0
Magnesium	10/19/00	12200	NLE	10.0
Manganese	10/19/00	29.0	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	13.3	100	1.0
Potassium	10/19/00	5210	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	37300	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	1.38	NLE	0.5
Zinc	10/19/00	234	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 #: 5788.04
Sample Received: 10/13/00
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	247	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	5.36	8	2.0
Barium	10/19/00	25.3	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	950	NLE	20.0
Chromium	10/19/00	0.874	100	0.5
Cobalt	10/19/00	ND	NLE	0.5
Copper	10/19/00	14.1	1000	2.0
Iron	10/19/00	1330	300	2.0
Lead	10/19/00	25.7	10	2.0
Magnesium	10/19/00	744	NLE	10.0
Manganese	10/19/00	2.67	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	1.40	100	1.0
Potassium	10/19/00	1100	NLE	40.0
Selenium	10/19/00	4.09	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	16300	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	1.89	NLE	0.5
Zinc	10/19/00	51.5	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 #: 5788.05
Sample Received: 10/13/00
Sample Matrix: Aqueous

Site: 283

Field ID#: 0283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/19/00	149	200	10.0
Antimony	10/19/00	ND	20	2.0
Arsenic	10/19/00	ND	8	2.0
Barium	10/19/00	66.5	2000	0.5
Beryllium	10/19/00	ND	20	0.5
Cadmium	10/19/00	ND	4	0.5
Calcium	10/19/00	10700	NLE	20.0
Chromium	10/19/00	0.662	100	0.5
Cobalt	10/19/00	0.900	NLE	0.5
Copper	10/19/00	24.6	1000	2.0
Iron	10/19/00	6640	300	2.0
Lead	10/19/00	ND	10	2.0
Magnesium	10/19/00	2040	NLE	10.0
Manganese	10/19/00	31.5	50	0.5
Mercury	10/17/00	ND	2	0.1
Nickel	10/19/00	3.87	100	1.0
Potassium	10/19/00	7300	NLE	40.0
Selenium	10/19/00	ND	50	3.0
Silver	10/19/00	ND	20	1.0
Sodium	10/19/00	8140	50000	20.0
Thallium	10/19/00	ND	10	2.0
Vanadium	10/19/00	ND	NLE	0.5
Zinc	10/19/00	21.8	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

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. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
5797.04	0283MW01	29-40367	10/17/00
5797.05	0283MW02	29-40887	10/17/00
5797.06	0283MW03	29-41650	10/17/00

NJDEP Laboratory Certification # 13461

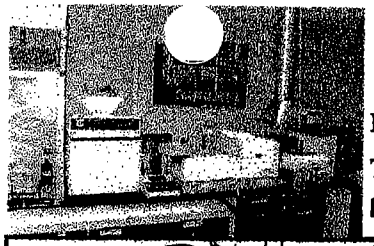
11-27-00

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. Farlow / LERA USA
Phone #: X26223
(X)DERA ( )OMA ( )Other:
Project No:
Location: 283 4th Qtr '00
Samplers Name / Company: Corey McCormack, TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOCs	TAL MTLS	Pest / PCB	BNA 625				Hex Cr	Comments: Remarks / Preservation Method
5797 .01	Trip	10/17/00	0720	AQ	2	✓							—	
.02	Field Blank		0800		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	283 mw01		0902		5	✓	✓	✓	✓				0.0	29-40887
.05	283 mw02		0930		5	✓	✓	✓	✓				0.4	29-40367
.06	283 mw03	↓	1016	↓	5	✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	10/17/00 1400				
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 T/FB/Dp w/ MIB, 2,90 since date c/in
Tide; N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/17/00
WEATHER: Overcast, 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: 6.07 ft
DEPTH OF WELL: 14.75 ft
DEPTH TO TOP OF SCREEN: 5.0 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: 07:47
pH 6.37 su — TEMP 19.1 °C
DISSOLVED O2 5.97 ppm — SPECIFIC CONDUCTIVITY 187 us/cm

PURGE END TIME: 09:01
pH 6.24 su — TEMP 18.2 °C
DISSOLVED O2 4.37 ppm — SPECIFIC CONDUCTIVITY 182 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.51 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 17 gal

SAMPLE START TIME: 09:02
pH 6.23 su — TEMP 18.3 °C
DISSOLVED O2 4.33 ppm — SPECIFIC CONDUCTIVITY 182 us/cm

SAMPLE END TIME: 09:12

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/17/00
WEATHER: Overcast, 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: 7.09 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 12.60 ft
(12.60) X .65 X 3 =24.57
GALLONS OF H2O TO BE PURGED: 25 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.4 ppm

PURGE START TIME: 07:41
pH 6.47 su — TEMP 18.9 °C
DISSOLVED O2 4.87 ppm — SPECIFIC CONDUCTIVITY 76.5 us/cm

PURGE END TIME: 09:29
pH 6.44 su — TEMP 18.6 °C
DISSOLVED O2 3.72 ppm — SPECIFIC CONDUCTIVITY 76.4 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 8.94 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 25 gal

SAMPLE START TIME: 09:30
pH 6.44 su — TEMP 16.9 °C
DISSOLVED O2 3.71 ppm — SPECIFIC CONDUCTIVITY 76.1 us/cm

SAMPLE END TIME: 09:39

COMMENTS: Strong fuel odor after purge. Duplicate here.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 10/17/00
WEATHER: Overcast, 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: 6.88 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 17.17 ft
(17.17) X .65 X 3 = 33.48
GALLONS OF H2O TO BE PURGED: 33 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: 07:52
pH 6.92 su — TEMP 18.9 °C
DISSOLVED O2 5.91 ppm — SPECIFIC CONDUCTIVITY 91.7 us/cm

PURGE END TIME: 10:15
pH 6.88 su — TEMP 18.6 °C
DISSOLVED O2 4.12 ppm — SPECIFIC CONDUCTIVITY 91.2 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 7.57 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 33 gal

SAMPLE START TIME: 10:16
pH 6.87 su — TEMP 18.5 °C
DISSOLVED O2 4.11 ppm — SPECIFIC CONDUCTIVITY 90.9 us/cm

SAMPLE END TIME: 10:26

COMMENTS: Slightly cloudy, green.

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	**VB008542.D**	Sample Name	**Vblk250**
Operator	**Skelton**	Field ID	**Vblk250**
Date Acquired	**20 Oct 2000 9:38 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	
156-59-2	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. **Vblk250**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk250

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008542.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/20/00

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	**VB008565.D**	Sample Name	**Vblk251**
Operator	**Skelton**	Field ID	**Vblk251**
Date Acquired	**24 Oct 2000 10:15 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	
156-59-2	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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **Vblk251**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Vblk251

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008565.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/24/00

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	**VB008553.D**	Sample Name	**5797.01**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**20 Oct 2000 5:26 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	11.45	47056	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	
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.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5797.01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008553.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/20/00

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	**VB008554.D**	Sample Name	**5797.02**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**20 Oct 2000 6:06 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	
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	11.46	51274	1.23 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	
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.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5797.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008554.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/20/00

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	**VB008555.D**	Sample Name	**5797.03**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**20 Oct 2000 6:46 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	
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	18.83	52017891	242.33 ug/L	1	0.23 ug/L	E
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	23.82	32653695	147.32 ug/L	1000	0.37 ug/L	E
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	27.66	46308712	193.87 ug/L	700	0.65 ug/L	E
00-00-0	m+p-Xylenes	27.85	47825572	497.68 ug/L	nle	1.14 ug/L	E
95-47-6	o-Xylene	28.95	46083944	284.74 ug/L	nle	0.62 ug/L	E
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

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008573.D**	Sample Name	**5797.03**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**24 Oct 2000 4:29 pm**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	18.50 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	
71-43-2	Benzene	18.82	12787340	621.26 ug/L	1	2.30 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	5.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	
108-88-3	Toluene	23.82	5418887	254.97 ug/L	1000	3.70 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	
124-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	
100-41-4	Ethylbenzene	27.65	18593945	791.70 ug/L	700	6.50 ug/L	D
00-00-0	m+p-Xylenes	27.85	20730404	2194.05 ug/L	nle	11.40 ug/L	E D
95-47-6	o-Xylene	28.94	18033440	1133.26 ug/L	nle	6.20 ug/L	D
100-42-5	Styrene			not detected	100	5.60 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 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

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008575.D**	Sample Name	**5797.03**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**24 Oct 2000 5:49 pm**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.81	6476234	619.61 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.82	2694652	249.68 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
124-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.65	10511363	859.87 ug/L	700	13.00 ug/L	D
00-00-0	m+p-Xylenes	27.85	12021817	2444.52 ug/L	nle	22.80 ug/L	D
95-47-6	o-Xylene	28.94	10069341	1215.74 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5797.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008555.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/20/00

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.	unknown	6.53	2200	J
2.	unknown	7.37	1600	J
3. 000930-18-7	Cyclopropane, 1,2-dimethyl-, cis-	8.04	640	JN
4. 000930-18-7	Cyclopropane, 1,2-dimethyl-, cis-	8.44	380	JN
5. 000107-83-5	Pentane, 2-methyl-	10.79	950	JN
6. 000142-29-0	Cyclopentene	11.44	450	JN
7.	unknown	11.79	1400	J
8.	unknown	12.83	590	J
9. 001120-62-3	Cyclopentene, 3-methyl-	14.67	320	JN
10. 000110-82-7	Cyclohexane	15.42	1900	JN
11. 000110-82-7	Cyclohexane	17.67	1800	JN
12. 000620-14-4	Benzene, 1-ethyl-3-methyl-	31.02	480	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	31.17	230	JN
14.	unknown	32.11	520	J
15. 000526-73-8	Benzene, 1,2,3-trimethyl-	33.21	240	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008571.D**	Sample Name	**5797.04**
Operator	**Skelton**	Field ID	**0283MW01**
Date Acquired	**24 Oct 2000 3:09 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	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. **0283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5797.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008571.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/24/00

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	**VB008574.D**	Sample Name	**5797.05**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**24 Oct 2000 5:09 pm**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	18.50 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	
71-43-2	Benzene	18.82	14444594	670.35 ug/L	1	2.30 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	5.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	
108-88-3	Toluene	23.81	6761964	303.92 ug/L	1000	3.70 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	
124-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	
100-41-4	Ethylbenzene	27.65	20114608	810.07 ug/L	700	6.50 ug/L	D
00-00-0	m+p-Xylenes	27.85	22725900	2275.00 ug/L	nle	11.40 ug/L	E D
95-47-6	o-Xylene	28.94	20664052	1228.26 ug/L	nle	6.20 ug/L	D
100-42-5	Styrene			not detected	100	5.60 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6 2-Sept-9

Qualifiers

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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	**VB008576.D**	Sample Name	**5797.05**
Operator	**Skelton**	Field ID	**0283MW02**
Date Acquired	**24 Oct 2000 6:29 pm**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.81	6964254	667.23 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.81	3139625	291.32 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
124-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.65	10681528	884.47 ug/L	700	13.00 ug/L	D
00-00-0	m+p-Xylenes	27.84	12640060	2601.65 ug/L	nle	22.80 ug/L	D
95-47-6	o-Xylene	28.94	10988380	1342.92 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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. **0283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5797.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008557.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/20/00

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.	unknown	6.53	2200	J
2.	unknown	7.37	1600	J
3. 000930-18-7	Cyclopropane, 1,2-dimethyl-, cis-	8.04	650	JN
4. 000930-18-7	Cyclopropane, 1,2-dimethyl-, cis-	8.44	370	JN
5. 000107-83-5	Pentane, 2-methyl-	10.79	920	JN
6. 000142-29-0	Cyclopentene	11.44	420	JN
7.	unknown	11.80	1300	J
8. 000110-54-3	Hexane	12.83	560	JN
9. 000592-43-8	2-Hexene	13.69	290	JN
10. 001120-62-3	Cyclopentene, 3-methyl-	14.67	300	JN
11. 000763-29-1	1-Pentene, 2-methyl-	15.43	1800	JN
12. 000110-82-7	Cyclohexane	17.67	1700	JN
13.	unknown	27.85	460	J
14. 000620-14-4	Benzene, 1-ethyl-3-methyl-	31.02	450	JN
15.	unknown	32.11	480	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB008572.D**	Sample Name	**5797.06**
Operator	**Skelton**	Field ID	**0283MW03**
Date Acquired	**24 Oct 2000 3:49 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	18.81	1766987	9.86 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	
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. **0283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 5797 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5797.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB008572.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: not dec. Date Analyzed: 10/24/00

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	**BN04605.D**	Sample Name	**Sblk430**
Operator	**Bhaskar**	Misc Info	**Sblk430 A 001023**
Date Acquired	**24-Oct-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	**BN04605.D**	Sample Name	**Sblk430**
Operator	**Bhaskar**	Misc Info	**Sblk430 A 001023**
Date Acquired	**24-Oct-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: **Sblk430**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5797 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: Sblk430

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04605.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: decanted: (Y/N) N Date Extracted: 10/23/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/24/00

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. 000123-42-2	2-Pentanone, 4-hydroxy-4-methyl	6.63	6	JN
2. 077899-10-6	(Z)14-Tricosenyl formate	32.75	40	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04607.D**	Sample Name	**5797.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**24-Oct-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	**BN04607.D**	Sample Name	**5797.02**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**24-Oct-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	30.62	272221	7.00 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.: 5797 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5797.02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04607.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/23/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/24/00

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	6.62	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04608.D**	Sample Name	**5797.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**24-Oct-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	14.38	7251288	129.68 ug/L	NLE	0.72	ug/L	E
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	16.53	750164	20.73 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	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	**BN04608.D**	Sample Name	**5797.03**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**24-Oct-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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04616.D**	Sample Name	**5797.03 (1:2)**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**25-Oct-00**	Sample Multiplier	**2**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	3.08	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	1.38	ug/L	
62-53-3	Aniline			not detected	NLE	3.70	ug/L	
108-95-2	Phenol			not detected	4000	1.04	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.26	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.22	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.24	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.16	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.24	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.30	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.18	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.14	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.96	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.28	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.68	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.02	ug/L	
78-59-1	Isophorone			not detected	100	0.90	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.04	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.86	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.96	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.78	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	2.30	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.08	ug/L	
91-20-3	Naphthalene	14.37	3668577	126.93 ug/L	NLE	1.44	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	3.56	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.86	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.42	ug/L	
91-57-6	2-Methylnaphthalene	16.53	355437	19.00 ug/L	NLE	1.10	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.52	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.18	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.92	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.06	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.58	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.08	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	1.40	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.84	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	3.86	ug/L	
83-32-9	Acenaphthene			not detected	400	1.24	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	3.68	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.46	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	2.82	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04616.D**	Sample Name	**5797.03 (1:2)**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**25-Oct-00**	Sample Multiplier	**2**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	2.82	ug/L	
84-66-2	Diethylphthalate			not detected	5000	3.08	ug/L	
86-73-7	Fluorene			not detected	300	1.96	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.72	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	5.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	4.20	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	2.88	ug/L	
103-33-3	Azobenzene			not detected	NLE	2.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	2.56	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	2.16	ug/L	
87-86-5	Pentachlorophenol			not detected	1	3.48	ug/L	
85-01-8	Phenanthrene			not detected	NLE	3.46	ug/L	
120-12-7	Anthracene			not detected	2000	3.70	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	4.98	ug/L	
206-44-0	Fluoranthene			not detected	300	2.96	ug/L	
92-87-5	Benzidine			not detected	50	4.30	ug/L	
129-00-0	Pyrene			not detected	200	3.06	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	2.48	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	5.36	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	3.20	ug/L	
218-01-9	Chrysene			not detected	20	2.28	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	2.68	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	2.88	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	2.64	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	2.30	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	4.86	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	4.48	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.88	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	4.08	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.: 5797 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5797.03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04608.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: decanted: (Y/N) N Date Extracted: 10/23/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/24/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 001462-03-9	Cyclopentanol, 1-methyl-	5.67	260	JN
2.	unknown	6.40	250	J
3.	unknown	6.69	710	J
4.	unknown	7.46	41	J
5. 000590-67-0	Cyclohexanol, 1-methyl-	7.84	230	JN
6.	unknown	7.90	150	J
7.	unknown	8.42	150	J
8. 005582-82-1	3-Heptanol, 3-methyl-	8.64	82	JN
9.	unknown	8.80	59	J
10.	unknown	8.89	37	J
11. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.15	220	JN
12. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.21	79	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	9.32	210	JN
14. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.55	130	JN
15.	unknown	9.71	60	J
16. 000108-67-8	Benzene, 1,3,5-trimethyl-	9.86	230	JN
17. 000095-36-3	1,2,4-Trimethylbenzene	10.48	230	JN
18.	unknown	10.79	150	J
19. 001074-43-7	Benzene, 1-methyl-3-propyl-	11.01	41	JN
20. 000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	11.13	67	JN
21. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.76	65	JN
22. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	13.44	43	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04609.D**	Sample Name	**5797.04**
Operator	**Bhaskar**	Misc Info	**283MW01**
Date Acquired	**25-Oct-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
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Data File Name	**BN04609.D**	Sample Name	**5797.04**
Operator	**Bhaskar**	Misc Info	**283MW01**
Date Acquired	**25-Oct-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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5797 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5797.04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04609.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: decanted: (Y/N) N Date Extracted: 10/23/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/25/00

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	6.63	8	J
2. 027519-02-4	9-Tricosene, (Z)-	32.75	40	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04610.D**	Sample Name	**5797.05**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**25-Oct-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	14.39	8070374	149.09 ug/L	NLE	0.72	ug/L	E
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	16.53	871368	24.87 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	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
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Data File Name	**BN04610.D**	Sample Name	**5797.05**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**25-Oct-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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5797 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 5797.05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04610.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: decanted: (Y/N) N Date Extracted: 10/23/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/25/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	001462-03-9	Cyclopentanol, 1-methyl-	5.67	280	JN
2.		unknown	6.40	260	J
3.		unknown	6.69	730	J
4.		unknown	7.47	43	J
5.	000590-67-0	Cyclohexanol, 1-methyl-	7.85	240	JN
6.		unknown	7.91	150	J
7.		unknown	8.43	150	J
8.	005582-82-1	3-Heptanol, 3-methyl-	8.64	86	JN
9.		unknown	8.81	64	J
10.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.16	250	JN
11.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.21	94	JN
12.	000526-73-8	Benzene, 1,2,3-trimethyl-	9.32	220	JN
13.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.55	140	JN
14.		unknown	9.71	63	J
15.	000095-36-3	1,2,4-Trimethylbenzene	9.87	250	JN
16.	000108-67-8	Benzene, 1,3,5-trimethyl-	10.48	230	JN
17.		unknown	10.79	150	J
18.	001074-43-7	Benzene, 1-methyl-3-propyl-	11.01	45	JN
19.	000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	11.13	73	JN
20.	000527-84-4	Benzene, 1-methyl-2-(1-methylel	11.62	41	JN
21.	000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.76	75	JN
22.	027133-93-3	2,3-Dihydro-1-methylindene	13.44	51	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04617.D**	Sample Name	**5797.05 (1:2)**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**25-Oct-00**	Sample Multiplier	**2**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	3.08	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	1.38	ug/L	
62-53-3	Aniline			not detected	NLE	3.70	ug/L	
108-95-2	Phenol			not detected	4000	1.04	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.26	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.22	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.24	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.16	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.24	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.30	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.18	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	1.14	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.96	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.28	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.68	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.02	ug/L	
78-59-1	Isophorone			not detected	100	0.90	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.04	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.86	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.96	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.78	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	2.30	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.08	ug/L	
91-20-3	Naphthalene	14.37	4478113	152.89 ug/L	NLE	1.44	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	3.56	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.86	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.42	ug/L	
91-57-6	2-Methylnaphthalene	16.53	433948	22.89 ug/L	NLE	1.10	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.52	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.18	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.92	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.06	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.58	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	2.08	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	1.40	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.84	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	3.86	ug/L	
83-32-9	Acenaphthene			not detected	400	1.24	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	3.68	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.46	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	2.82	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04617.D**	Sample Name	**5797.05 (1:2)**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**25-Oct-00**	Sample Multiplier	**2**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	2.82	ug/L	
84-66-2	Diethylphthalate			not detected	5000	3.08	ug/L	
86-73-7	Fluorene			not detected	300	1.96	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.72	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	5.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	4.20	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	2.88	ug/L	
103-33-3	Azobenzene			not detected	NLE	2.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	2.56	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	2.16	ug/L	
87-86-5	Pentachlorophenol			not detected	1	3.48	ug/L	
85-01-8	Phenanthrene			not detected	NLE	3.46	ug/L	
120-12-7	Anthracene			not detected	2000	3.70	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	4.98	ug/L	
206-44-0	Fluoranthene			not detected	300	2.96	ug/L	
92-87-5	Benzidine			not detected	50	4.30	ug/L	
129-00-0	Pyrene			not detected	200	3.06	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	2.48	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	5.36	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	3.20	ug/L	
218-01-9	Chrysene			not detected	20	2.28	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	2.68	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	2.88	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	2.64	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	2.30	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	4.86	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	4.48	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.88	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	4.08	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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04611.D**	Sample Name	**5797.06**
Operator	**Bhaskar**	Misc Info	**283MW03**
Date Acquired	**25-Oct-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	**BN04611.D**	Sample Name	**5797.06**
Operator	**Bhaskar**	Misc Info	**283MW03**
Date Acquired	**25-Oct-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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 5797 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 5797.06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN04611.D

Level: (low/med) LOW Date Received: 10/17/00

% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/23/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/25/00

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	6.62	8	J
2. 077899-10-6	(Z)14-Tricosenyl formate	32.75	40	JN

PESTICIDE/PCB

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	PBLK610
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	10/20/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/25/00
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 # :**	5797.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/17/00
	Bldg. 173	**Extraction Date:**	10/20/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/25/00
Analysis:	EPA Method 608	**Location :**	283
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 # :**	5797.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/17/00
	Bldg. 173	**Extraction Date:**	10/20/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/25/00
Analysis:	EPA Method 608	**Location :**	283
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 # :**	5797.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/17/00
	Bldg. 173	**Extraction Date:**	10/20/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/25/00
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW01
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 # :**	5797.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/17/00
	Bldg. 173	**Extraction Date:**	10/20/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/25/00
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW02
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 # :**	5797.06
	DPW, SELFM-PW-EV	**Date Rec'd:**	10/17/00
	Bldg. 173	**Extraction Date:**	10/20/00
	Ft. Monmouth, NJ 07703	**Analysis Date:**	10/25/00
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW03
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 #: 5797
Sample Prepared: 10/24/00

Site: 283

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	10/24/00	ND	200	10.0
Antimony	10/24/00	ND	20	2.0
Arsenic	10/24/00	ND	8	2.0
Barium	10/24/00	ND	2000	0.5
Beryllium	10/24/00	ND	20	0.5
Cadmium	10/24/00	ND	4	0.5
Calcium	10/24/00	73.2	NLE	20.0
Chromium	10/24/00	ND	100	0.5
Cobalt	10/24/00	ND	NLE	0.5
Copper	10/24/00	99.5	1000	2.0
Iron	10/24/00	ND	300	2.0
Lead	10/24/00	ND	10	2.0
Magnesium	10/24/00	ND	NLE	10.0
Manganese	10/24/00	ND	50	0.5
Mercury	10/23/00	ND	2	0.1
Nickel	10/24/00	ND	100	1.0
Potassium	10/24/00	ND	NLE	40.0
Selenium	10/24/00	ND	50	3.0
Silver	10/24/00	ND	20	1.0
Sodium	10/24/00	237	50000	20.0
Thallium	10/24/00	ND	10	2.0
Vanadium	10/24/00	ND	NLE	0.5
Zinc	10/24/00	7.11	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 #: 5797.02
Sample Received: 10/17/00
Sample Matrix: Aqueous

Site: 283

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	10/24/00	ND	200	10.0
Antimony	10/24/00	ND	20	2.0
Arsenic	10/24/00	ND	8	2.0
Barium	10/24/00	0.525	2000	0.5
Beryllium	10/24/00	ND	20	0.5
Cadmium	10/24/00	ND	4	0.5
Calcium	10/24/00	ND	NLE	20.0
Chromium	10/24/00	ND	100	0.5
Cobalt	10/24/00	ND	NLE	0.5
Copper	10/24/00	ND	1000	2.0
Iron	10/24/00	ND	300	2.0
Lead	10/24/00	ND	10	2.0
Magnesium	10/24/00	ND	NLE	10.0
Manganese	10/24/00	ND	50	0.5
Mercury	10/23/00	ND	2	0.1
Nickel	10/24/00	ND	100	1.0
Potassium	10/24/00	ND	NLE	40.0
Selenium	10/24/00	ND	50	3.0
Silver	10/24/00	ND	20	1.0
Sodium	10/24/00	412	50000	20.0
Thallium	10/24/00	ND	10	2.0
Vanadium	10/24/00	ND	NLE	0.5
Zinc	10/24/00	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 #: 5797.03
Sample Received: 10/17/00
Sample Matrix: Aqueous

Site: 283

Field ID#: Field Dup

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/24/00	973	200	10.0
Antimony	10/24/00	4.05	20	2.0
Arsenic	10/24/00	4.89	8	2.0
Barium	10/24/00	45.8	2000	0.5
Beryllium	10/24/00	ND	20	0.5
Cadmium	10/24/00	ND	4	0.5
Calcium	10/24/00	2080	NLE	20.0
Chromium	10/24/00	7.93	100	0.5
Cobalt	10/24/00	ND	NLE	0.5
Copper	10/24/00	10.9	1000	2.0
Iron	10/24/00	3210	300	2.0
Lead	10/24/00	15.9	10	2.0
Magnesium	10/24/00	1170	NLE	10.0
Manganese	10/24/00	5.06	50	0.5
Mercury	10/23/00	ND	2	0.1
Nickel	10/24/00	ND	100	1.0
Potassium	10/24/00	2190	NLE	40.0
Selenium	10/24/00	6.23	50	3.0
Silver	10/24/00	ND	20	1.0
Sodium	10/24/00	17900	50000	20.0
Thallium	10/24/00	ND	10	2.0
Vanadium	10/24/00	2.20	NLE	0.5
Zinc	10/24/00	32.3	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 #: 5797.04
Sample Received: 10/17/00
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/24/00	2120	200	10.0
Antimony	10/24/00	3.97	20	2.0
Arsenic	10/24/00	ND	8	2.0
Barium	10/24/00	80.7	2000	0.5
Beryllium	10/24/00	0.709	20	0.5
Cadmium	10/24/00	ND	4	0.5
Calcium	10/24/00	6220	NLE	20.0
Chromium	10/24/00	1.10	100	0.5
Cobalt	10/24/00	3.20	NLE	0.5
Copper	10/24/00	ND	1000	2.0
Iron	10/24/00	306	300	2.0
Lead	10/24/00	1.85	10	2.0
Magnesium	10/24/00	13200	NLE	10.0
Manganese	10/24/00	21.8	50	0.5
Mercury	10/23/00	ND	2	0.1
Nickel	10/24/00	5.56	100	1.0
Potassium	10/24/00	5590	NLE	40.0
Selenium	10/24/00	ND	50	3.0
Silver	10/24/00	ND	20	1.0
Sodium	10/24/00	42700	50000	20.0
Thallium	10/24/00	ND	10	2.0
Vanadium	10/24/00	ND	NLE	0.5
Zinc	10/24/00	67.0	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 #: 5797.05
Sample Received: 10/17/00
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/24/00	917	200	10.0
Antimony	10/24/00	4.10	20	2.0
Arsenic	10/24/00	2.38	8	2.0
Barium	10/24/00	38.9	2000	0.5
Beryllium	10/24/00	ND	20	0.5
Cadmium	10/24/00	ND	4	0.5
Calcium	10/24/00	1650	NLE	20.0
Chromium	10/24/00	8.60	100	0.5
Cobalt	10/24/00	0.556	NLE	0.5
Copper	10/24/00	ND	1000	2.0
Iron	10/24/00	3340	300	2.0
Lead	10/24/00	14.5	10	2.0
Magnesium	10/24/00	1300	NLE	10.0
Manganese	10/24/00	4.68	50	0.5
Mercury	10/23/00	ND	2	0.1
Nickel	10/24/00	ND	100	1.0
Potassium	10/24/00	2130	NLE	40.0
Selenium	10/24/00	6.69	50	3.0
Silver	10/24/00	ND	20	1.0
Sodium	10/24/00	17900	50000	20.0
Thallium	10/24/00	ND	10	2.0
Vanadium	10/24/00	3.13	NLE	0.5
Zinc	10/24/00	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 #: 5797.06
Sample Received: 10/17/00
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/24/00	365	200	10.0
Antimony	10/24/00	3.90	20	2.0
Arsenic	10/24/00	2.32	8	2.0
Barium	10/24/00	66.6	2000	0.5
Beryllium	10/24/00	ND	20	0.5
Cadmium	10/24/00	ND	4	0.5
Calcium	10/24/00	10400	NLE	20.0
Chromium	10/24/00	1.56	100	0.5
Cobalt	10/24/00	0.753	NLE	0.5
Copper	10/24/00	ND	1000	2.0
Iron	10/24/00	7030	300	2.0
Lead	10/24/00	2.17	10	2.0
Magnesium	10/24/00	2110	NLE	10.0
Manganese	10/24/00	27.5	50	0.5
Mercury	10/23/00	ND	2	0.1
Nickel	10/24/00	1.96	100	1.0
Potassium	10/24/00	7610	NLE	40.0
Selenium	10/24/00	ND	50	3.0
Silver	10/24/00	ND	20	1.0
Sodium	10/24/00	8870	50000	20.0
Thallium	10/24/00	ND	10	2.0
Vanadium	10/24/00	ND	NLE	0.5
Zinc	10/24/00	26.0	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

LTM

	Lab	Aluminum	Iron	Lead	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	200	300	10	50	100	NLE				-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	6.31				V,S,P,M
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	5.54				V,S,P,M
10/17/2000	FMETL	2120	306	1.85	21.8	5.56	6.07				V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 10/17/2000

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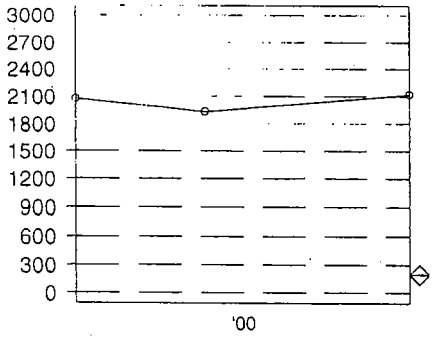
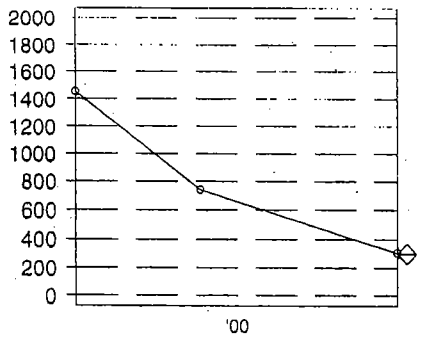
FORT MONMOUTH

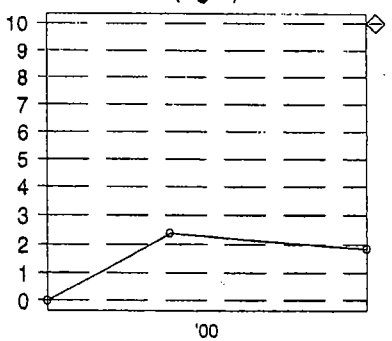
GW MONITORING
BLDG. 283

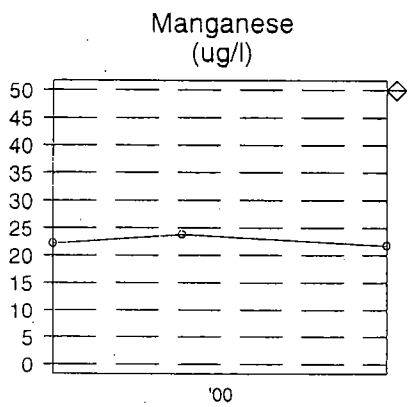
Source 2 of 3

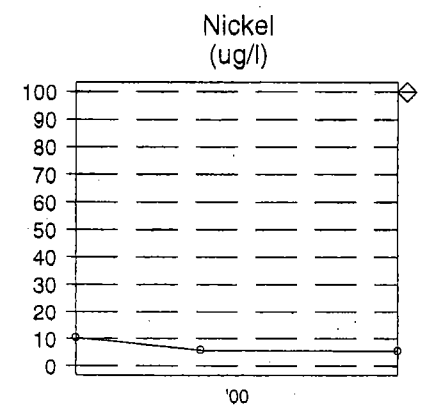
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

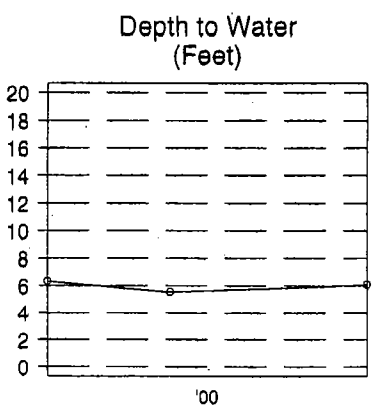












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 10/17/2000

LEGEND:

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NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-27-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	V,S,P,M
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	V,S,P,M
10/17/2000	FMETL	ND	ND	670.35	303.92	810.07	3829.91	ND	ND	152.89	V,S,P,M
10/17/2000D	FMETL	ND	ND	621.26	254.97	791.70	3577.78	ND	ND	126.93	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 10/17/2000

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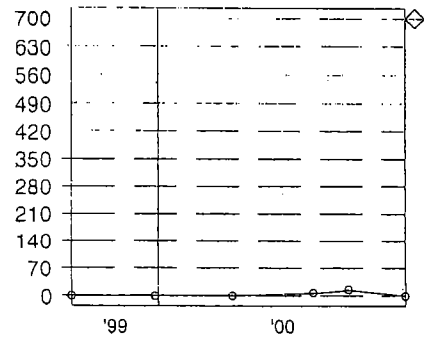
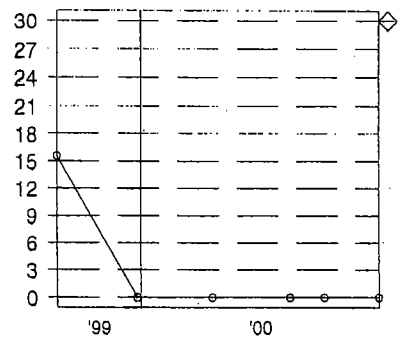
FORT MONMOUTH

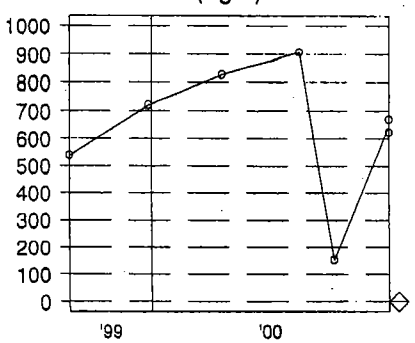
GW MONITORING
BLDG. 283

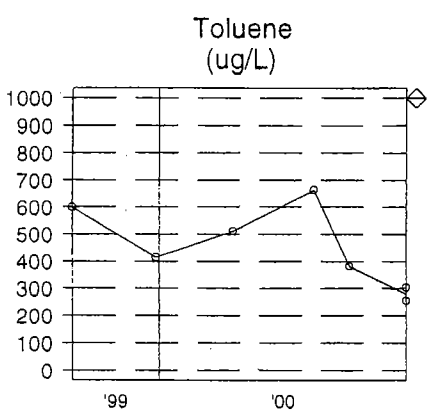
Source 1 of 3

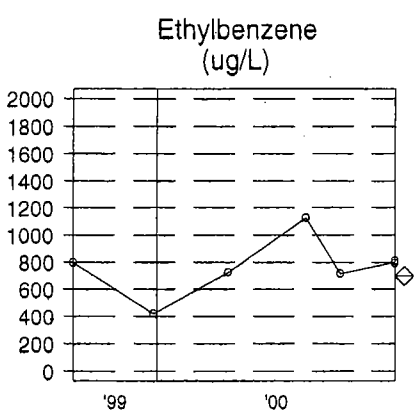
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

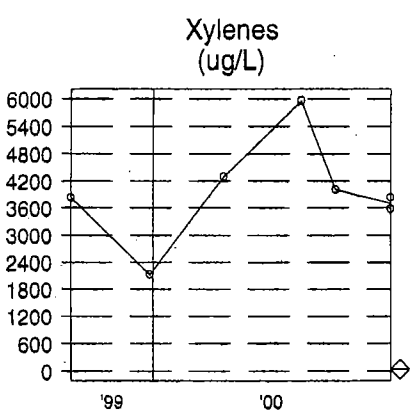


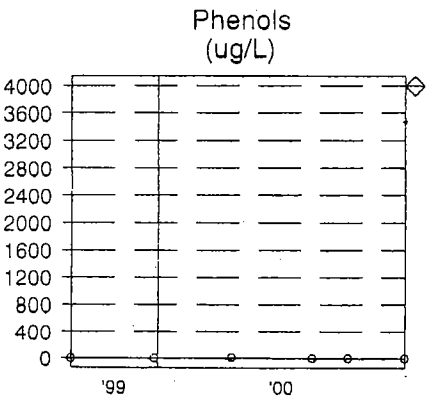


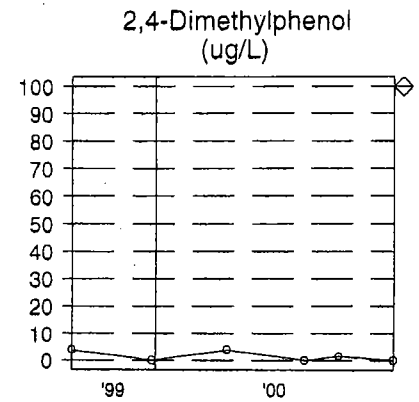


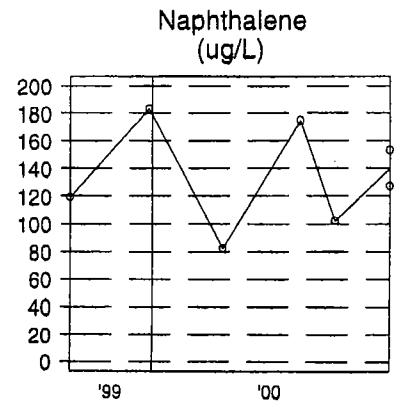












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 10/17/2000

LEGEND:

PARAMETER

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NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-27-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	2-Methyl naphtha lene	Nitro benzene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	-
NJDEP Criteria:	-	NLE	10	200	8	300	10	10	50	2	-
09/20/1999	FMETL	25.25	ND	309	4.74	2330	22.0	8.76	14.5	ND	V,S,P,M
12/27/1999	FMETL	26.28	ND	123	ND	2060	6.92	ND	44.0	0.3	V,S,P,M
03/23/2000	FMETL	7.43	ND	241	ND	2010	15.3	ND	11.9	0.2	V,S,P,M
06/28/2000	FMETL	25.10	ND	81.4	ND	2130	11.5	ND	8.31	ND	V,S,P,M
08/10/2000	FMETL	25.13	1.17	812	3.40	2060	31.9	ND	5.97	ND	V,S,P,M
10/17/2000	FMETL	24.87	ND	917	2.38	3340	14.5	ND	4.68	ND	V,S,P,M
10/17/2000D	FMETL	20.73	ND	973	4.89	3210	15.9	ND	5.06	ND	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 10/17/2000

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FORT MONMOUTH

GW MONITORING
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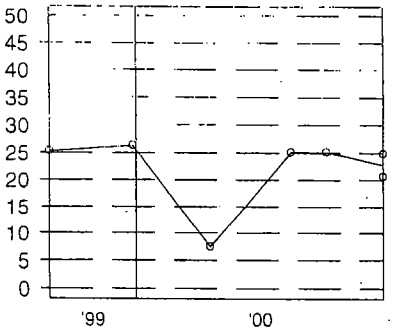
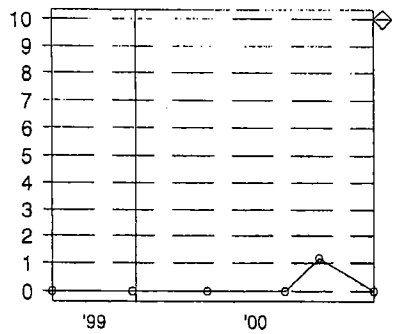
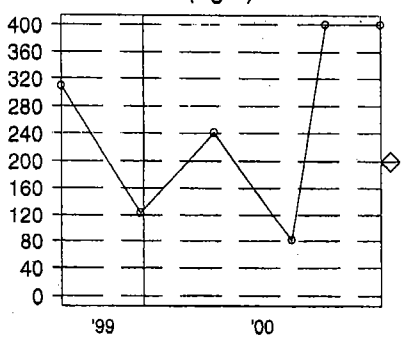
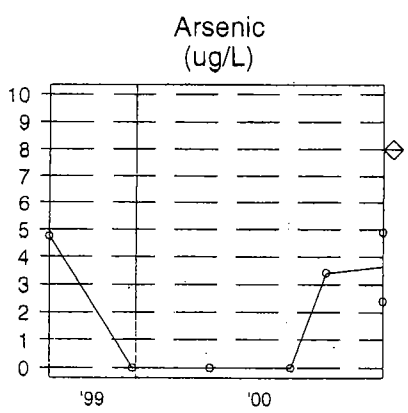
Source 1 of 3

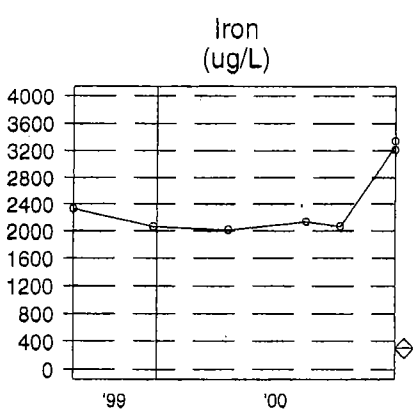
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

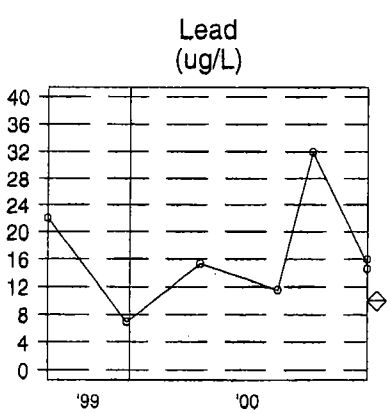


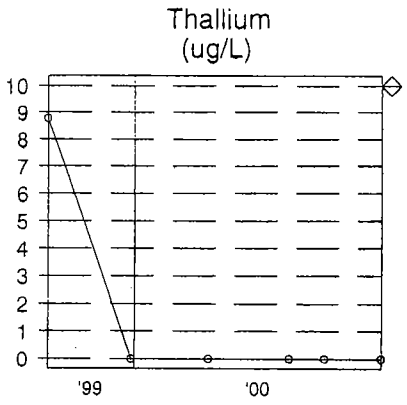


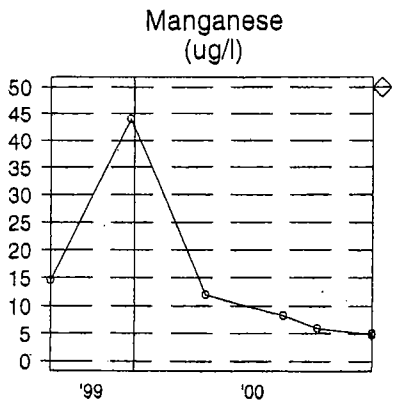


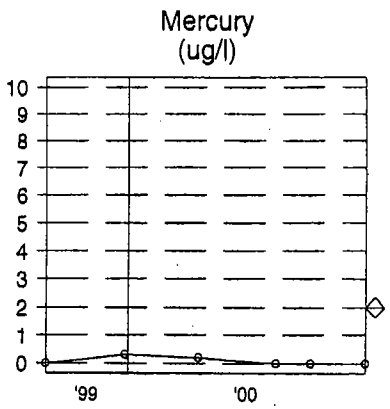












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 10/17/2000

LEGEND:

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o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

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BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-27-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Nickel	Selenium	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:	-	100	50	NLE							-
09/20/1999	FMETL	4.11	6.49	7.20							V,S,P,M
12/27/1999	FMETL	3.62	4.73	6.81							V,S,P,M
03/23/2000	FMETL	6.43	7.29	6.38							V,S,P,M
06/28/2000	FMETL	6.01	4.36	7.83							V,S,P,M
08/10/2000	FMETL	ND	8.40	6.28							V,S,P,M
10/17/2000	FMETL	ND	6.69	7.09							V,S,P,M
10/17/2000D	FMETL	ND	6.23	7.09							V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 10/17/2000

NOTES:

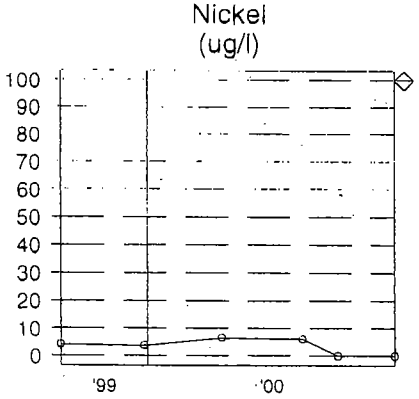
Page 3 of 3.

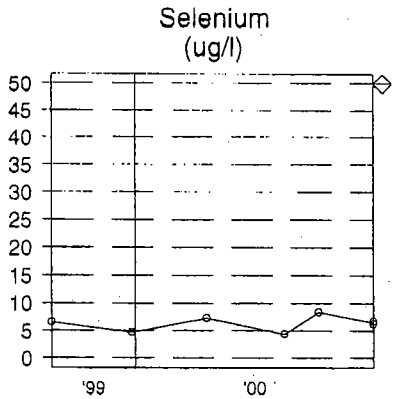
FORT MONMOUTH

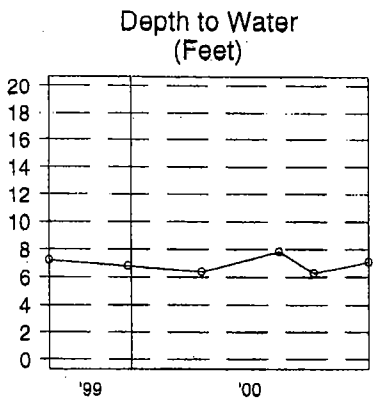
GW MONITORING
BLDG. 283

Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV







SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 10/17/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-27-2000 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	1	200	8	300	10	50	100	NLE		-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	7.12		V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	6.41		V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	6.88		V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 10/17/2000

NOTES:

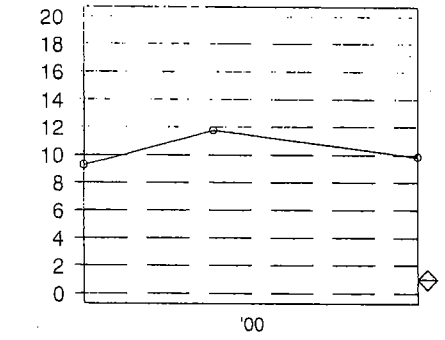
Page 1 of 1.

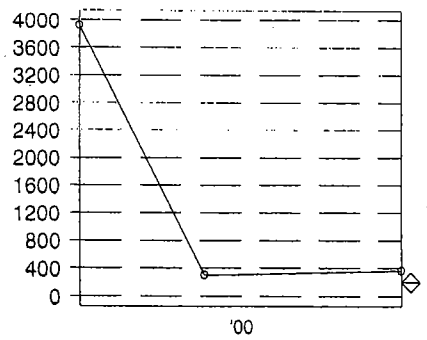
FORT MONMOUTH

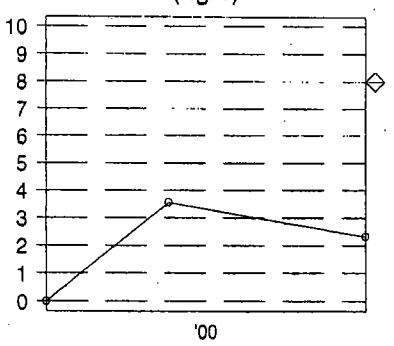
GW MONITORING
BLDG. 283

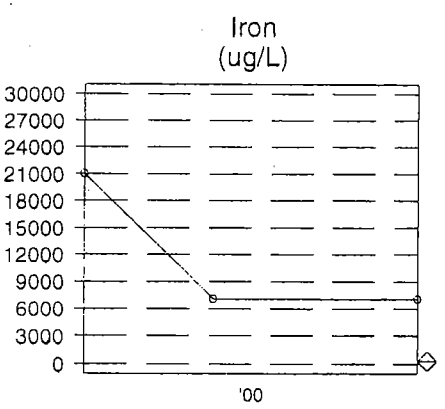
Source 3 of 3

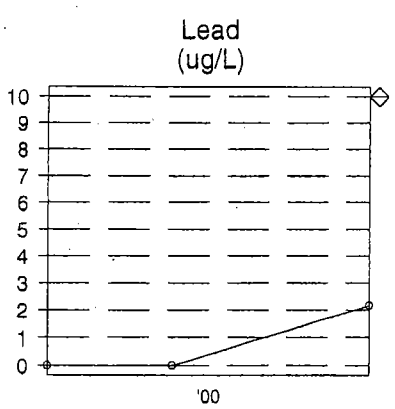
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

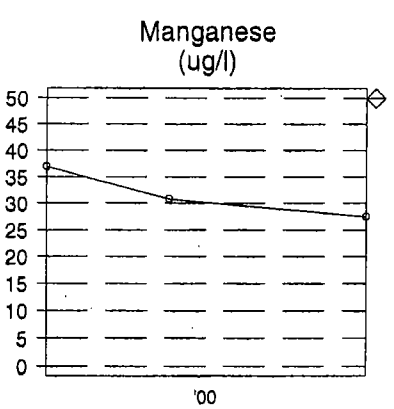


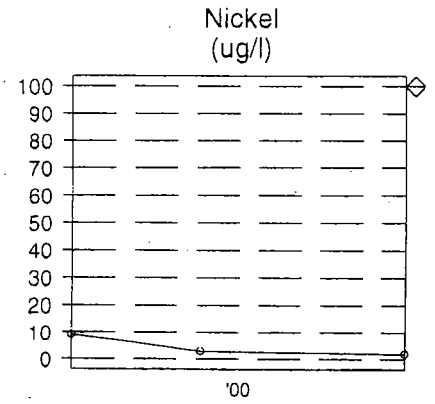


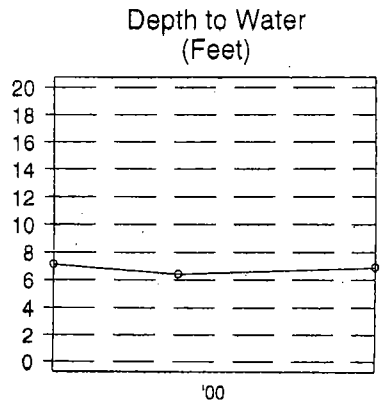












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 10/17/2000

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

11-27-2000 x:\mtech46\fm\283\gw\283.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. 283

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
31	0283MW01	29-40367	01/05/01
32	0283MW02	29-40887	01/05/01
33	0283MW03	29-41650	01/05/01

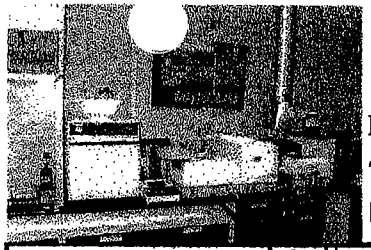
NJDEP Laboratory Certification # 13461

2-7-01
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 #: X21223
(X) DERA ( ) OMA ( ) Other: _____
Project No:
Location: 283 wells 1st Qtr '01
Samplers Name / Company: Corey McCormack, TUS

Comments: HCL/HNO_3/4°C

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	VOA +15	TAL MTLS	P.st/PCB	BNA +25				Hex Prod	Remarks / Preservation Method
28 .01	Trip	1/5/01	0737	AQ	2	✓							—	
29 .02	Field Blank		0930		5	✓	✓	✓	✓				—	
30 .03	Dupe		→		5	✓	✓	✓	✓				—	
31 .04	283 mw01		1007		5	✓	✓	✓	✓				0.0	29 - 40367
32 .05	283 mw02		0948		5	✓	✓	✓	✓				4.1	29 - 40387
33 .06	283 mw03 *	↓	1039	↓	5	✓	✓	✓	✓				0.0	29 - 41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	1/5/01 1530				
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 T/F8/Op ~~from 283~~ w/ M18.290 Same date. com
Tide: N/A

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/05/01
WEATHER: Overcast, 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: 6.11 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.64 ft
(13.64) X .65 X 3 =26.59
GALLONS OF H2O TO BE PURGED: 27 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: 08:09
pH 6.44 su TEMP 17.1 °C
DISSOLVED O2 5.81 ppm SPECIFIC CONDUCTIVITY 193 us/cm

PURGE END TIME: 10:06
pH 6.37 su TEMP 16.5 °C
DISSOLVED O2 4.87 ppm SPECIFIC CONDUCTIVITY 184 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.39 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 10:07
pH 6.38 su TEMP 16.4 °C
DISSOLVED O2 4.86 ppm SPECIFIC CONDUCTIVITY 184 us/cm

SAMPLE END TIME: 10:13

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/05/01
WEATHER: Overcast, 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: 7.32 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 12.37 ft
(12.37) X .65 X 3 =24.12
GALLONS OF H2O TO BE PURGED: 24 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.4 ppm

PURGE START TIME: 08:03
pH 6.54 su — TEMP 17.7 °C
DISSOLVED O2 5.11 ppm — SPECIFIC CONDUCTIVITY 78 us/cm

PURGE END TIME: 09:47
pH 6.49 su — TEMP 17.1 °C
DISSOLVED O2 4.03 ppm — SPECIFIC CONDUCTIVITY 81 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 8.53 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 24 gal

SAMPLE START TIME: 09:48
pH 6.49 su — TEMP 17.2 °C
DISSOLVED O2 4.02 ppm — SPECIFIC CONDUCTIVITY 80 us/cm

SAMPLE END TIME: 09:55

COMMENTS: Strong odor.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 01/05/01
WEATHER: Overcast, 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: 6.94 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 17.11 ft
(17.11) X .65 X 3 = 33.36
GALLONS OF H2O TO BE PURGED: 33 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: 08:15
pH 6.87 su — TEMP 17.7 °C
DISSOLVED O2 5.87 ppm — SPECIFIC CONDUCTIVITY 95 us/cm

PURGE END TIME: 10:38
pH 6.83 su — TEMP 17.1 °C
DISSOLVED O2 4.23 ppm — SPECIFIC CONDUCTIVITY 90 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 7.30 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 33 gal

SAMPLE START TIME: 10:39
pH 6.81 su — TEMP 17.2 °C
DISSOLVED O2 4.21 ppm — SPECIFIC CONDUCTIVITY 90 us/cm

SAMPLE END TIME: 10:44

COMMENTS: DUP. Here. Cloudy while bailing.

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	**VC004692.D**	Sample Name	**MB 011101**
Operator	**Skelton**	Field ID	**MB 011101**
Date Aquired	**11-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

1/16/01 9:23 AM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB011101**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB 011101

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004692.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. Date Analyzed: 1/11/01

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	**VC004673.D**	Sample Name	**28**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**10-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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 28

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004673.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. Date Analyzed: 1/10/01

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	**VC004674.D**	Sample Name	**29**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**10-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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 29

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004674.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. _____ Date Analyzed: 1/10/01

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	VC004675.D	Sample Name	30
Operator	Skelton	Field ID	Dupe
Date Aquired	10-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	18.61	1135626	4.97 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			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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 30

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004675.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. Date Analyzed: 1/10/01

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	**VC004676.D**	Sample Name	**31**
Operator	**Skelton**	Field ID	**0283MW01**
Date Aquired	**10-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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 31

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004676.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. Date Analyzed: 1/10/01

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	**VC004677.D**	Sample Name	**32**
Operator	**Skelton**	Field ID	**0283MW02**
Date Aquired	**10-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	8.86	749067	23.44 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	
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	18.59	82015178	240.15 ug/L	1	0.23 ug/L	E
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	23.62	48749540	145.94 ug/L	1000	0.37 ug/L	E
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	27.44	63615405	158.17 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.64	65216814	472.95 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.72	60202055	215.65 ug/L	nle	0.62 ug/L	E
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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004698.D**	Sample Name	**32**
Operator	**Skelton**	Field ID	**0283MW02**
Date Aquired	**11-Jan-01**	Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.61	16409364	1009.73 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.62	5107533	320.72 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.46	20159562	1160.45 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.66	22014203	3685.82 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.74	17445793	1457.93 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0283MW92**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 32

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004677.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. _____ Date Analyzed: 1/10/01

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: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown hydrocarbon	6.35	34	J
2.	unknown hydrocarbon	7.18	27	J
3.	unknown hydrocarbon	11.53	29	J
4.	unknown hydrocarbon	15.21	32	J
5.	unknown hydrocarbon	17.46	30	J
6. 002452-99-5	Cyclopentane, 1,2-dimethyl-	18.44	26	JN
7. 000110-83-8	Cyclohexene	18.85	30	JN
8.	unknown hydrocarbon	20.47	110	J
9.	unknown	30.84	30	J
10.	unknown	31.92	29	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC004693.D**	Sample Name	**33**
Operator	**Skelton**	Field ID	**0283MW03**
Date Aquired	**11-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	18.61	1558279	5.30 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			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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **0283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 28-33 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 33

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004693.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: not dec. _____ Date Analyzed: 1/11/01

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	**BNA04827.D**	Sample Name	**MB-**
Operator	**Bhaskar**	Misc Info	**MB- 010110**
Date Acquired	**11-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	**BNA04827.D**	Sample Name	**MB-**
Operator	**Bhaskar**	Misc Info	**MB- 010110**
Date Acquired	**11-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-010110**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 29-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-010110

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04827.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/11/01

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	33.93	90	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04829.D**	Sample Name	**29**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**11-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
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Data File Name	**BNA04829.D**	Sample Name	**29**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**11-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.: 29-33 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 29

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04829.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 1/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/11/01

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	**BNA04830.D**	Sample Name	**30**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**11-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
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Data File Name	**BNA04830.D**	Sample Name	**30**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**11-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.: 29-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 30

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04830.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/11/01

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	**BNA04831.D**	Sample Name	**31**
Operator	**Bhaskar**	Misc Info	**0283MW01**
Date Acquired	**11-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	**BNA04831.D**	Sample Name	**31**
Operator	**Bhaskar**	Misc Info	**0283MW01**
Date Acquired	**11-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: **0283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 29-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 31

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04831.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/11/01

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	7.84	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04832.D**	Sample Name	**32**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**11-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	13.52	8544537	224.88 ug/L	NLE	0.72	ug/L	E
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	15.17	850921	28.12 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			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	**BNA04832.D**	Sample Name	**32**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**11-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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA04841.D**	Sample Name	**32 (1:5)**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**12-Jan-01**	Sample Multiplier	**5**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	7.70	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	3.45	ug/L	
62-53-3	Aniline			not detected	NLE	9.25	ug/L	
108-95-2	Phenol			not detected	4000	2.60	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	3.15	ug/L	
95-57-8	2-Chlorophenol			not detected	40	3.05	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	3.10	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.90	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	3.10	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	3.25	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	2.95	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	2.85	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	2.40	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	3.20	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.70	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.55	ug/L	
78-59-1	Isophorone			not detected	100	2.25	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	2.60	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	4.65	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.40	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.95	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	5.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.70	ug/L	
91-20-3	Naphthalene	13.50	1816861	223.45 ug/L	NLE	3.60	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	8.90	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	2.15	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	3.55	ug/L	
91-57-6	2-Methylnaphthalene	15.16	174388	26.93 ug/L	NLE	2.75	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	3.80	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	2.95	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	4.80	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.65	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	5.20	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	5.20	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	3.50	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	4.60	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	9.65	ug/L	
83-32-9	Acenaphthene			not detected	400	3.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	9.20	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	3.65	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	7.05	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA04841.D**	Sample Name	**32 (1:5)**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**12-Jan-01**	Sample Multiplier	**5**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	7.05	ug/L	
84-66-2	Diethylphthalate			not detected	5000	7.70	ug/L	
86-73-7	Fluorene			not detected	300	4.90	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	4.30	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	14.80	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	10.50	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	7.20	ug/L	
103-33-3	Azobenzene			not detected	NLE	5.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	6.40	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	5.40	ug/L	
87-86-5	Pentachlorophenol			not detected	1	8.70	ug/L	
85-01-8	Phenanthrene			not detected	NLE	8.65	ug/L	
120-12-7	Anthracene			not detected	2000	9.25	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	12.45	ug/L	
206-44-0	Fluoranthene			not detected	300	7.40	ug/L	
92-87-5	Benzidine			not detected	50	10.75	ug/L	
129-00-0	Pyrene			not detected	200	7.65	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	6.20	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	13.40	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	8.00	ug/L	
218-01-9	Chrysene			not detected	20	5.70	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	6.70	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	7.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	6.60	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	5.75	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	12.15	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	11.20	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	9.70	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	10.20	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: **0283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 29-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 32

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04832.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/11/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000077-74-7	3-Pentanol, 3-methyl-	5.31	480	JN
2. 001462-03-9	Cyclopentanol, 1-methyl-	6.12	240	JN
3.	unknown	6.92	300	J
4. 000595-41-5	3-Pentanol, 2,3-dimethyl-	7.09	62	JN
5.	unknown	7.16	480	J
6. 019550-46-0	1,3-Dimethyl cyclopentanol	7.21	350	JN
7. 000590-67-0	Cyclohexanol, 1-methyl-	8.30	260	JN
8.	unknown	8.37	130	J
9.	unknown	8.87	170	J
10. 005582-82-1	3-Heptanol, 3-methyl-	9.07	110	JN
11.	unknown	9.19	77	J
12.	unknown	9.27	100	J
13. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.51	320	JN
14. 000622-96-8	Benzene, 1-ethyl-4-methyl-	9.56	130	JN
15. 000108-67-8	Benzene, 1,3,5-trimethyl-	9.66	270	JN
16. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.84	150	JN
17. 000095-63-6	Benzene, 1,2,4-trimethyl-	10.14	710	JN
18. 000108-67-8	Benzene, 1,3,5-trimethyl-	10.65	260	JN
19. 000496-11-7	Indane	10.92	170	JN
20. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.22	70	JN
21. 000527-84-4	Benzene, 1-methyl-2-(1-methylel	11.71	73	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BNA04833.D	Sample Name	33
Operator	Bhaskar	Misc Info	0283MW03
Date Acquired	11-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	**BNA04833.D**	Sample Name	**33**
Operator	**Bhaskar**	Misc Info	**0283MW03**
Date Acquired	**11-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: **0283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 29-33 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 33

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA04833.D

Level: (low/med) LOW Date Received: 1/5/01

% Moisture: decanted: (Y/N) N Date Extracted: 1/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/11/01

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 # :**	MB118
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	1/9/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/10/01
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 # :**	29
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/5/01
	Bldg. 173	**Extraction Date:**	1/9/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/10/01
Analysis:	EPA Method 608	**Location :**	283 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 # :**	30
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/5/01
	Bldg. 173	**Extraction Date:**	1/9/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/10/01
Analysis:	EPA Method 608	**Location :**	283 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		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 # :**	31
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/5/01
	Bldg. 173	**Extraction Date:**	1/9/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/10/01
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW01
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 # :**	32
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/5/01
	Bldg. 173	**Extraction Date:**	1/9/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/10/01
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW02
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 # :**	33
	DPW, SELFM-PW-EV	**Date Rec'd:**	1/5/01
	Bldg. 173	**Extraction Date:**	1/9/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	1/10/01
Analysis:	EPA Method 608	**Location :**	283 wells
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW03
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 #: 29-33
Sample Prepared: 01/11/01

Site: 283

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/11/01	ND	200	10.0
Antimony	01/11/01	ND	20	2.0
Arsenic	01/11/01	ND	8	2.0
Barium	01/11/01	ND	2000	0.5
Beryllium	01/11/01	ND	20	0.5
Cadmium	01/11/01	ND	4	0.5
Calcium	01/11/01	ND	NLE	20.0
Chromium	01/11/01	ND	100	0.5
Cobalt	01/11/01	ND	NLE	0.5
Copper	01/11/01	ND	1000	2.0
Iron	01/11/01	116	300	2.0
Lead	01/11/01	ND	10	1.0
Magnesium	01/11/01	ND	NLE	10.0
Manganese	01/11/01	1.79	50	0.5
Mercury	01/10/01	ND	2	0.1
Nickel	01/11/01	ND	100	1.0
Potassium	01/11/01	ND	NLE	40.0
Selenium	01/11/01	ND	50	3.0
Silver	01/11/01	ND	20	1.0
Sodium	01/11/01	ND	50000	20.0
Thallium	01/11/01	ND	10	2.0
Vanadium	01/11/01	ND	NLE	0.5
Zinc	01/11/01	8.03	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 #: 29
Sample Received: 01/05/01
Sample Matrix: Aqueous

Site: 283

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/11/01	ND	200	10.0
Antimony	01/11/01	ND	20	2.0
Arsenic	01/11/01	ND	8	2.0
Barium	01/11/01	ND	2000	0.5
Beryllium	01/11/01	ND	20	0.5
Cadmium	01/11/01	ND	4	0.5
Calcium	01/11/01	ND	NLE	20.0
Chromium	01/11/01	ND	100	0.5
Cobalt	01/11/01	ND	NLE	0.5
Copper	01/11/01	ND	1000	2.0
Iron	01/11/01	ND	300	2.0
Lead	01/11/01	ND	10	1.0
Magnesium	01/11/01	ND	NLE	10.0
Manganese	01/11/01	ND	50	0.5
Mercury	01/10/01	ND	2	0.1
Nickel	01/11/01	ND	100	1.0
Potassium	01/11/01	ND	NLE	40.0
Selenium	01/11/01	ND	50	3.0
Silver	01/11/01	ND	20	1.0
Sodium	01/11/01	ND	50000	20.0
Thallium	01/11/01	ND	10	2.0
Vanadium	01/11/01	ND	NLE	0.5
Zinc	01/11/01	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 #: 30
Sample Received: 01/05/01
Sample Matrix: Aqueous

Site: 283

Field ID#: Dupe

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/11/01	2090	200	10.0
Antimony	01/11/01	ND	20	2.0
Arsenic	01/11/01	9.03	8	2.0
Barium	01/11/01	371	2000	0.5
Beryllium	01/11/01	ND	20	0.5
Cadmium	01/11/01	ND	4	0.5
Calcium	01/11/01	12800	NLE	20.0
Chromium	01/11/01	52.9	100	0.5
Cobalt	01/11/01	1.26	NLE	0.5
Copper	01/11/01	ND	1000	2.0
Iron	01/11/01	50500	300	2.0
Lead	01/11/01	ND	10	1.0
Magnesium	01/11/01	3170	NLE	10.0
Manganese	01/11/01	63.9	50	0.5
Mercury	01/10/01	ND	2	0.1
Nickel	01/11/01	16.1	100	1.0
Potassium	01/11/01	10700	NLE	40.0
Selenium	01/11/01	ND	50	3.0
Silver	01/11/01	3.27	20	1.0
Sodium	01/11/01	8540	50000	20.0
Thallium	01/11/01	ND	10	2.0
Vanadium	01/11/01	7.24	NLE	0.5
Zinc	01/11/01	35.1	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 #: 31
Sample Received: 01/05/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/11/01	2460	200	10.0
Antimony	01/11/01	ND	20	2.0
Arsenic	01/11/01	ND	8	2.0
Barium	01/11/01	78.2	2000	0.5
Beryllium	01/11/01	0.627	20	0.5
Cadmium	01/11/01	ND	4	0.5
Calcium	01/11/01	7180	NLE	20.0
Chromium	01/11/01	0.880	100	0.5
Cobalt	01/11/01	4.03	NLE	0.5
Copper	01/11/01	ND	1000	2.0
Iron	01/11/01	868	300	2.0
Lead	01/11/01	ND	10	1.0
Magnesium	01/11/01	15300	NLE	10.0
Manganese	01/11/01	26.0	50	0.5
Mercury	01/10/01	ND	2	0.1
Nickel	01/11/01	4.89	100	1.0
Potassium	01/11/01	5310	NLE	40.0
Selenium	01/11/01	ND	50	3.0
Silver	01/11/01	ND	20	1.0
Sodium	01/11/01	46600	50000	20.0
Thallium	01/11/01	ND	10	2.0
Vanadium	01/11/01	ND	NLE	0.5
Zinc	01/11/01	46.6	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 #: 32
Sample Received: 01/05/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/11/01	360	200	10.0
Antimony	01/11/01	ND	20	2.0
Arsenic	01/11/01	3.72	8	2.0
Barium	01/11/01	34.6	2000	0.5
Beryllium	01/11/01	ND	20	0.5
Cadmium	01/11/01	ND	4	0.5
Calcium	01/11/01	1770	NLE	20.0
Chromium	01/11/01	2.60	100	0.5
Cobalt	01/11/01	0.717	NLE	0.5
Copper	01/11/01	80.5	1000	2.0
Iron	01/11/01	3220	300	2.0
Lead	01/11/01	25.3	10	1.0
Magnesium	01/11/01	1150	NLE	10.0
Manganese	01/11/01	6.47	50	0.5
Mercury	01/10/01	ND	2	0.1
Nickel	01/11/01	2.85	100	1.0
Potassium	01/11/01	1960	NLE	40.0
Selenium	01/11/01	6.22	50	3.0
Silver	01/11/01	ND	20	1.0
Sodium	01/11/01	17300	50000	20.0
Thallium	01/11/01	ND	10	2.0
Vanadium	01/11/01	ND	NLE	0.5
Zinc	01/11/01	147	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 #: 33
Sample Received: 01/05/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/11/01	1680	200	10.0
Antimony	01/11/01	ND	20	2.0
Arsenic	01/11/01	6.40	8	2.0
Barium	01/11/01	284	2000	0.5
Beryllium	01/11/01	ND	20	0.5
Cadmium	01/11/01	ND	4	0.5
Calcium	01/11/01	12400	NLE	20.0
Chromium	01/11/01	18.0	100	0.5
Cobalt	01/11/01	0.963	NLE	0.5
Copper	01/11/01	105	1000	2.0
Iron	01/11/01	38500	300	2.0
Lead	01/11/01	21.1	10	1.0
Magnesium	01/11/01	2860	NLE	10.0
Manganese	01/11/01	34.3	50	0.5
Mercury	01/10/01	ND	2	0.1
Nickel	01/11/01	8.53	100	1.0
Potassium	01/11/01	10000	NLE	40.0
Selenium	01/11/01	ND	50	3.0
Silver	01/11/01	ND	20	1.0
Sodium	01/11/01	7960	50000	20.0
Thallium	01/11/01	ND	10	2.0
Vanadium	01/11/01	5.04	NLE	0.5
Zinc	01/11/01	216	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	Aluminum	Iron	Lead	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	200	300	10	50	100	NLE				-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	6.31				V,S,P,M
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	5.54				V,S,P,M
10/17/2000	FMETL	2120	306	1.85	21.8	5.56	6.07				V,S,P,M
01/05/2001	FMETL	2460	868	ND	26.0	4.89	6.11				V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 01/05/2001

NOTES:

FORT MONMOUTH

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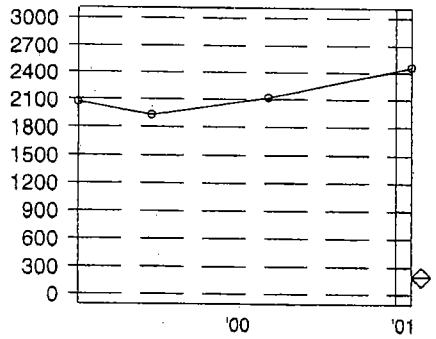
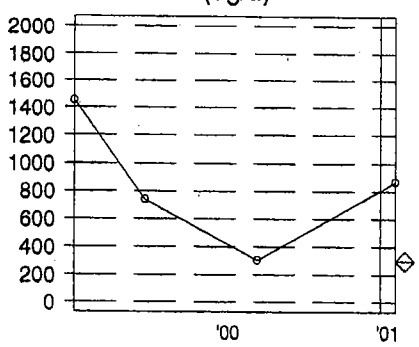
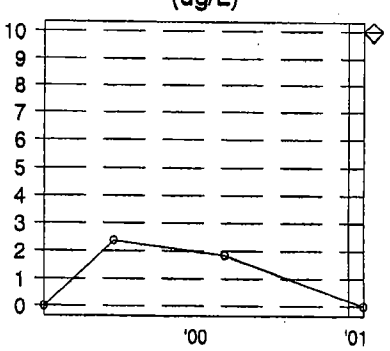
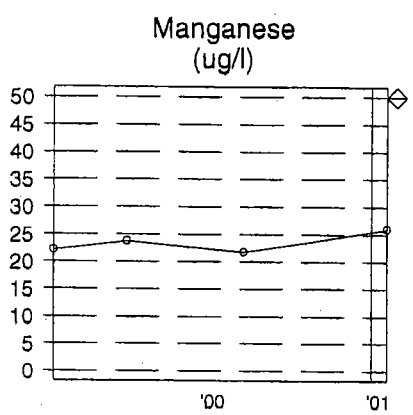
Source 2 of 3

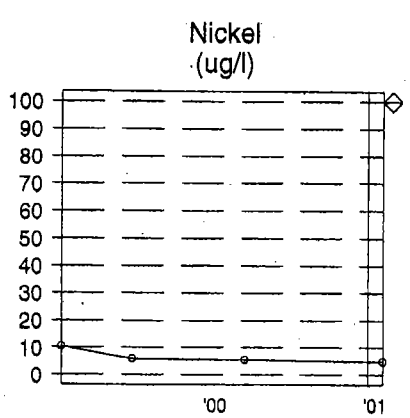
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

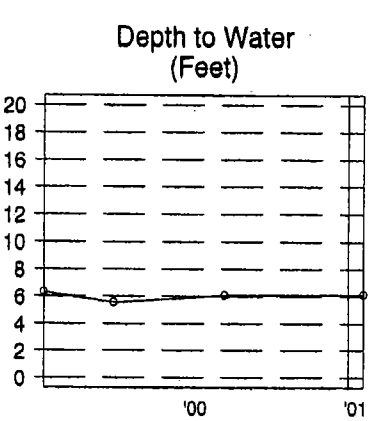












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 01/05/2001

LEGEND:

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NJDEP Criteria

FORT MONMOUTH

GW MONITORING
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Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-07-2001 x:\mtech48\fm\283\gw\283.wsf

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	V,S,P,M
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	V,S,P,M
10/17/2000	FMETL	ND	ND	670.35	303.92	810.07	3829.91	ND	ND	152.89	V,S,P,M
10/17/2000D	FMETL	ND	ND	621.26	254.97	791.70	3577.78	ND	ND	126.93	V,S,P,M
01/05/2001	FMETL	23.44	ND	1009.73	320.72	1160.45	5143.75	ND	ND	223.45	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
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FORT MONMOUTH

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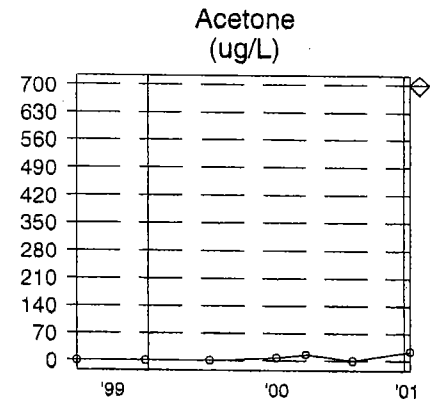
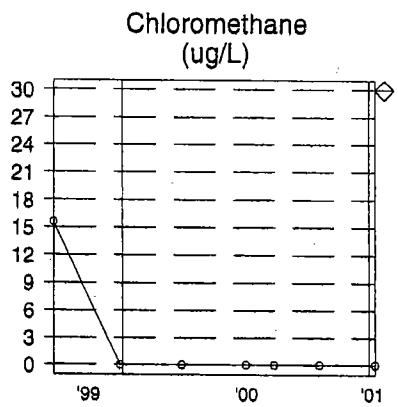
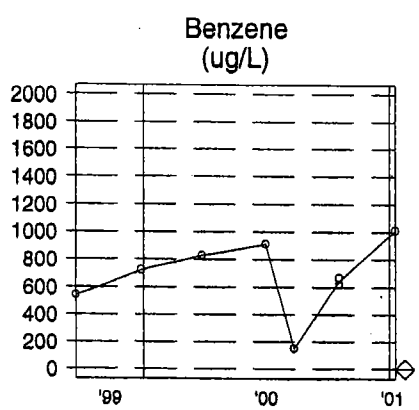
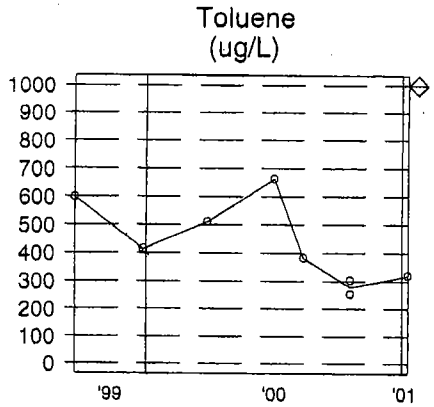
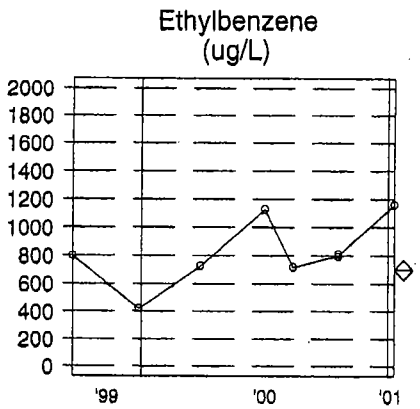
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

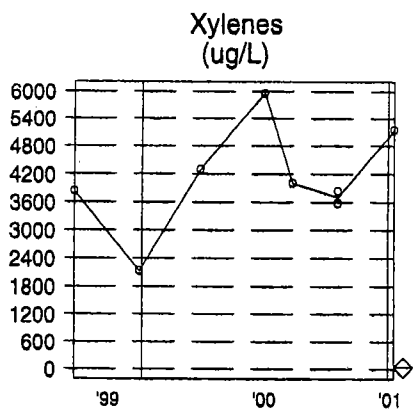


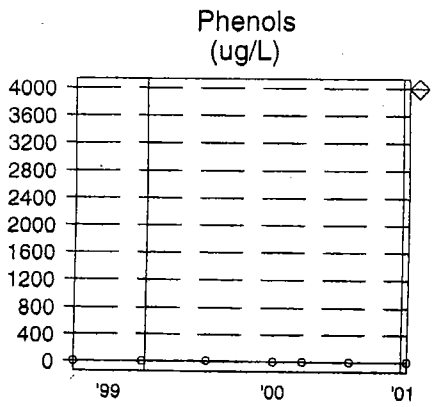


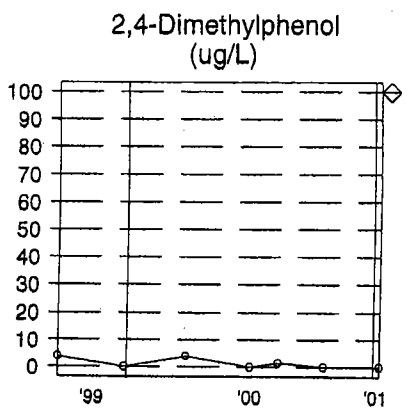


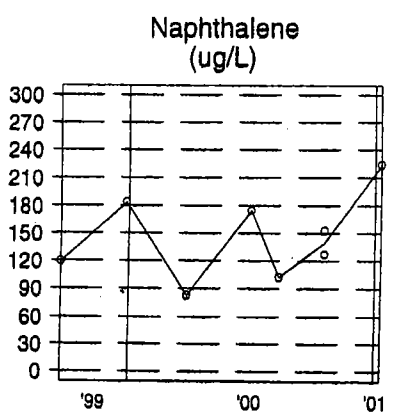












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 01/05/2001

LEGEND:

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NJDEP Criteria

FORT MONMOUTH

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U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	2-Methyl naphtha lene	Nitro benzene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	-
NJDEP Criteria:	-	NLE	10	200	8	300	10	10	50	2	-
09/20/1999	FMETL	25.25	ND	309	4.74	2330	22.0	8.76	14.5	ND	V,S,P,M
12/27/1999	FMETL	26.28	ND	123	ND	2060	6.92	ND	44.0	0.3	V,S,P,M
03/23/2000	FMETL	7.43	ND	241	ND	2010	15.3	ND	11.9	0.2	V,S,P,M
06/28/2000	FMETL	25.10	ND	81.4	ND	2130	11.5	ND	8.31	ND	V,S,P,M
08/10/2000	FMETL	25.13	1.17	812	3.40	2060	31.9	ND	5.97	ND	V,S,P,M
10/17/2000	FMETL	24.87	ND	917	2.38	3340	14.5	ND	4.68	ND	V,S,P,M
10/17/2000D	FMETL	20.73	ND	973	4.89	3210	15.9	ND	5.06	ND	V,S,P,M
01/05/2001	FMETL	28.12	ND	360	3.72	3220	25.3	ND	6.47	ND	V,S,P,M

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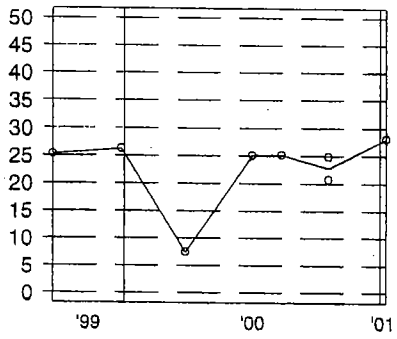
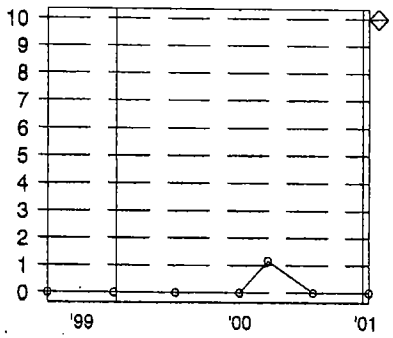
FORT MONMOUTH
SELFM-PW-EV

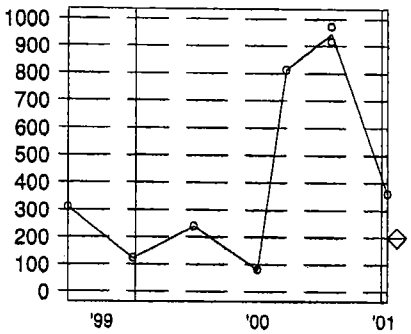
2-Methylnaphthalene
(ug/L)



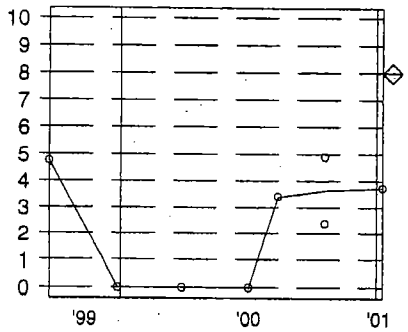
Nitrobenzene
(ug/L)



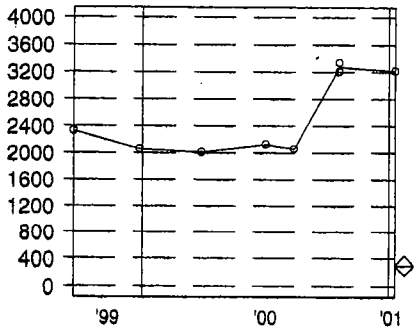
Aluminum
(ug/L)



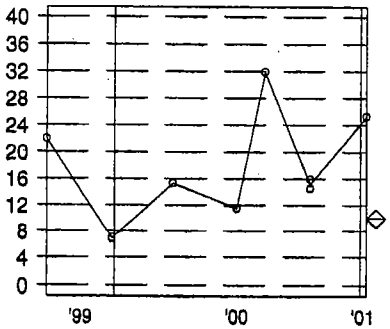
Arsenic
(ug/L)



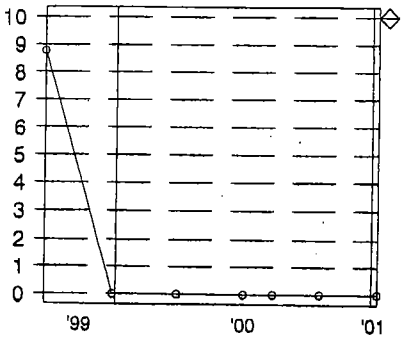
Iron
(ug/L)



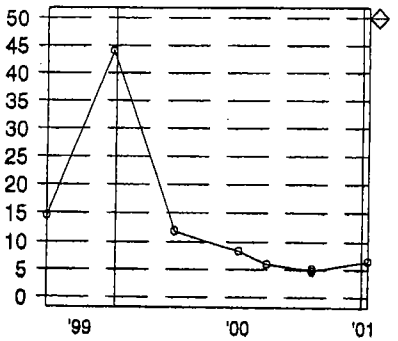
Lead
(ug/L)



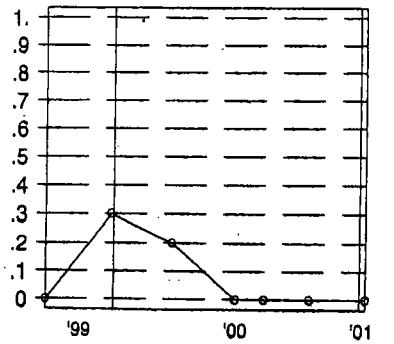
Thallium
(ug/L)



Manganese
(ug/l)



Mercury
(ug/l)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 01/05/2001

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NJDEP Criteria

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FORT MONMOUTH
SELFM-PW-EV

	Lab	Nickel	Selenium	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:	-	100	50	NLE							-
09/20/1999	FMETL	4.11	6.49	7.20							V,S,P,M
12/27/1999	FMETL	3.62	4.73	6.81							V,S,P,M
03/23/2000	FMETL	6.43	7.29	6.38							V,S,P,M
06/28/2000	FMETL	6.01	4.36	7.83							V,S,P,M
08/10/2000	FMETL	ND	8.40	6.28							V,S,P,M
10/17/2000	FMETL	ND	6.69	7.09							V,S,P,M
10/17/2000D	FMETL	ND	6.23	7.09							V,S,P,M
01/05/2001	FMETL	2.85	6.22	7.32							V,S,P,M

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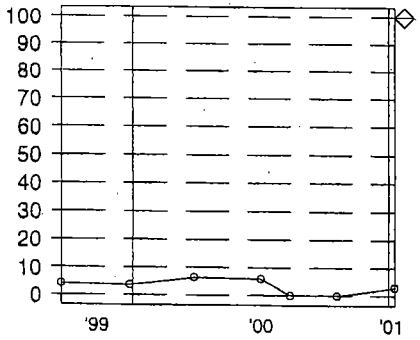
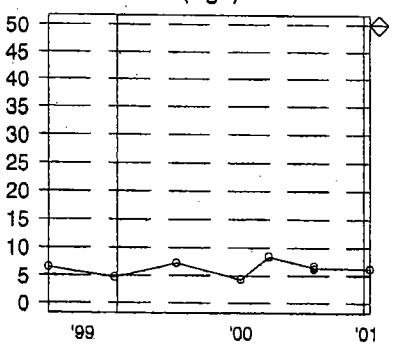
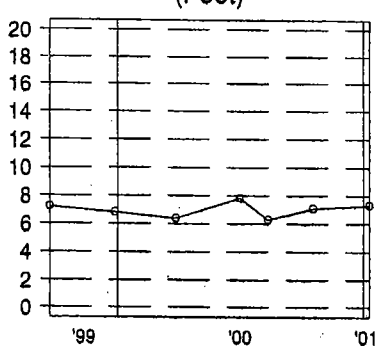
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV







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Sampling Dates:
09/20/1999 - 01/05/2001

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NJDEP Criteria

FORT MONMOUTH

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Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Silver	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	20	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	3.27	6.94	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
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FORT MONMOUTH
SELFM-PW-EV

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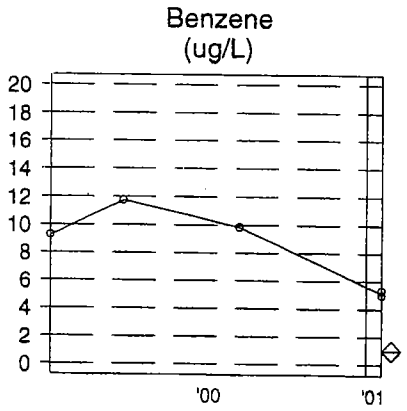

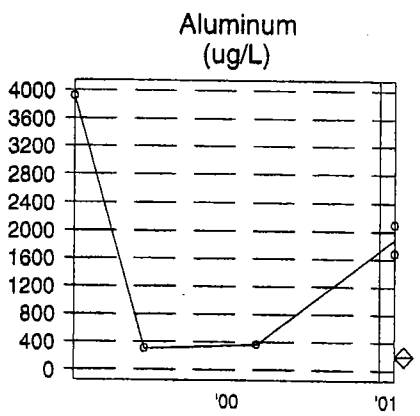

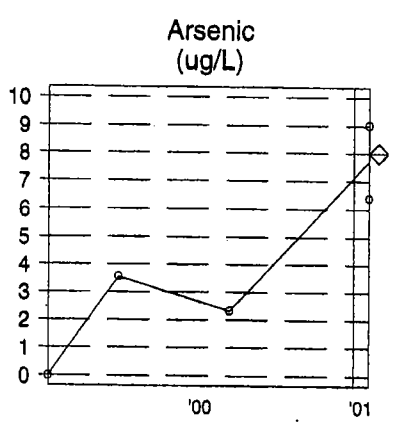

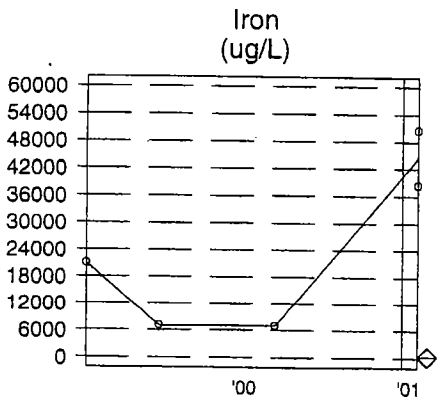

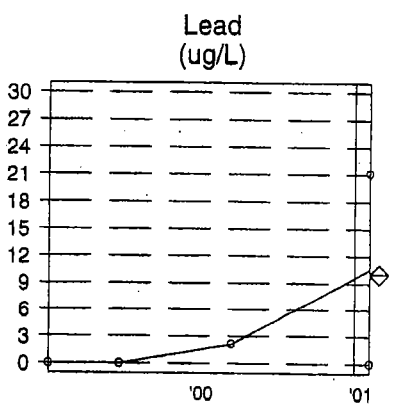

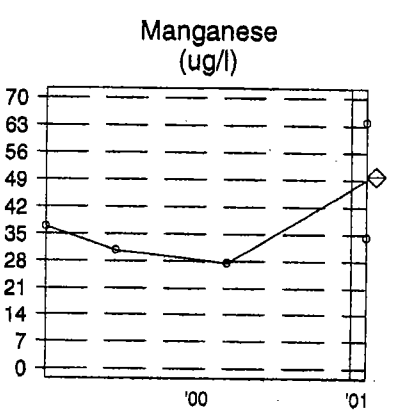

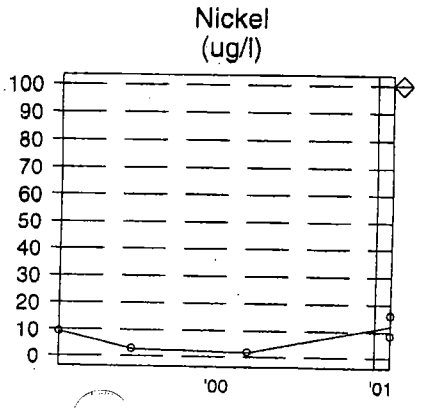

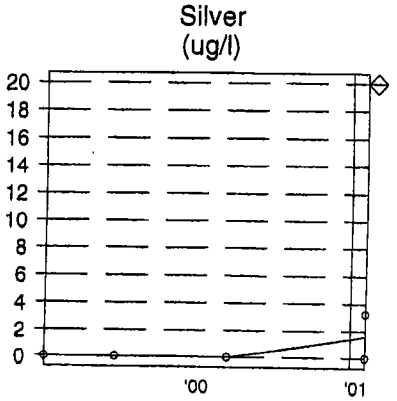

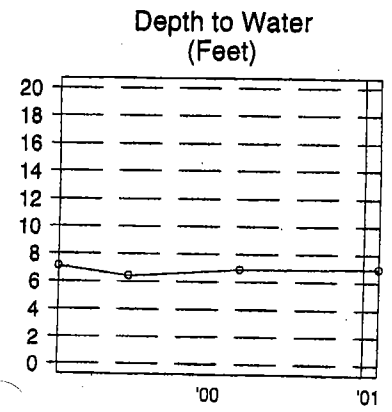

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 01/05/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-07-2001 x:\mtech46\fm\283\gw\283.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. 283 #8

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
1602904	0283MW01	29-40367	04/04/01
1602905	0283MW02	29-40887	04/04/01
1602906	0283MW03	29-41650	04/04/01

NJDEP Laboratory Certification # 13461

7-9-01

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 #: 426223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: 283
2nd Qtr '01

Samplers Name / Company: Corey McCormack, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL MTLS	Pest / PCB	BN/A's				Hg Read	Comments: Remarks / Preservation Method
														HCL/HNO_3/4°C
160029 .01	Trip	4/4/01	0737	AQ	2	✓							—	
.02	Field Blank		0830		5	✓	✓	✓	✓				—	
.03	Dupe		—		5	✓	✓	✓	✓				—	
.04	283mw01		1023		5	✓	✓	✓	✓				0.0	29-40367
.05 ~~.05~~	283mw02		1014		5	✓	✓	✓	✓				0.0	29-40887
.06	283mw03 *	↓	1053	↓	5	✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	4/4/01 1510				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, ( )Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: ( )Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: Shows T/FB/D w/ 290/M18 Some Data
Tide: N/A

print legibly

Coc.xls3/21/01

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 04/04/01
WEATHER: Sunny, 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: 4.62 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 15.13 ft
(15.13) X .65 X 3 =29.50
GALLONS OF H2O TO BE PURGED: 30 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: 08:12
pH 3.52 su TEMP 9.9 °C
DISSOLVED O2 5.93 ppm SPECIFIC CONDUCTIVITY 518 us/cm

PURGE END TIME: 10:22
pH 3.48 su TEMP 9.7 °C
DISSOLVED O2 5.38 ppm SPECIFIC CONDUCTIVITY 516 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 5.15 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 30 gal

SAMPLE START TIME: 10:23
pH 3.49 su TEMP 9.7 °C
DISSOLVED O2 5.37 ppm SPECIFIC CONDUCTIVITY 516 us/cm

SAMPLE END TIME: 10:29

COMMENTS: Very low pH. Recalibrate meter, ok.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 04/04/01
WEATHER: Sunny, 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: 4.81 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 14.88 ft
(14.88) X .65 X 3 =29.01
GALLONS OF H2O TO BE PURGED: 29 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: 08:07
pH 5.17 su TEMP 12.0 °C
DISSOLVED O2 5.91 ppm SPECIFIC CONDUCTIVITY 109 us/cm

PURGE END TIME: 10:13
pH 5.10 su TEMP 10.8 °C
DISSOLVED O2 5.43 ppm SPECIFIC CONDUCTIVITY 105 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.87 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 29 gal

SAMPLE START TIME: 10:14
pH 5.10 su TEMP 10.8 °C
DISSOLVED O2 5.41 ppm SPECIFIC CONDUCTIVITY 105 us/cm

SAMPLE END TIME: 10:19

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 04/04/01
WEATHER: Sunny, 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: 5.75 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 18.30 ft
(18.30) X .65 X 3 = 35.68
GALLONS OF H2O TO BE PURGED: 36 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: 08:16
pH 5.61 su — TEMP 15.3 °C
DISSOLVED O2 5.81 ppm — SPECIFIC CONDUCTIVITY 178 us/cm

PURGE END TIME: 10:52
pH 5.57 su — TEMP 15.1 °C
DISSOLVED O2 5.30 ppm — SPECIFIC CONDUCTIVITY 177 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.11 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 36 gal

SAMPLE START TIME: 10:53
pH 5.57 su — TEMP 15.1 °C
DISSOLVED O2 5.27 ppm — SPECIFIC CONDUCTIVITY 177 us/cm

SAMPLE END TIME: 10:59

COMMENTS: DUP. Here. 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 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	**VC005502.D**	Sample Name	**MB**
Operator	**Skelton**	Field ID	**MB 1633**
Date Aquired	**10-Apr-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

4/11/01 11:55 AM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 1633**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

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

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005502.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. Date Analyzed: 4/10/01

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	**VC005506.D**	Sample Name	**1602901**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**10-Apr-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	11.17	231343	2.77 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	16.22	29255155	229.26 ug/L	6	0.30 ug/L	E
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	21.36	2773859	33.55 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	25.77	189185	4.17 ug/L	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

4/11/01 11:55 AM

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC005517.D**	Sample Name	**1602901**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**10-Apr-01**	Multiplier	**5**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	9.25 ug/L	
107131	Acrylonitrile			not detected	50	13.90 ug/L	
75650	tert-Butyl alcohol			not detected	nle	42.60 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.80 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	8.40 ug/L	
74-87-3	Chloromethane			not detected	30	5.80 ug/L	
75-01-4	Vinyl Chloride			not detected	5	5.30 ug/L	
74-83-9	Bromomethane			not detected	10	5.50 ug/L	
75-00-3	Chloroethane			not detected	nle	5.05 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	2.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	1.20 ug/L	
67-64-1	Acetone			not detected	700	6.80 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	2.30 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.20 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.80 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.60 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	3.90 ug/L	
78-93-3	2-Butanone			not detected	300	3.10 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.85 ug/L	
67-66-3	Chloroform	16.23	8298534	264.15 ug/L	6	1.50 ug/L	D
75-55-6	1,1,1-Trichloroethane			not detected	30	1.15 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	2.35 ug/L	
71-43-2	Benzene			not detected	1	1.15 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.90 ug/L	
79-01-6	Trichloroethene			not detected	1	1.15 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	2.00 ug/L	
75-27-4	Bromodichloromethane	21.37	618310	28.95 ug/L	1	2.75 ug/L	D
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	3.25 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	3.45 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	2.95 ug/L	
108-88-3	Toluene			not detected	1000	1.85 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	4.35 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	2.40 ug/L	
127-18-4	Tetrachloroethene			not detected	1	1.60 ug/L	
591-78-6	2-Hexanone			not detected	nle	3.55 ug/L	
126-48-1	Dibromochloromethane			not detected	10	4.30 ug/L	
108-90-7	Chlorobenzene			not detected	4	1.95 ug/L	
100-41-4	Ethylbenzene			not detected	700	3.25 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	5.70 ug/L	
1330-20-7	o-Xylene			not detected	nle	3.10 ug/L	
100-42-5	Styrene			not detected	100	2.80 ug/L	
75-25-2	Bromoform			not detected	4	3.50 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	2.35 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.75 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.85 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	3.20 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602901

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005506.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. Date Analyzed: 4/10/01

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	**VC005507.D**	Sample Name	**1602902**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**10-Apr-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	11.17	215812	2.74 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	16.23	28087704	233.34 ug/L	6	0.30 ug/L	E
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	21.37	2610348	33.67 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	25.78	177723	4.12 ug/L	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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC005518.D**	Sample Name	**1602902**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**10-Apr-01**	Multiplier	**5**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	9.25 ug/L	
107131	Acrylonitrile			not detected	50	13.90 ug/L	
75650	tert-Butyl alcohol			not detected	nle	42.60 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.80 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	8.40 ug/L	
74-87-3	Chloromethane			not detected	30	5.80 ug/L	
75-01-4	Vinyl Chloride			not detected	5	5.30 ug/L	
74-83-9	Bromomethane			not detected	10	5.50 ug/L	
75-00-3	Chloroethane			not detected	nle	5.05 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	2.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	1.20 ug/L	
67-64-1	Acetone			not detected	700	6.80 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	2.30 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.20 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.80 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.60 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	3.90 ug/L	
78-93-3	2-Butanone			not detected	300	3.10 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.85 ug/L	
67-66-3	Chloroform	16.23	7843527	273.71 ug/L	6	1.50 ug/L	D
75-55-6	1,1,1-Trichloroethane			not detected	30	1.15 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	2.35 ug/L	
71-43-2	Benzene			not detected	1	1.15 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.90 ug/L	
79-01-6	Trichloroethene			not detected	1	1.15 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	2.00 ug/L	
75-27-4	Bromodichloromethane	21.37	577735	29.27 ug/L	1	2.75 ug/L	D
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	3.25 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	3.45 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	2.95 ug/L	
108-88-3	Toluene			not detected	1000	1.85 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	4.35 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	2.40 ug/L	
127-18-4	Tetrachloroethene			not detected	1	1.60 ug/L	
591-78-6	2-Hexanone			not detected	nle	3.55 ug/L	
126-48-1	Dibromochloromethane			not detected	10	4.30 ug/L	
108-90-7	Chlorobenzene			not detected	4	1.95 ug/L	
100-41-4	Ethylbenzene			not detected	700	3.25 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	5.70 ug/L	
1330-20-7	o-Xylene			not detected	nle	3.10 ug/L	
100-42-5	Styrene			not detected	100	2.80 ug/L	
75-25-2	Bromoform			not detected	4	3.50 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	2.35 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.75 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.85 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	3.20 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602902

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005507.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. Date Analyzed: 4/10/01

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	**VC005508.D**	Sample Name	**1602903**
Operator	**Skelton**	Field ID	**Dupe**
Date Aquired	**10-Apr-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	18.61	2587767	9.08 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			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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602903

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005508.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. Date Analyzed: 4/10/01

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	**VC005509.D**	Sample Name	**1602904**
Operator	**Skelton**	Field ID	**283MW01**
Date Aquired	**10-Apr-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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1602904

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005509.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. _____ Date Analyzed: 4/10/01

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	**VC005510.D**	Sample Name	**1602905**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**10-Apr-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	4.90	3043911	18.56 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			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	18.61	57203955	144.15 ug/L	1	0.23 ug/L	E
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	23.62	50343543	134.87 ug/L	1000	0.37 ug/L	E
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	27.44	57349529	122.14 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.63	62269506	352.15 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.72	61041542	183.23 ug/L	nle	0.62 ug/L	E
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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC005519.D**	Sample Name	**1602905**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**11-Apr-01**	Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.60	4994856	264.00 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.62	4182772	235.04 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.46	9666014	502.14 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.65	14762382	2036.36 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.74	16185971	1185.09 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602905

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005510.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. Date Analyzed: 4/10/01

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: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000930-22-3	Oxirane, ethenyl-	6.35	30	JN
2.	unknown	7.18	28	J
3. 000107-83-5	Pentane, 2-methyl-	10.54	23	JN
4.	unknown	11.53	25	J
5.	unknown	15.20	33	J
6.	unknown	17.46	30	J
7.	unknown	18.44	18	J
8.	unknown	20.48	75	J
9.	unknown	30.84	35	J
10.	unknown	31.92	34	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC005503.D**	Sample Name	**16029.06**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**10-Apr-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	18.61	3145179	10.06 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			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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 16029.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005503.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: not dec. _____ Date Analyzed: 4/10/01

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	**BNA05219.D**	Sample Name	**MB-1639**
Operator	**Bhaskar**	Misc Info	**MB-010410**
Date Acquired	**11-Apr-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	**BNA05219.D**	Sample Name	**MB-1639**
Operator	**Bhaskar**	Misc Info	**MB-010410**
Date Acquired	**11-Apr-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	26.10	40460	1.46 ug/L	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-1639**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-1639

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05219.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 4/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 4/11/01

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	**BNA05221.D**	Sample Name	**1602902**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**11-Apr-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
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Data File Name	**BNA05221.D**	Sample Name	**1602902**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**11-Apr-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.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602902

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05221.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: decanted: (Y/N) N Date Extracted: 4/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 4/11/01

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	**BNA05222.D**	Sample Name	**1602903**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**11-Apr-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
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Data File Name	**BNA05222.D**	Sample Name	**1602903**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**11-Apr-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.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602903

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05222.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: decanted: (Y/N) N Date Extracted: 4/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 4/11/01

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	**BNA05223.D**	Sample Name	**1602904**
Operator	**Bhaskar**	Misc Info	**283MW01**
Date Acquired	**11-Apr-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
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Data File Name	**BNA05223.D**	Sample Name	**1602904**
Operator	**Bhaskar**	Misc Info	**283MW01**
Date Acquired	**11-Apr-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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602904

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05223.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: decanted: (Y/N) N Date Extracted: 4/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 4/11/01

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	**BNA05224.D**	Sample Name	**1602905**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**11-Apr-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	9.61	193948	8.32 ug/L	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	13.10	3238772	65.12 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	14.75	197058	6.10 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			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	**BNA05224.D**	Sample Name	**1602905**
Operator	**Bhaskar**	Misc Info	**283MW02**
Date Acquired	**11-Apr-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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1602905

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05224.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 4/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 4/11/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	001462-03-9	Cyclopentanol, 1-methyl-	5.58	83	JN
2.		unknown	5.75	27	J
3.		unknown	6.45	86	J
4.		unknown	6.70	160	J
5.		unknown	7.08	39	J
6.	000590-67-0	Cyclohexanol, 1-methyl-	7.87	69	JN
7.		unknown	7.95	38	J
8.		unknown	8.50	51	J
9.	005582-82-1	3-Heptanol, 3-methyl-	8.69	23	JN
10.		unknown	8.88	25	J
11.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.11	210	JN
12.	000622-96-8	Benzene, 1-ethyl-4-methyl-	9.16	86	JN
13.	000108-67-8	Benzene, 1,3,5-trimethyl-	9.26	170	JN
14.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.45	110	JN
15.	000526-73-8	Benzene, 1,2,3-trimethyl-	9.75	380	JN
16.	000095-36-3	1,2,4-Trimethylbenzene	10.26	170	JN
17.	000496-11-7	Indane	10.52	100	JN
18.	001074-17-5	Benzene, 1-methyl-2-propyl-	10.74	25	JN
19.	000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	10.85	52	JN
20.	001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.18	29	JN
21.	000099-87-6	Benzene, 1-methyl-4-(1-methylet	11.23	30	JN
22.	000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	11.34	58	JN
23.	002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	12.45	49	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA05225.D**	Sample Name	**1602906**
Operator	**Bhaskar**	Misc Info	**283MW03**
Date Acquired	**11-Apr-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
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Data File Name	**BNA05225.D**	Sample Name	**1602906**
Operator	**Bhaskar**	Misc Info	**283MW03**
Date Acquired	**11-Apr-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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16029 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1602906

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05225.D

Level: (low/med) LOW Date Received: 4/4/01

% Moisture: decanted: (Y/N) N Date Extracted: 4/10/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 4/11/01

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 # :**	MB-1641
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	4/11/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/19/01
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 # :**	16029.02
	DPW, SELFM-PW-EV	**Date Rec'd:**	4/4/01
	Bldg. 173	**Extraction Date:**	4/11/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/19/01
Analysis:	EPA Method 608	**Location :**	283
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 # :**	16029.03
	DPW, SELFM-PW-EV	**Date Rec'd:**	4/4/01
	Bldg. 173	**Extraction Date:**	4/11/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/19/01
Analysis:	EPA Method 608	**Location :**	283
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 # :**	16029.04
	DPW, SELFM-PW-EV	**Date Rec'd:**	4/4/01
	Bldg. 173	**Extraction Date:**	4/11/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/19/01
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW01
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 # :**	16029.05
	DPW, SELFM-PW-EV	**Date Rec'd:**	4/4/01
	Bldg. 173	**Extraction Date:**	4/11/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/19/01
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW02
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 # :**	16029.06
	DPW, SELFM-PW-EV	**Date Rec'd:**	4/4/01
	Bldg. 173	**Extraction Date:**	4/11/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	4/19/01
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW03
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 #: 16029
Sample Prepared: 06/01/01

Site: 283

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/01	ND	200	10.0
Antimony	06/01/01	7	20	2.0
Arsenic	06/01/01	ND	8	2.0
Barium	06/01/01	ND	2000	0.5
Beryllium	06/01/01	ND	20	0.5
Cadmium	06/01/01	ND	4	0.5
Calcium	06/01/01	ND	NLE	20.0
Chromium	06/01/01	ND	100	0.5
Cobalt	06/01/01	ND	NLE	0.5
Copper	06/01/01	14	1000	2.0
Iron	06/01/01	ND	300	2.0
Lead	06/01/01	3	10	1.0
Magnesium	06/01/01	ND	NLE	10.0
Manganese	06/01/01	ND	50	0.5
Mercury	04/26/01	ND	2	0.1
Nickel	06/01/01	1	100	1.0
Potassium	06/01/01	370	NLE	40.0
Selenium	06/01/01	ND	50	3.0
Silver	06/01/01	4	20	1.0
Sodium	06/01/01	600	50000	20.0
Thallium	06/01/01	ND	10	2.0
Vanadium	06/01/01	ND	NLE	0.5
Zinc	06/01/01	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 #: 1602902
Sample Received: 04/04/01
Sample Matrix: Aqueous

Site: 283

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/01	ND	200	10.0
Antimony	06/01/01	ND	20	2.0
Arsenic	06/01/01	ND	8	2.0
Barium	06/01/01	ND	2000	0.5
Beryllium	06/01/01	ND	20	0.5
Cadmium	06/01/01	ND	4	0.5
Calcium	06/01/01	ND	NLE	20.0
Chromium	06/01/01	ND	100	0.5
Cobalt	06/01/01	ND	NLE	0.5
Copper	06/01/01	ND	1000	2.0
Iron	06/01/01	ND	300	2.0
Lead	06/01/01	ND	10	1.0
Magnesium	06/01/01	ND	NLE	10.0
Manganese	06/01/01	ND	50	0.5
Mercury	04/26/01	0.14	2	0.1
Nickel	06/01/01	ND	100	1.0
Potassium	06/01/01	1810	NLE	40.0
Selenium	06/01/01	ND	50	3.0
Silver	06/01/01	1	20	1.0
Sodium	06/01/01	63900	50000	20.0
Thallium	06/01/01	ND	10	2.0
Vanadium	06/01/01	ND	NLE	0.5
Zinc	06/01/01	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 #: 1602903
Sample Received: 04/04/01
Sample Matrix: Aqueous

Site: 283

Field ID#: Dupe

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/01	470	200	10.0
Antimony	06/01/01	ND	20	2.0
Arsenic	06/01/01	4	8	2.0
Barium	06/01/01	566	2000	0.5
Beryllium	06/01/01	ND	20	0.5
Cadmium	06/01/01	5.0	4	0.5
Calcium	06/01/01	9010	NLE	20.0
Chromium	06/01/01	ND	100	0.5
Cobalt	06/01/01	ND	NLE	0.5
Copper	06/01/01	ND	1000	2.0
Iron	06/01/01	40300	300	2.0
Lead	06/01/01	3	10	1.0
Magnesium	06/01/01	2120	NLE	10.0
Manganese	06/01/01	31.5	50	0.5
Mercury	04/26/01	ND	2	0.1
Nickel	06/01/01	7	100	1.0
Potassium	06/01/01	7500	NLE	40.0
Selenium	06/01/01	ND	50	3.0
Silver	06/01/01	ND	20	1.0
Sodium	06/01/01	7600	50000	20.0
Thallium	06/01/01	ND	10	2.0
Vanadium	06/01/01	1.4	NLE	0.5
Zinc	06/01/01	35	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 #: 1602904
Sample Received: 04/04/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/01	2350	200	10.0
Antimony	06/01/01	ND	20	2.0
Arsenic	06/01/01	ND	8	2.0
Barium	06/01/01	78.7	2000	0.5
Beryllium	06/01/01	0.6	20	0.5
Cadmium	06/01/01	ND	4	0.5
Calcium	06/01/01	6240	NLE	20.0
Chromium	06/01/01	1.0	100	0.5
Cobalt	06/01/01	3.9	NLE	0.5
Copper	06/01/01	17	1000	2.0
Iron	06/01/01	410	300	2.0
Lead	06/01/01	3	10	1.0
Magnesium	06/01/01	15200	NLE	10.0
Manganese	06/01/01	34.7	50	0.5
Mercury	04/26/01	ND	2	0.1
Nickel	06/01/01	12	100	1.0
Potassium	06/01/01	4350	NLE	40.0
Selenium	06/01/01	ND	50	3.0
Silver	06/01/01	2	20	1.0
Sodium	06/01/01	41300	50000	20.0
Thallium	06/01/01	ND	10	2.0
Vanadium	06/01/01	ND	NLE	0.5
Zinc	06/01/01	100	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 #: 1602905
Sample Received: 04/04/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/01	2200	200	10.0
Antimony	06/01/01	ND	20	2.0
Arsenic	06/01/01	3	8	2.0
Barium	06/01/01	30.5	2000	0.5
Beryllium	06/01/01	ND	20	0.5
Cadmium	06/01/01	ND	4	0.5
Calcium	06/01/01	ND	NLE	20.0
Chromium	06/01/01	12.7	100	0.5
Cobalt	06/01/01	ND	NLE	0.5
Copper	06/01/01	19	1000	2.0
Iron	06/01/01	4360	300	2.0
Lead	06/01/01	23	10	1.0
Magnesium	06/01/01	1020	NLE	10.0
Manganese	06/01/01	8.1	50	0.5
Mercury	04/26/01	ND	2	0.1
Nickel	06/01/01	5	100	1.0
Potassium	06/01/01	1420	NLE	40.0
Selenium	06/01/01	5	50	3.0
Silver	06/01/01	ND	20	1.0
Sodium	06/01/01	14100	50000	20.0
Thallium	06/01/01	ND	10	2.0
Vanadium	06/01/01	6.4	NLE	0.5
Zinc	06/01/01	37	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 #: 1602906
Sample Received: 04/04/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	06/01/01	880	200	10.0
Antimony	06/01/01	ND	20	2.0
Arsenic	06/01/01	5	8	2.0
Barium	06/01/01	534	2000	0.5
Beryllium	06/01/01	ND	20	0.5
Cadmium	06/01/01	5.1	4	0.5
Calcium	06/01/01	8800	NLE	20.0
Chromium	06/01/01	4.5	100	0.5
Cobalt	06/01/01	ND	NLE	0.5
Copper	06/01/01	ND	1000	2.0
Iron	06/01/01	40500	300	2.0
Lead	06/01/01	2	10	1.0
Magnesium	06/01/01	2310	NLE	10.0
Manganese	06/01/01	31.5	50	0.5
Mercury	04/26/01	ND	2	0.1
Nickel	06/01/01	6	100	1.0
Potassium	06/01/01	7800	NLE	40.0
Selenium	06/01/01	ND	50	3.0
Silver	06/01/01	ND	20	1.0
Sodium	06/01/01	7600	50000	20.0
Thallium	06/01/01	ND	10	2.0
Vanadium	06/01/01	3.0	NLE	0.5
Zinc	06/01/01	7	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	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	V,S,P,M
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	V,S,P,M
10/17/2000	FMETL	ND	ND	670.35	303.92	810.07	3829.91	ND	ND	152.89	V,S,P,M
10/17/2000D	FMETL	ND	ND	621.26	254.97	791.70	3577.78	ND	ND	126.93	V,S,P,M
01/05/2001	FMETL	23.44	ND	1009.73	320.72	1160.45	5143.75	ND	ND	223.45	V,S,P,M
04/04/2001	FMETL	ND	18.56	264	235.04	502.14	3221.45	8.32	ND	65.12	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 04/04/2001

NOTES:

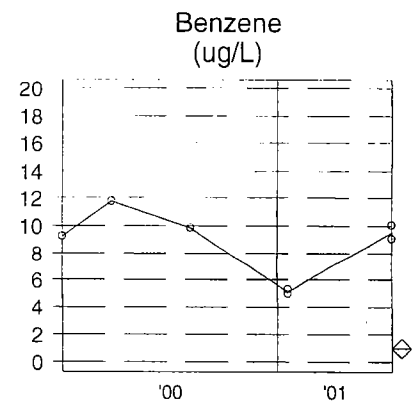
Page 1 of 3.

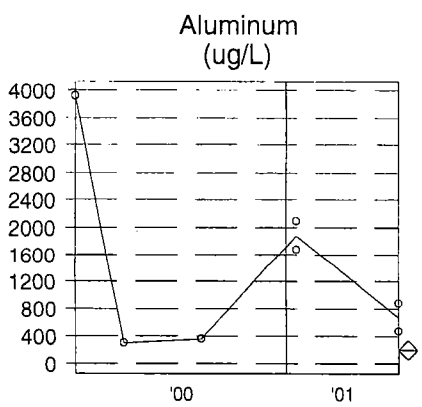
FORT MONMOUTH

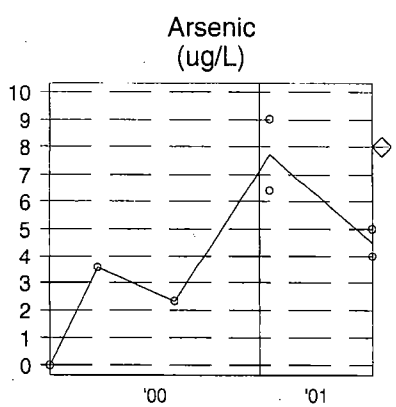
GW MONITORING
BLDG. 283

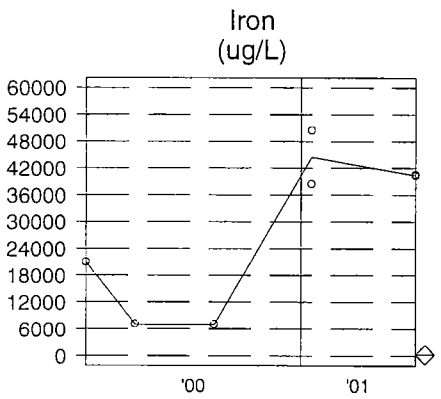
Source 1 of 3

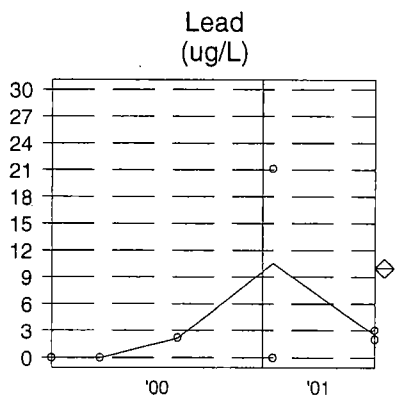
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

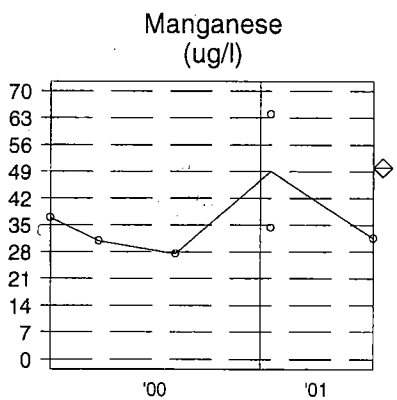


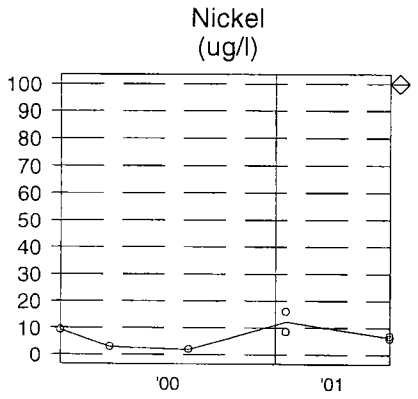


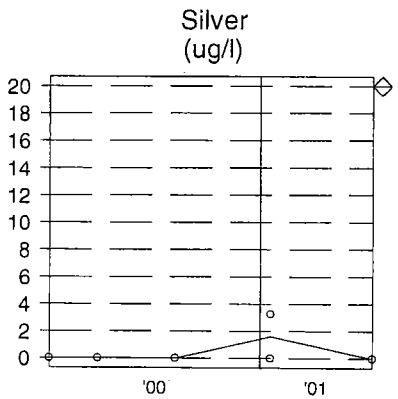


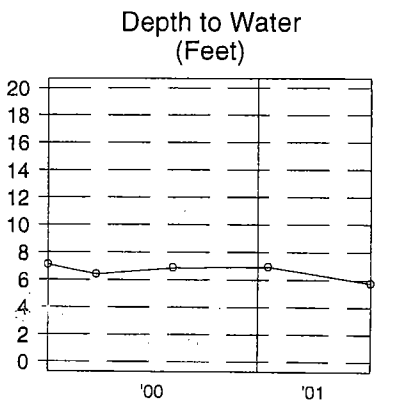












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 04/04/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

07-09-2001 x:\mtech46\fm\283\gw\283.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. 283 #9

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
1628504	0283MW01	29-40367	07/24/01
1628505	0283MW02	29-40887	07/24/01
1628506	0283MW03	29-41650	07/24/01

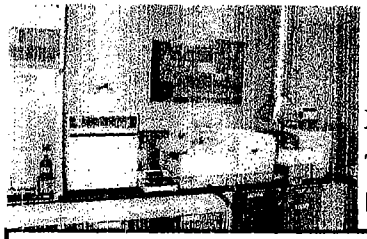
NJDEP Laboratory Certification # 13461

8-24-01
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
(✓)DERA ( )OMA ( )Other:_____
Project No:
Location: 283/290

Samplers Name / Company: David Shaw / Justin Leonard

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	ABN+25	PEST/PCB	TAL METALS					Comments: Remarks / Preservation Method
14285 01	TB	7/24/01		AQ	2	✓								
02	FB	"		AQ	5	✓	✓	✓	✓					
03	Dupe	"	✓	AQ	5	✓	✓	✓	✓					
04	283 MW1	"	1105	AQ	5	✓	✓	✓	✓					
05	283 MW2	"	1113	AQ	5	✓	✓	✓	✓					
06	283 MW3	"	1130	AQ	9	✓	✓	✓	✓					
~~07~~	~~290 MW1~~	"	~~1433~~	AQ	5	✓	✓	✓	✓					
~~08~~	~~290 MW2~~	"	~~1427~~	AQ	5	✓	✓	✓	✓					

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
	7/24/01 1510				
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

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 07/24/01
WEATHER: Hot and humid
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.25 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.5 ft
(13.5) X .65 X 3 =26
GALLONS OF H2O TO BE PURGED: 26 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm): PERISTALTIC
PURGE RATE: 4.33 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 09:00
pH 3.83 su TEMP 16.55 °C
DISSOLVED O2 0.01 ppm SPECIFIC CONDUCTIVITY 485.3 us/cm

PURGE END TIME: 10:52
pH 3.73 su TEMP 15.83 °C
DISSOLVED O2 .03 ppm SPECIFIC CONDUCTIVITY 472.9 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.65 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 26 gal

SAMPLE START TIME: 10:53
pH 3.73 su TEMP 15.83 °C
DISSOLVED O2 .03 ppm SPECIFIC CONDUCTIVITY 472.9 us/cm

SAMPLE END TIME: 11:05

COMMENTS: Very low pH. Recalibrate meter, ok. DUP. Here.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: David Sharpe
DATE: 07/24/01
WEATHER: Hot and humid
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.75 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 12.94 ft
(12.94) X .65 X 3 =25
GALLONS OF H2O TO BE PURGED: 25 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALTIC
PURGE RATE: 4.33 gpm
Hnu READING: 1.1 ppm

PURGE START TIME: 09:18
pH 5.00 su — TEMP 15.77 °C
DISSOLVED O2 .50 ppm — SPECIFIC CONDUCTIVITY 79.60 us/cm

PURGE END TIME: 11:06
pH 5.10 su — TEMP 15.62 °C
DISSOLVED O2 0.49 ppm — SPECIFIC CONDUCTIVITY 76.28 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 10.25 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 25 gal

SAMPLE START TIME: 11:07
pH 5.10 su — TEMP 15.62 °C
DISSOLVED O2 0.49 ppm — SPECIFIC CONDUCTIVITY 76.25 us/cm

SAMPLE END TIME: 10:13

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 07/24/01
WEATHER: Hot and humid.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 7.0 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 17.05 ft
(17.05) X .65 X 3 = 33
GALLONS OF H2O TO BE PURGED: 33 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALTIC
PURGE RATE: 4.33 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 08:58
pH 5.90 su — TEMP 17.35 °C
DISSOLVED O2 .30 ppm — SPECIFIC CONDUCTIVITY 138.8 us/cm

PURGE END TIME: 11:21
pH 5.73 su — TEMP 19.06 °C
DISSOLVED O2 .49 ppm — SPECIFIC CONDUCTIVITY 134.6 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 7.2 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 33 gal

SAMPLE START TIME: 11:22
pH 5.73 su — TEMP 19.06 °C
DISSOLVED O2 .49 ppm — SPECIFIC CONDUCTIVITY 134.6 us/cm

SAMPLE END TIME: 11:30

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 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	**VC006592.D**	Sample Name	**MB**
Operator	**Skelton**	Field ID	**MB**
Date Aquired	**25-Jul-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

8/6/01 3:35 PM

D:\HPCHEM\Custrpt\Volatile\624fy00.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 2120**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.:

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

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006592.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. Date Analyzed: 7/25/01

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	**VC006593.D**	Sample Name	**1628501**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**25-Jul-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	16.23	226418	4.19 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: **TB**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628501

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006593.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. _____ Date Analyzed: 7/25/01

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	**VC006594.D**	Sample Name	**1628502**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**25-Jul-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	16.23	211869	4.03 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: **FB**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628502

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006594.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. _____ Date Analyzed: 7/25/01

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	**VC006595.D**	Sample Name	**1628503**
Operator	**Skelton**	Field ID	**Dupe**
Date Aquired	**25-Jul-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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628503

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006595.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. _____ Date Analyzed: 7/25/01

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	**VC006596.D**	Sample Name	**1628504**
Operator	**Skelton**	Field ID	**283MW01**
Date Aquired	**25-Jul-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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW1**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628504

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006596.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. _____ Date Analyzed: 7/25/01

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	**VC006597.D**	Sample Name	**1628505**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**25-Jul-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	18.62	49133097	334.59 ug/L	1	0.23 ug/L	E
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	23.63	31109883	210.83 ug/L	1000	0.37 ug/L	E
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	27.45	48756633	270.60 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.66	52097480	706.72 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.74	50222454	370.97 ug/L	nle	0.62 ug/L	E
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

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC006606.D**	Sample Name	**1628505s**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**26-Jul-01**	Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.61	3480493	502.20 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.63	1682621	241.61 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.47	4738519	604.67 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.66	5819797	1815.20 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.75	5786017	982.68 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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: **283MW2**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1628505

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006597.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. Date Analyzed: 7/25/01

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: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.92	15	J
2.	unknown	6.36	38	J
3.	unknown	7.19	31	J
4. 000513-35-9	2-Butene, 2-methyl-	7.83	10	JN
5. 000107-83-5	Pentane, 2-methyl-	10.56	17	JN
6.	unknown	11.52	22	J
7. 000110-82-7	Cyclohexane	15.21	31	JN
8. 000110-82-7	Cyclohexane	17.46	30	JN
9. 000108-87-2	Cyclohexane, methyl-	20.48	37	JN
10. 000611-14-3	Benzene, 1-ethyl-2-methyl-	30.84	26	JN
11. 000526-73-8	Benzene, 1,2,3-trimethyl-	30.99	11	JN
12. 000526-73-8	Benzene, 1,2,3-trimethyl-	31.60	10	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	31.92	25	JN
14. 000095-36-3	1,2,4-Trimethylbenzene	33.03	11	JN
15. 000496-11-7	Indane	33.77	9	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC006598.D**	Sample Name	**1628506**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**25-Jul-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	18.61	1599094	10.20 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			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: **283MW3**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1628506

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC006598.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: not dec. Date Analyzed: 7/25/01

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: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	22.48	40	JN
2. 027133-93-3	2,3-Dihydro-1-methylindene	25.17	68	JN
3. 000091-20-3	Naphthalene	30.91	130	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA05803.D**	Sample Name	**MB-2170**
Operator	**Bhaskar**	Misc Info	**MB-2170**
Date Acquired	**2-Aug-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	**BNA05803.D**	Sample Name	**MB-2170**
Operator	**Bhaskar**	Misc Info	**MB-2170**
Date Acquired	**2-Aug-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-2170**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-2170

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05803.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 7/31/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/01

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	**BNA05805.D**	Sample Name	**1628502**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**2-Aug-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	**BNA05805.D**	Sample Name	**1628502**
Operator	**Bhaskar**	Misc Info	**Field Blank**
Date Acquired	**2-Aug-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.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628502

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05805.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 7/31/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/01

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	**BNA05806.D**	Sample Name	**1628503**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**2-Aug-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
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Data File Name	**BNA05806.D**	Sample Name	**1628503**
Operator	**Bhaskar**	Misc Info	**Dupe**
Date Acquired	**2-Aug-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.: 16285 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1628503

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05806.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 7/31/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/01

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	**BNA05807.D**	Sample Name	**1628504**
Operator	**Bhaskar**	Misc Info	**0283MW01**
Date Acquired	**3-Aug-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
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Data File Name	**BNA05807.D**	Sample Name	**1628504**
Operator	**Bhaskar**	Misc Info	**0283MW01**
Date Acquired	**3-Aug-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: **283MW1**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628504

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05807.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 7/31/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/3/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

Number TICs found: 0 (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	**BNA05808.D**	Sample Name	**1628505**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**3-Aug-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	13.05	3786314	169.67 ug/L	NLE	0.72	ug/L	E
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	14.70	283467	18.69 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			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
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Data File Name	**BNA05808.D**	Sample Name	**1628505**
Operator	**Bhaskar**	Misc Info	**0283MW02**
Date Acquired	**3-Aug-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	26.03	116701	9.83 ug/L	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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN04884.D**	Sample Name	**1628505 (1:5)**
Operator	**Bhaskar**	Misc Info	**0283MW02 (1:5)**
Date Acquired	**7-Aug-01**	Sample Multiplier	**5**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	7.70	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	3.45	ug/L	
62-53-3	Aniline			not detected	NLE	9.25	ug/L	
108-95-2	Phenol			not detected	4000	2.60	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	3.15	ug/L	
95-57-8	2-Chlorophenol			not detected	40	3.05	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	3.10	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.90	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	3.10	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	3.25	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	2.95	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	2.85	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	2.40	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	3.20	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.70	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.55	ug/L	
78-59-1	Isophorone			not detected	100	2.25	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	2.60	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	4.65	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.40	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.95	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	5.75	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.70	ug/L	
91-20-3	Naphthalene	13.19	2167808	150.61 ug/L	NLE	3.60	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	8.90	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	2.15	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	3.55	ug/L	
91-57-6	2-Methylnaphthalene	14.84	217065	26.08 ug/L	NLE	2.75	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	3.80	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	2.95	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	4.80	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	2.65	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	5.20	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	5.20	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	3.50	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	4.60	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	9.65	ug/L	
83-32-9	Acenaphthene			not detected	400	3.10	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	9.20	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	3.65	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	7.05	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN04884.D**	Sample Name	**1628505 (1:5)**
Operator	**Bhaskar**	Misc Info	**0283MW02 (1:5)**
Date Acquired	**7-Aug-01**	Sample Multiplier	**5**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	7.05	ug/L	
84-66-2	Diethylphthalate			not detected	5000	7.70	ug/L	
86-73-7	Fluorene			not detected	300	4.90	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	4.30	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	14.80	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	10.50	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	7.20	ug/L	
103-33-3	Azobenzene			not detected	NLE	5.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	6.40	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	5.40	ug/L	
87-86-5	Pentachlorophenol			not detected	1	8.70	ug/L	
85-01-8	Phenanthrene			not detected	NLE	8.65	ug/L	
120-12-7	Anthracene			not detected	2000	9.25	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	12.45	ug/L	
206-44-0	Fluoranthene			not detected	300	7.40	ug/L	
92-87-5	Benzidine			not detected	50	10.75	ug/L	
129-00-0	Pyrene			not detected	200	7.65	ug/L	
85-68-7	Butylbenzylphthalate	26.10	63693	8.54 ug/L	100	6.20	ug/L	D
56-55-3	Benzo[a]anthracene			not detected	10	13.40	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	8.00	ug/L	
218-01-9	Chrysene			not detected	20	5.70	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	6.70	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	7.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	6.60	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	5.75	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	12.15	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	11.20	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	9.70	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	10.20	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: **283MW2**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1628505

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05808.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 7/31/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/3/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 22 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.53	60	J
2.	unknown	6.40	120	J
3.	unknown	6.66	270	J
4. 000590-67-0	Cyclohexanol, 1-methyl-	7.82	88	JN
5.	unknown	7.90	47	J
6. 000098-82-8	Benzene, (1-methylethyl)-	8.31	31	JN
7.	unknown	8.45	77	J
8. 005582-82-1	3-Heptanol, 3-methyl-	8.64	35	JN
9.	unknown	8.83	39	J
10. 000103-65-1	Benzene, propyl-	8.90	49	JN
11. 000620-14-4	Benzene, 1-ethyl-3-methyl-	9.06	330	JN
12. 000622-96-8	Benzene, 1-ethyl-4-methyl-	9.11	99	JN
13. 000095-36-3	1,2,4-Trimethylbenzene	9.21	230	JN
14. 000622-96-8	Benzene, 1-ethyl-4-methyl-	9.40	130	JN
15.	unknown	9.60	29	J
16. 000095-36-3	1,2,4-Trimethylbenzene	9.70	840	JN
17. 000611-14-3	Benzene, 1-ethyl-2-methyl-	10.21	240	JN
18. 000496-11-7	Indane	10.47	140	JN
19. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	10.80	52	JN
20. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.28	59	JN
21. 001005-64-7	(E)-1-Phenyl-1-butene	11.34	51	JN
22. 002039-90-9	Benzene, 2-ethenyl-1,3-dimethyl-	12.40	45	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA05809.D**	Sample Name	**1628506**
Operator	**Bhaskar**	Misc Info	**0283MW03**
Date Acquired	**3-Aug-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	**BNA05809.D**	Sample Name	**1628506**
Operator	**Bhaskar**	Misc Info	**0283MW03**
Date Acquired	**3-Aug-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: **283MW3**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16285 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1628506

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA05809.D

Level: (low/med) LOW Date Received: 7/24/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 7/31/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/3/01

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 # :**	MB-2178
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	7/31/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/6/01
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 # :**	1628502
	DPW, SELFM-PW-EV	**Date Rec'd:**	7/24/01
	Bldg. 173	**Extraction Date:**	7/31/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/6/01
Analysis:	EPA Method 608	**Location :**	283
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
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 # :**	1628503
	DPW, SELFM-PW-EV	**Date Rec'd:**	7/24/01
	Bldg. 173	**Extraction Date:**	7/31/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/6/01
Analysis:	EPA Method 608	**Location :**	283
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 # :**	1628504
	DPW, SELFM-PW-EV	**Date Rec'd:**	7/24/01
	Bldg. 173	**Extraction Date:**	7/31/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/6/01
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW1
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 # :**	1628505
	DPW, SELFM-PW-EV	**Date Rec'd:**	7/24/01
	Bldg. 173	**Extraction Date:**	7/31/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/6/01
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW2
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 # :**	1628506
	DPW, SELFM-PW-EV	**Date Rec'd:**	7/24/01
	Bldg. 173	**Extraction Date:**	7/31/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	8/6/01
Analysis:	EPA Method 608	**Location :**	283
Matrix:	Aqueous		
Analyst:	T. Frankovich	**Field ID:**	283MW3
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 #:16285
Sample Prepared: 08/07/01

Site: 283

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/07/01	ND	200	10.0
Antimony	08/07/01	4.37	20	2.0
Arsenic	08/07/01	2.99	8	2.0
Barium	08/07/01	4.5	2000	0.5
Beryllium	08/07/01	ND	20	0.5
Cadmium	08/07/01	0.677	4	0.5
Calcium	08/07/01	244	NLE	20.0
Chromium	08/07/01	ND	100	0.5
Cobalt	08/07/01	ND	NLE	0.5
Copper	08/07/01	9.96	1000	2.0
Iron	08/07/01	70.7	300	2.0
Lead	08/07/01	3.92	10	1.0
Magnesium	08/07/01	588	NLE	10.0
Manganese	08/07/01	ND	50	0.5
Mercury	08/03/01	ND	2	0.1
Nickel	08/07/01	ND	100	1.0
Potassium	08/07/01	77.3	NLE	40.0
Selenium	08/07/01	ND	50	3.0
Silver	08/07/01	ND	20	1.0
Sodium	08/07/01	138	50000	20.0
Thallium	08/07/01	ND	10	2.0
Vanadium	08/07/01	ND	NLE	0.5
Zinc	08/07/01	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 #:1628502
Sample Received: 07/24/01
Sample Matrix: Aqueous

Site: 283

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/07/01	ND	200	10.0
Antimony	08/07/01	ND	20	2.0
Arsenic	08/07/01	ND	8	2.0
Barium	08/07/01	2.64	2000	0.5
Beryllium	08/07/01	ND	20	0.5
Cadmium	08/07/01	ND	4	0.5
Calcium	08/07/01	ND	NLE	20.0
Chromium	08/07/01	ND	100	0.5
Cobalt	08/07/01	ND	NLE	0.5
Copper	08/07/01	ND	1000	2.0
Iron	08/07/01	ND	300	2.0
Lead	08/07/01	ND	10	1.0
Magnesium	08/07/01	ND	NLE	10.0
Manganese	08/07/01	ND	50	0.5
Mercury	08/03/01	ND	2	0.1
Nickel	08/07/01	ND	100	1.0
Potassium	08/07/01	ND	NLE	40.0
Selenium	08/07/01	4.85	50	3.0
Silver	08/07/01	ND	20	1.0
Sodium	08/07/01	71.1	50000	20.0
Thallium	08/07/01	ND	10	2.0
Vanadium	08/07/01	ND	NLE	0.5
Zinc	08/07/01	7.09	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 #:1628503
Sample Received: 07/24/01
Sample Matrix: Aqueous

Site: 283

Field ID#: Dupe

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/07/01	3160	200	10.0
Antimony	08/07/01	ND	20	2.0
Arsenic	08/07/01	ND	8	2.0
Barium	08/07/01	103	2000	0.5
Beryllium	08/07/01	0.814	20	0.5
Cadmium	08/07/01	1.09	4	0.5
Calcium	08/07/01	8240	NLE	20.0
Chromium	08/07/01	3.63	100	0.5
Cobalt	08/07/01	4.43	NLE	0.5
Copper	08/07/01	2.7	1000	2.0
Iron	08/07/01	576	300	2.0
Lead	08/07/01	1.18	10	1.0
Magnesium	08/07/01	16300	NLE	10.0
Manganese	08/07/01	34.3	50	0.5
Mercury	08/03/01	ND	2	0.1
Nickel	08/07/01	10.4	100	1.0
Potassium	08/07/01	5910	NLE	40.0
Selenium	08/07/01	12.5	50	3.0
Silver	08/07/01	ND	20	1.0
Sodium	08/07/01	48400	50000	20.0
Thallium	08/07/01	ND	10	2.0
Vanadium	08/07/01	1.28	NLE	0.5
Zinc	08/07/01	96.8	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 #:1628504
Sample Received: 07/24/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/07/01	3150	200	10.0
Antimony	08/07/01	ND	20	2.0
Arsenic	08/07/01	ND	8	2.0
Barium	08/07/01	102	2000	0.5
Beryllium	08/07/01	0.99	20	0.5
Cadmium	08/07/01	1.67	4	0.5
Calcium	08/07/01	8190	NLE	20.0
Chromium	08/07/01	3.98	100	0.5
Cobalt	08/07/01	4.36	NLE	0.5
Copper	08/07/01	6.44	1000	2.0
Iron	08/07/01	575	300	2.0
Lead	08/07/01	3.03	10	1.0
Magnesium	08/07/01	16500	NLE	10.0
Manganese	08/07/01	55.2	50	0.5
Mercury	08/03/01	ND	2	0.1
Nickel	08/07/01	20.4	100	1.0
Potassium	08/07/01	6020	NLE	40.0
Selenium	08/07/01	7.93	50	3.0
Silver	08/07/01	ND	20	1.0
Sodium	08/07/01	49100	50000	20.0
Thallium	08/07/01	ND	10	2.0
Vanadium	08/07/01	1.62	NLE	0.5
Zinc	08/07/01	92.2	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 #:1628505
Sample Received: 07/24/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/07/01	1780	200	10.0
Antimony	08/07/01	ND	20	2.0
Arsenic	08/07/01	6.78	8	2.0
Barium	08/07/01	43.1	2000	0.5
Beryllium	08/07/01	ND	20	0.5
Cadmium	08/07/01	0.744	4	0.5
Calcium	08/07/01	1540	NLE	20.0
Chromium	08/07/01	13.6	100	0.5
Cobalt	08/07/01	ND	NLE	0.5
Copper	08/07/01	8.26	1000	2.0
Iron	08/07/01	4050	300	2.0
Lead	08/07/01	12.3	10	1.0
Magnesium	08/07/01	842	NLE	10.0
Manganese	08/07/01	36	50	0.5
Mercury	08/03/01	ND	2	0.1
Nickel	08/07/01	12.2	100	1.0
Potassium	08/07/01	2110	NLE	40.0
Selenium	08/07/01	30	50	3.0
Silver	08/07/01	ND	20	1.0
Sodium	08/07/01	16100	50000	20.0
Thallium	08/07/01	ND	10	2.0
Vanadium	08/07/01	6.21	NLE	0.5
Zinc	08/07/01	36.6	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 #:1628506
Sample Received: 07/24/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	08/07/01	289	200	10.0
Antimony	08/07/01	ND	20	2.0
Arsenic	08/07/01	3.3	8	2.0
Barium	08/07/01	178	2000	0.5
Beryllium	08/07/01	ND	20	0.5
Cadmium	08/07/01	1.48	4	0.5
Calcium	08/07/01	10000	NLE	20.0
Chromium	08/07/01	2.31	100	0.5
Cobalt	08/07/01	ND	NLE	0.5
Copper	08/07/01	5.78	1000	2.0
Iron	08/07/01	11200	300	2.0
Lead	08/07/01	2.6	10	1.0
Magnesium	08/07/01	1450	NLE	10.0
Manganese	08/07/01	63.4	50	0.5
Mercury	08/03/01	ND	2	0.1
Nickel	08/07/01	14.9	100	1.0
Potassium	08/07/01	6880	NLE	40.0
Selenium	08/07/01	ND	50	3.0
Silver	08/07/01	ND	20	1.0
Sodium	08/07/01	7840	50000	20.0
Thallium	08/07/01	ND	10	2.0
Vanadium	08/07/01	0.945	NLE	0.5
Zinc	08/07/01	34.7	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	Aluminum	Iron	Lead	Manganese	Nickel	Selenium	Silver	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	200	300	10	50	100	50	20	NLE		-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	ND	ND	6.31		V,S,P,M
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	ND	ND	5.54		V,S,P,M
10/17/2000	FMETL	2120	306	1.85	21.8	5.56	ND	ND	6.07		V,S,P,M
01/05/2001	FMETL	2460	868	ND	26.0	4.89	ND	ND	6.11		V,S,P,M
04/04/2001	FMETL	2350	410	3.00	34.7	12.0	ND	2.00	4.62		V,S,P,M
07/24/2001	FMETL	3150	575	3.03	55.2	20.4	7.93	ND	6.25		V,S,P,M
07/24/2001D	FMETL	3160	576	1.18	34.3	10.4	12.5	ND	6.25		V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 07/24/2001

NOTES:

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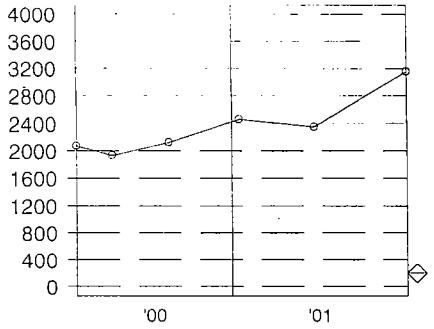
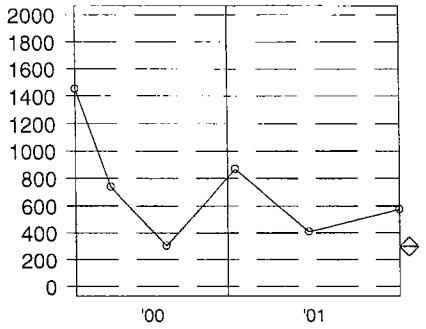
FORT MONMOUTH

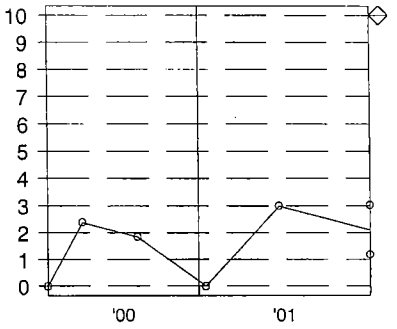
GW MONITORING
BLDG. 283

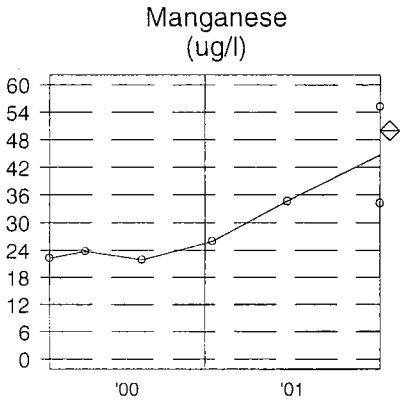
Source 2 of 3

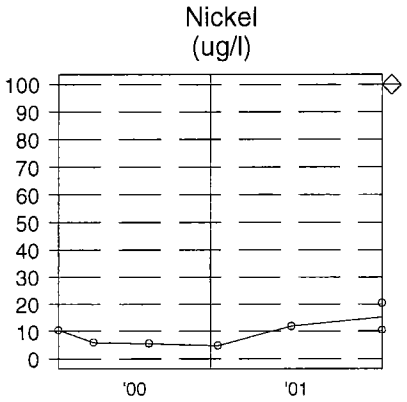
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

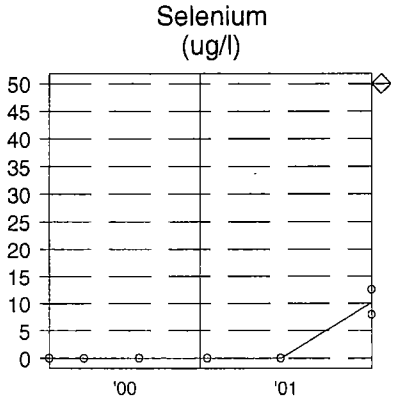


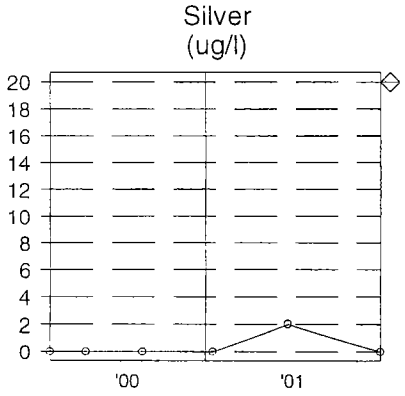


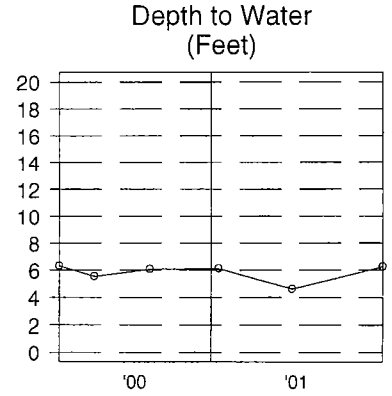












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 07/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

08-20-2001 x:\mtech46\fm\283\gw\283.wsf

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Nitro benzene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	10	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	ND	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	ND	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	ND	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	ND	V,S,P,M
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	1.17	V,S,P,M
10/17/2000	FMETL	ND	ND	670.35	303.92	810.07	3829.91	ND	ND	ND	V,S,P,M
10/17/2000D	FMETL	ND	ND	621.26	254.97	791.70	3577.78	ND	ND	ND	V,S,P,M
01/05/2001	FMETL	23.44	ND	1009.73	320.72	1160.45	5143.75	ND	ND	ND	V,S,P,M
04/04/2001	FMETL	ND	18.56	264	235.04	502.14	3221.45	8.32	ND	ND	V,S,P,M
07/24/2001	FMETL	ND	ND	502.20	241.61	604.67	2797.88	ND	ND	ND	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 07/24/2001

NOTES:

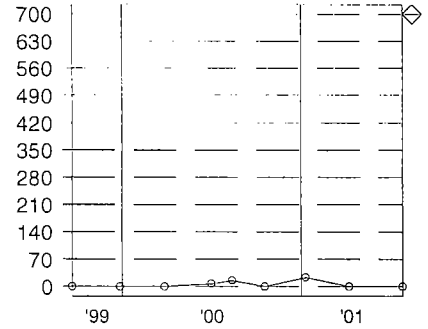
Page 1 of 2.

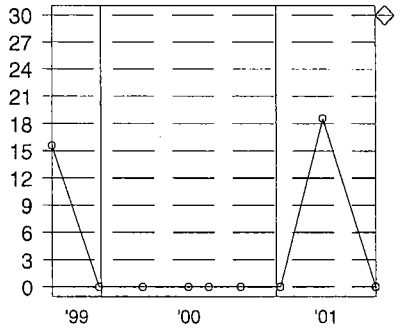
FORT MONMOUTH

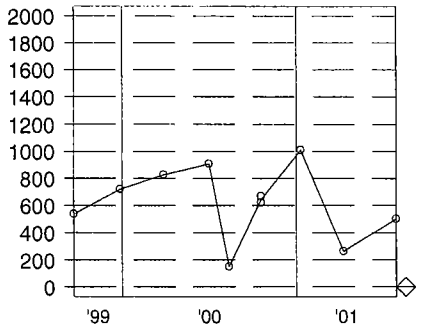
GW MONITORING
BLDG. 283

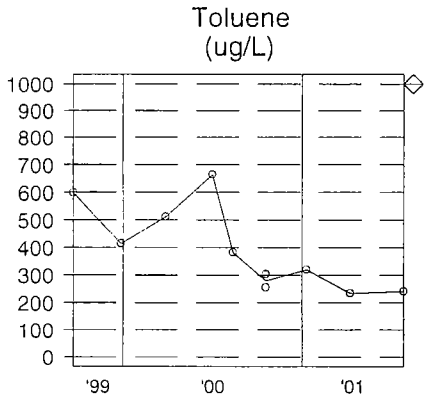
Source 1 of 3

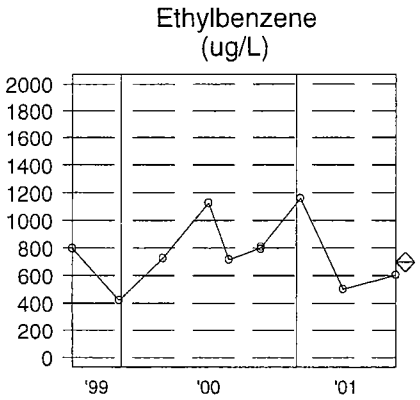
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

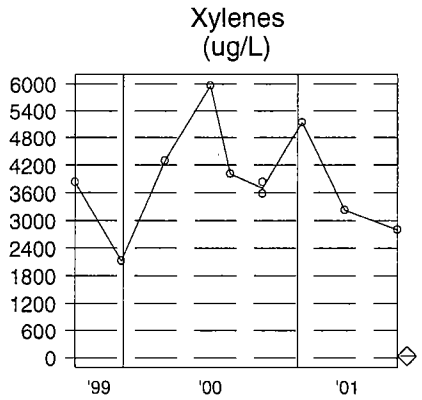


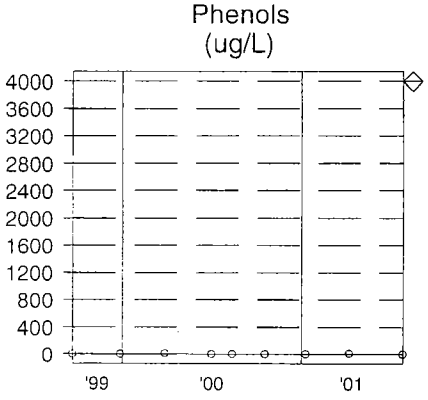


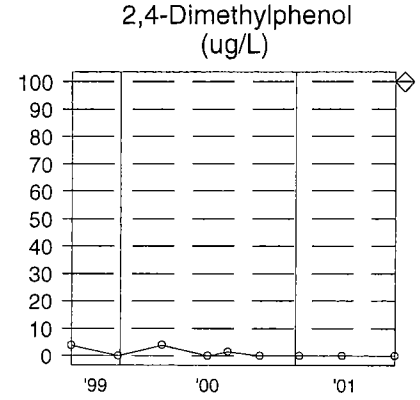


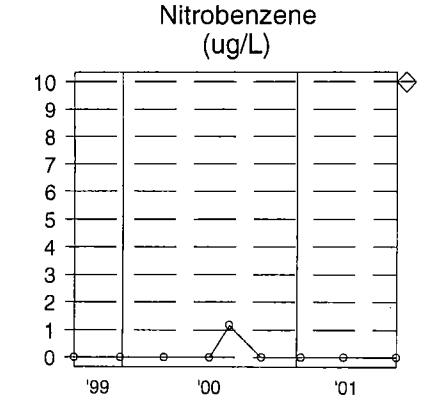












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 07/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

08-20-2001 x:\mtech46\fm\283\gw\283.wsf

	Lab	Aluminum	Arsenic	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	200	8	300	10	50	2	100	50	NLE	-
09/20/1999	FMETL	309	4.74	2330	22.0	14.5	ND	4.11	6.49	7.20	V,S,P,M
12/27/1999	FMETL	123	ND	2060	6.92	44.0	0.3	3.62	4.73	6.81	V,S,P,M
03/23/2000	FMETL	241	ND	2010	15.3	11.9	0.2	6.43	7.29	6.38	V,S,P,M
06/28/2000	FMETL	81.4	ND	2130	11.5	8.31	ND	6.01	4.36	7.83	V,S,P,M
08/10/2000	FMETL	812	3.40	2060	31.9	5.97	ND	ND	8.40	6.28	V,S,P,M
10/17/2000	FMETL	917	2.38	3340	14.5	4.68	ND	ND	6.69	7.09	V,S,P,M
10/17/2000D	FMETL	973	4.89	3210	15.9	5.06	ND	ND	6.23	7.09	V,S,P,M
01/05/2001	FMETL	360	3.72	3220	25.3	6.47	ND	2.85	6.22	7.32	V,S,P,M
04/04/2001	FMETL	2200	3.00	4360	23.0	8.10	ND	5.00	5.00	4.81	V,S,P,M
07/24/2001	FMETL	1780	6.78	4050	12.3	36.0	ND	12.2	30.0	6.75	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 07/24/2001

NOTES:

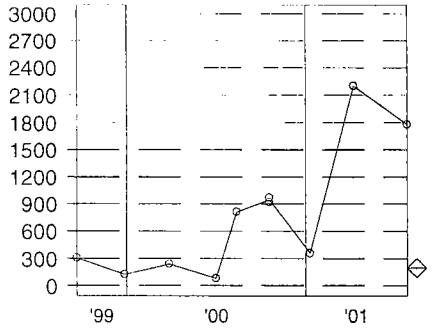
Page 2 of 2.

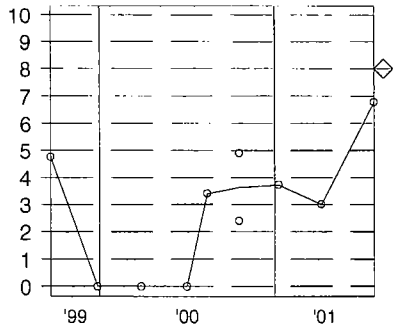
FORT MONMOUTH

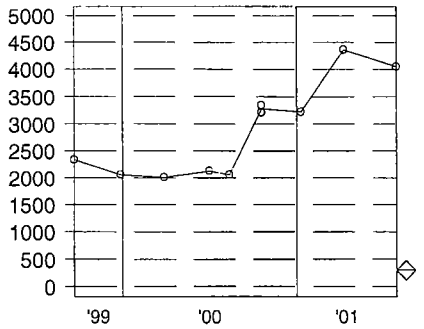
GW MONITORING
BLDG. 283

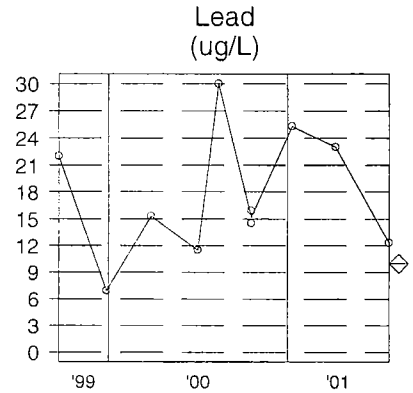
Source 1 of 3

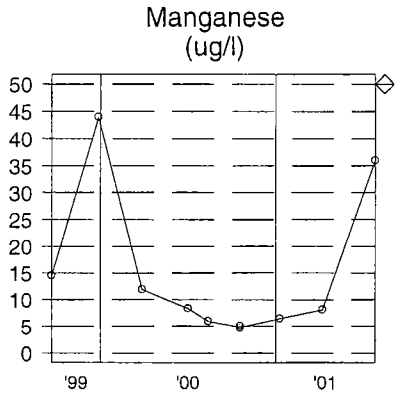
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

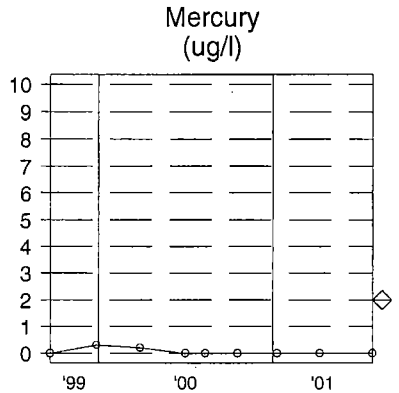


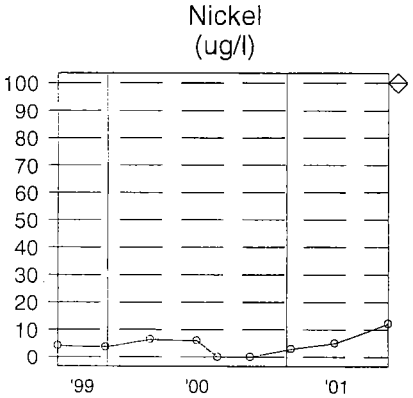


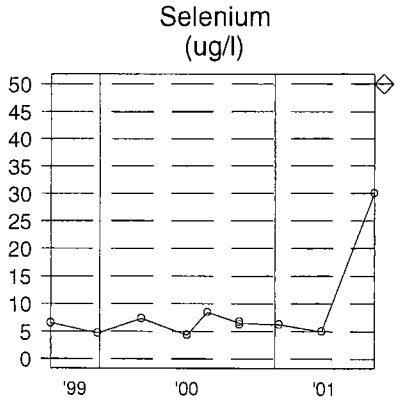


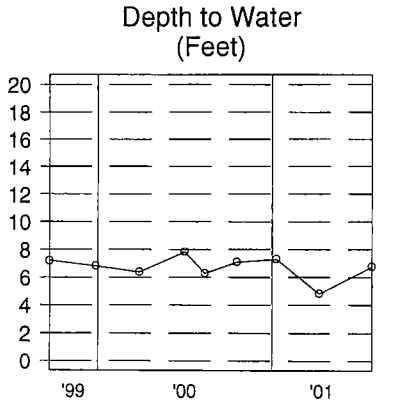












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 07/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

08-20-2001 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Silver	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	20	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	3.27	6.94	V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	ND	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	ND	5.75	V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	ND	7.00	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 07/24/2001

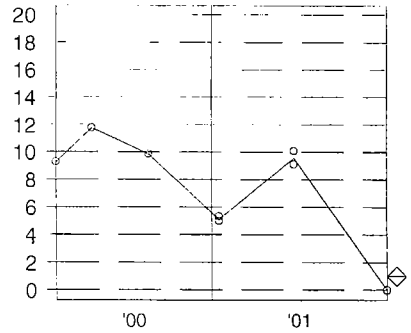
NOTES:

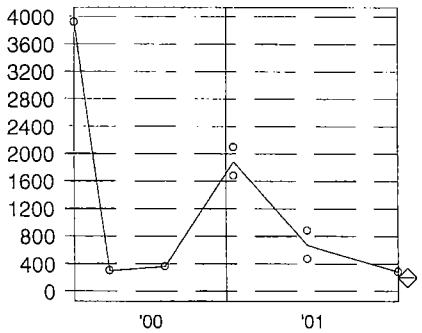
FORT MONMOUTH

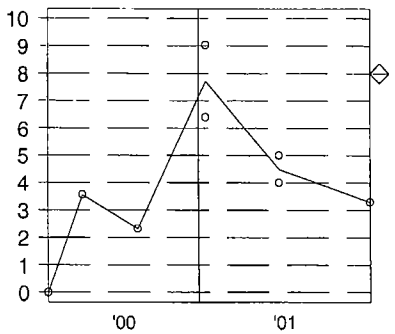
GW MONITORING
BLDG. 283

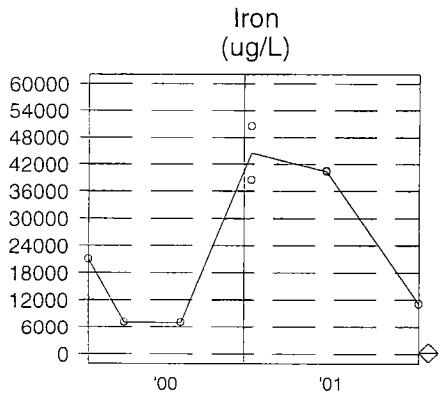
Source 3 of 3

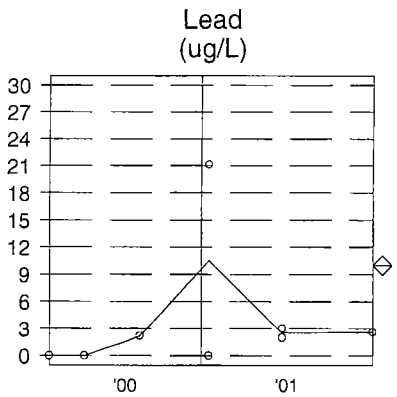
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

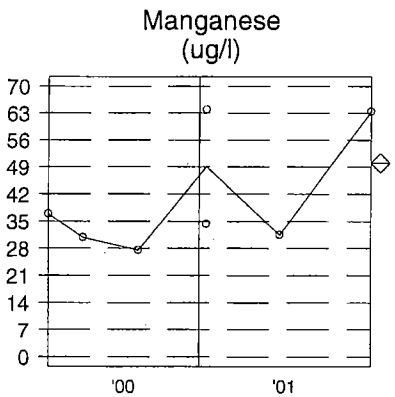


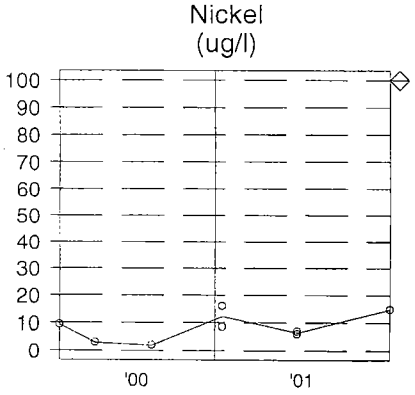


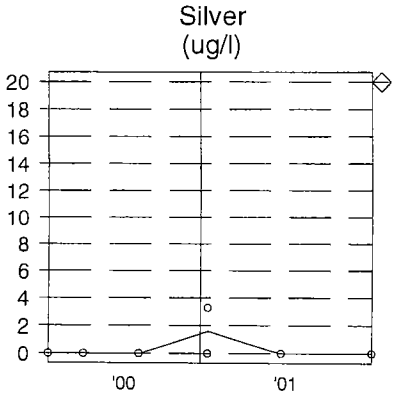


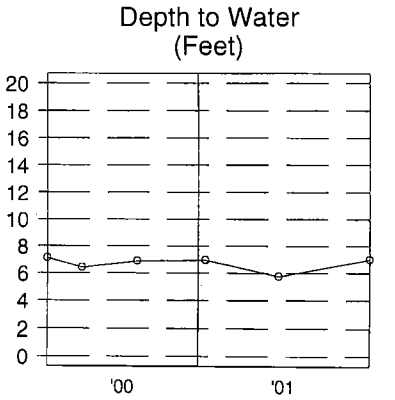












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 07/24/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

08-20-2001 x:\mtech46\fm\283\gw\283.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #10

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
1663801	0283MW01	29-40367	12/11/01
1663802	0283MW02	29-40887	12/11/01
1663803	0283MW03	29-41650	12/11/01

NJDEP Laboratory Certification # 13461

1-16-02

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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fuller
Phone #: X26223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells
4th Qrtr '01

Samplers Name / Company: Corey McCormack, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL MTLS	Pest/PCB	BNA+25				Hex Read	Remarks / Preservation Method
116838 01	283 mw01	12/11/01	1525	AQ	5	✓	✓	✓	✓				~~0.0~~ 1.9	29-40367
02	283 mw02	"	1325	"	"	✓	✓	✓	✓				0.0	29-40887
03	283 mw03	"	1541	"	"	✓	✓	✓	✓				0.0	29-41650

Comments: HCL/HNO_3/Lyq

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	12/11/01 1545	J. Fuller			
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.xls11/14/01

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. FARLON
Phone #: X216223
(X)DERA ( )OMA ( )Other:_____
Project No:
Location: MIB wells
4th Qtr '01
Samplers Name / Company: Corey McCormack, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL MTLS	Pest/PCB	BNA + 25				Hex Cr	Comments: Remarks / Preservation Method
116687 01	Trip	12/11/01	0739	AQ	2	✓							1	
02	Field Blank		0800		5	✓	✓	✓	✓				1	
03	Dupe		—		5	✓	✓	✓	✓				1	
04	MIB MW24 *		0944		5	✓	✓	✓	✓				0.0	29-32565
05	MIB MW25		0956		5	✓	✓	✓	✓				0.0	29-32566

Analysis Parameters

Comments: <4°C / HCL / HNO_3

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	12/11/01 1545	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: H

print legibly

Coc.xls11/14/01

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/11/01
WEATHER: Partly cloudy and 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: 7.15 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 12.60 ft
(12.60) X .65 X 3 =24.57
GALLONS OF H2O TO BE PURGED: 25 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: 13:26
pH 3.53 su TEMP 15.63 °C
DISSOLVED O2 2.24 mg/L SPECIFIC CONDUCTIVITY 34.60 ms/cm

PURGE END TIME: 15:14
pH 3.53 su TEMP 15.64 °C
DISSOLVED O2 0.75 mg/L SPECIFIC CONDUCTIVITY 34.60 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 10.21 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 25 gal

SAMPLE START TIME: 15:15
pH 3.53 su TEMP 15.64 °C
DISSOLVED O2 0.64 mg/L SPECIFIC CONDUCTIVITY 34.60 ms/cm

SAMPLE END TIME: 15:25

COMMENTS: Low pH. Slightly cloudy while bailing.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/11/01
WEATHER: Partly cloudy and 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: 8.54 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 11.15 ft
(11.15) X .65 X 3 =21.74
GALLONS OF H2O TO BE PURGED: 22 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 1.7 ppm

PURGE START TIME: 11:49
pH 5.81 su — TEMP 15.55 °C
DISSOLVED O2 3.41 mg/L — SPECIFIC CONDUCTIVITY 31.86 ms/cm

PURGE END TIME: 13:24
pH 5.72 su — TEMP 15.77 °C
DISSOLVED O2 0.90 mg/L — SPECIFIC CONDUCTIVITY 25.57 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 11.96 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 22 gal

SAMPLE START TIME: 13:25
pH 5.61 su — TEMP 15.87 °C
DISSOLVED O2 0.44 mg/L — SPECIFIC CONDUCTIVITY 20.85 ms/cm

SAMPLE END TIME: 13:29

COMMENTS: Very strong odor.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/11/01
WEATHER: Partly cloudy and 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: 7.67 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 16.38 ft
(16.38) X .65 X 3 = 31.94
GALLONS OF H2O TO BE PURGED: 32 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: 13:21
pH 5.55 su — TEMP 16.63 °C
DISSOLVED O2 2.79 mg/L — SPECIFIC CONDUCTIVITY 16.31 ms/cm

PURGE END TIME: 15:40
pH 5.56 su — TEMP 16.70 °C
DISSOLVED O2 0.94 mg/L — SPECIFIC CONDUCTIVITY 16.21 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 8.03 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 32 gal

SAMPLE START TIME: 15:41
pH 5.59 su — TEMP 16.70 °C
DISSOLVED O2 0.64 mg/L — SPECIFIC CONDUCTIVITY 16.19 ms/cm

SAMPLE END TIME: 15:46

COMMENTS: Cloudy while bailing.

VOLATILE ORGANICS

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	**VC007658.D**	Sample Name	**MB 13Dec01**
Operator	**Skelton**	Field ID	**MB 13Dec01**
Date Aquired	**13-Dec-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	
75-35-3	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

12/19/01 10:42 AM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16637 Location: M18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB 13Dec01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007658.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/13/01

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	**VC007658.D**	Sample Name	**MB 13Dec01**
Operator	**Skelton**	Field ID	**MB 13Dec01**
Date Aquired	**13-Dec-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	
75-35-3	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

12/19/01 10:42 AM

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB 13Dec01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007658.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/13/01

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	**VC007694.D**	Sample Name	**MB 14Dec01**
Operator	**Skelton**	Field ID	**MN 14Dec01**
Date Aquired	**14-Dec-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	
75-35-3	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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB 14Dec01

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007694.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/14/01

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	**VC007659.D**	Sample Name	**1663701**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**13-Dec-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	11.17	206627	13.17 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 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16637 Location: M18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663701

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007659.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/13/01

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	**VC007660.D**	Sample Name	**1663702**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**13-Dec-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	11.17	792664	51.10 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 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16637 Location: M18 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663702

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007660.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/13/01

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	**VC007664.D**	Sample Name	**1663801**
Operator	**Skelton**	Field ID	**283MW01**
Date Aquired	**13-Dec-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	
75-35-3	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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663801

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007664.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/13/01

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	**VC007665.D**	Sample Name	**1663802**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**13-Dec-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	
75-35-3	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	18.62	43236921	548.84 ug/L	1	0.23 ug/L	E
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	23.62	1925654	24.78 ug/L	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	27.47	32182052	341.71 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.66	26976232	718.14 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.75	11961941	172.18 ug/L	nle	0.62 ug/L	E
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

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC007695.D**	Sample Name	**1663802**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**14-Dec-01**	Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.61	3503350	1055.06 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.62	98371	30.03 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	27.46	2778861	711.17 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.65	2023727	1298.52 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.74	650196	225.58 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663802

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007665.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. Date Analyzed: 12/13/01

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: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.91	21	J
2. 000078-78-4	Butane, 2-methyl-	6.35	56	JN
3. 000109-66-0	Pentane	7.18	27	JN
4. 000513-35-9	2-Butene, 2-methyl-	7.82	7	JN
5. 000107-83-5	Pentane, 2-methyl-	10.55	17	JN
6. 000287-92-3	Cyclopentane	11.52	24	JN
7. 000110-82-7	Cyclohexane	15.21	32	JN
8. 000110-82-7	Cyclohexane	17.46	30	JN
9. 000108-87-2	Cyclohexane, methyl-	20.48	19	JN
10. 000611-14-3	Benzene, 1-ethyl-2-methyl-	30.84	25	JN
11. 000108-67-8	Benzene, 1,3,5-trimethyl-	30.98	12	JN
12. 000611-14-3	Benzene, 1-ethyl-2-methyl-	31.60	10	JN
13. 000108-67-8	Benzene, 1,3,5-trimethyl-	31.92	30	JN
14. 000526-73-8	Benzene, 1,2,3-trimethyl-	33.03	8	JN
15. 000496-11-7	Indane	33.76	9	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC007691.D**	Sample Name	**1663803**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**14-Dec-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	
75-35-3	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	18.61	554044	8.53 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			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: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1663803

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC007691.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: not dec. _____ Date Analyzed: 12/14/01

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	**BNA06457.D**	Sample Name	**MB-2765**
Operator	**BPatel**	Misc Info	**MB-011214**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06457.D**	Sample Name	**MB-2765**
Operator	**BPatel**	Misc Info	**MB-011214**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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-2765**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-2765

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06457.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/14/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/3/02

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	6.04	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05282.D**	Sample Name	**MB-2729**
Operator	**B.Patel**	Misc Info	**MB-011212**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05282.D**	Sample Name	**MB-2729**
Operator	**B.Patel**	Misc Info	**MB-011212**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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-2729**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16637 Location: M18 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-2729

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05282.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/12/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/3/02

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	6.57	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05289.D**	Sample Name	**1663702**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN05289.D**	Sample Name	**1663702**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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.: 16637 Location: M18 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 1663702

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05289.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: decanted: (Y/N) N Date Extracted: 12/12/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/3/02

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	6.57	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06471.D**	Sample Name	**1663801**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA06471.D**	Sample Name	**1663801**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663801

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06471.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: decanted: (Y/N) N Date Extracted: 12/14/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/3/02

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	6.03	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06472.D**	Sample Name	**1663802**
Operator	**BPatel**	Misc Info	**283MW02**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene	12.51	7120358	89.93 ug/L	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene	14.14	660972	13.36 ug/L	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

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Data File Name	**BNA06472.D**	Sample Name	**1663802**
Operator	**BPatel**	Misc Info	**283MW02**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663802

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06472.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: decanted: (Y/N) N Date Extracted: 12/14/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/3/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		unknown	5.82	190	J
2.		unknown	6.08	430	J
3.		unknown	7.19	40	J
4.	000590-67-0	Cyclohexanol, 1-methyl-	7.26	180	JN
5.		unknown	7.35	89	J
6.		unknown	7.93	110	J
7.	005582-82-1	3-Heptanol, 3-methyl-	8.11	65	JN
8.		unknown	8.21	63	J
9.		unknown	8.30	82	J
10.		unknown	8.36	60	J
11.	000620-14-4	Benzene, 1-ethyl-3-methyl-	8.51	130	JN
12.	000611-14-3	Benzene, 1-ethyl-2-methyl-	8.57	74	JN
13.	000095-36-3	1,2,4-Trimethylbenzene	8.67	160	JN
14.	000611-14-3	Benzene, 1-ethyl-2-methyl-	8.86	100	JN
15.		unknown	9.10	41	J
16.	000108-67-8	Benzene, 1,3,5-trimethyl-	9.16	260	JN
17.	000622-96-8	Benzene, 1-ethyl-4-methyl-	9.66	55	JN
18.	000496-11-7	Indane	9.93	110	JN
19.	000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	10.28	47	JN
20.	000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	10.76	42	JN
21.	027133-93-3	2,3-Dihydro-1-methylindene	10.80	47	JN
22.	027133-93-3	2,3-Dihydro-1-methylindene	11.86	44	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06473.D**	Sample Name	**1663803**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06473.D**	Sample Name	**1663803**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**3-Jan-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 16638 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1663803

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06473.D

Level: (low/med) LOW Date Received: 12/11/01

% Moisture: decanted: (Y/N) N Date Extracted: 12/14/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/3/02

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	6.03	6	J

PEST/PCB's

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	MB
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	12/13/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/15/01
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	1663702
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/11/01
	Bldg. 173	**Extraction Date:**	12/13/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/15/01
Analysis:	EPA Method 608	**Location :**	M18 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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	16.29	0.50	0.0007	**0.002**
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	MB 2767
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	12/17/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/28/01
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	1663801
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/11/01
	Bldg. 173	**Extraction Date:**	12/17/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/28/01
Analysis:	EPA Method 608	**Location :**	283 Wells
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	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	0.0011	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	1663802
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/11/01
	Bldg. 173	**Extraction Date:**	12/17/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/28/01
Analysis:	EPA Method 608	**Location :**	283 Wells
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	MW 02
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	1663803
	DPW, SELFM-PW-EV	**Date Rec'd:**	12/11/01
	Bldg. 173	**Extraction Date:**	12/17/01
	Ft. Monmouth, NJ 07703	**Analysis Date:**	12/28/01
Analysis:	EPA Method 608	**Location :**	283 Wells
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	MW 03
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

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 #: 16637
Sample Prepared: 01/02/02

Site: M18

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	01/09/02	ND	200	10.0
Antimony	01/09/02	ND	20	2.0
Arsenic	01/09/02	ND	8	2.0
Barium	01/09/02	ND	2000	0.5
Beryllium	01/09/02	ND	20	0.5
Cadmium	01/09/02	1.55	4	0.5
Calcium	01/09/02	ND	NLE	20.0
Chromium	01/09/02	ND	100	0.5
Cobalt	01/09/02	ND	NLE	0.5
Copper	01/09/02	ND	1000	2.0
Iron	01/09/02	ND	300	2.0
Lead	01/09/02	ND	10	2.0
Magnesium	01/09/02	ND	NLE	10.0
Manganese	01/09/02	ND	50	0.5
Mercury	12/27/02	ND	2	0.1
Nickel	01/09/02	ND	100	1.0
Potassium	01/09/02	74.9	NLE	40.0
Selenium	01/09/02	ND	50	3.0
Silver	01/09/02	ND	20	1.0
Sodium	01/09/02	ND	50000	20.0
Thallium	01/09/02	6.39	10	2.0
Vanadium	01/09/02	ND	NLE	0.5
Zinc	01/09/02	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 #: 16638
Sample Prepared: 01/02/02

Site: 283

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	01/09/02	ND	200	10.0
Antimony	01/09/02	ND	20	2.0
Arsenic	01/09/02	ND	8	2.0
Barium	01/09/02	ND	2000	0.5
Beryllium	01/09/02	ND	20	0.5
Cadmium	01/09/02	1.55	4	0.5
Calcium	01/09/02	ND	NLE	20.0
Chromium	01/09/02	ND	100	0.5
Cobalt	01/09/02	ND	NLE	0.5
Copper	01/09/02	ND	1000	2.0
Iron	01/09/02	ND	300	2.0
Lead	01/09/02	ND	10	2.0
Magnesium	01/09/02	ND	NLE	10.0
Manganese	01/09/02	ND	50	0.5
Mercury	12/27/02	ND	2	0.1
Nickel	01/09/02	ND	100	1.0
Potassium	01/09/02	74.9	NLE	40.0
Selenium	01/09/02	ND	50	3.0
Silver	01/09/02	ND	20	1.0
Sodium	01/09/02	ND	50000	20.0
Thallium	01/09/02	6.39	10	2.0
Vanadium	01/09/02	ND	NLE	0.5
Zinc	01/09/02	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 #: 1663702
Sample Received: 12/11/01
Sample Matrix: Aqueous

Site: M18

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	01/09/02	ND	200	10.0
Antimony	01/09/02	ND	20	2.0
Arsenic	01/09/02	ND	8	2.0
Barium	01/09/02	ND	2000	0.5
Beryllium	01/09/02	ND	20	0.5
Cadmium	01/09/02	ND	4	0.5
Calcium	01/09/02	ND	NLE	20.0
Chromium	01/09/02	ND	100	0.5
Cobalt	01/09/02	ND	NLE	0.5
Copper	01/09/02	ND	1000	2.0
Iron	01/09/02	ND	300	2.0
Lead	01/09/02	ND	10	2.0
Magnesium	01/09/02	ND	NLE	10.0
Manganese	01/09/02	ND	50	0.5
Mercury	12/27/02	ND	2	0.1
Nickel	01/09/02	ND	100	1.0
Potassium	01/09/02	ND	NLE	40.0
Selenium	01/09/02	ND	50	3.0
Silver	01/09/02	ND	20	1.0
Sodium	01/09/02	ND	50000	20.0
Thallium	01/09/02	5.54	10	2.0
Vanadium	01/09/02	ND	NLE	0.5
Zinc	01/09/02	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 #: 1663801
Sample Received: 12/11/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/09/02	3600	200	10.0
Antimony	01/09/02	ND	20	2.0
Arsenic	01/09/02	ND	8	2.0
Barium	01/09/02	92.7	2000	0.5
Beryllium	01/09/02	1.04	20	0.5
Cadmium	01/09/02	ND	4	0.5
Calcium	01/09/02	7100	NLE	20.0
Chromium	01/09/02	19.1	100	0.5
Cobalt	01/09/02	4.41	NLE	0.5
Copper	01/09/02	39.8	1000	2.0
Iron	01/09/02	4490	300	2.0
Lead	01/09/02	7.83	10	2.0
Magnesium	01/09/02	13700	NLE	10.0
Manganese	01/09/02	29.3	50	0.5
Mercury	12/27/02	ND	2	0.1
Nickel	01/09/02	12.5	100	1.0
Potassium	01/09/02	6980	NLE	40.0
Selenium	01/09/02	ND	50	3.0
Silver	01/09/02	ND	20	1.0
Sodium	01/09/02	38400	50000	20.0
Thallium	01/09/02	ND	10	2.0
Vanadium	01/09/02	7.61	NLE	0.5
Zinc	01/09/02	110	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 #: 1663802
Sample Received: 12/11/01
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/09/02	1470	200	10.0
Antimony	01/09/02	ND	20	2.0
Arsenic	01/09/02	3.09	8	2.0
Barium	01/09/02	47.6	2000	0.5
Beryllium	01/09/02	ND	20	0.5
Cadmium	01/09/02	ND	4	0.5
Calcium	01/09/02	3870	NLE	20.0
Chromium	01/09/02	21.5	100	0.5
Cobalt	01/09/02	1.50	NLE	0.5
Copper	01/09/02	79.3	1000	2.0
Iron	01/09/02	7120	300	2.0
Lead	01/09/02	11.8	10	2.0
Magnesium	01/09/02	2320	NLE	10.0
Manganese	01/09/02	15.0	50	0.5
Mercury	12/27/02	ND	2	0.1
Nickel	01/09/02	8.52	100	1.0
Potassium	01/09/02	3370	NLE	40.0
Selenium	01/09/02	ND	50	3.0
Silver	01/09/02	ND	20	1.0
Sodium	01/09/02	17800	50000	20.0
Thallium	01/09/02	ND	10	2.0
Vanadium	01/09/02	7.77	NLE	0.5
Zinc	01/09/02	87.0	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 #: 1663803
Sample Received: 12/11/01
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	01/09/02	1030	200	10.0
Antimony	01/09/02	ND	20	2.0
Arsenic	01/09/02	7.27	8	2.0
Barium	01/09/02	193	2000	0.5
Beryllium	01/09/02	ND	20	0.5
Cadmium	01/09/02	0.748	4	0.5
Calcium	01/09/02	11100	NLE	20.0
Chromium	01/09/02	14.0	100	0.5
Cobalt	01/09/02	1.63	NLE	0.5
Copper	01/09/02	ND	1000	2.0
Iron	01/09/02	23400	300	2.0
Lead	01/09/02	ND	10	2.0
Magnesium	01/09/02	2540	NLE	10.0
Manganese	01/09/02	35.5	50	0.5
Mercury	12/27/02	ND	2	0.1
Nickel	01/09/02	5.80	100	1.0
Potassium	01/09/02	8310	NLE	40.0
Selenium	01/09/02	ND	50	3.0
Silver	01/09/02	ND	20	1.0
Sodium	01/09/02	6950	50000	20.0
Thallium	01/09/02	ND	10	2.0
Vanadium	01/09/02	5.00	NLE	0.5
Zinc	01/09/02	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

LTM

	Lab	Aluminum	Iron	Lead	Manganese	Nickel	Selenium	Silver	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	200	300	10	50	100	50	20	NLE		-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	ND	ND	6.31		V,S,P,M
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	ND	ND	5.54		V,S,P,M
10/17/2000	FMETL	2120	306	1.85	21.8	5.56	ND	ND	6.07		V,S,P,M
01/05/2001	FMETL	2460	868	ND	26.0	4.89	ND	ND	6.11		V,S,P,M
04/04/2001	FMETL	2350	410	3.00	34.7	12.0	ND	2.00	4.62		V,S,P,M
07/24/2001	FMETL	3150	575	3.03	55.2	20.4	7.93	ND	6.25		V,S,P,M
07/24/2001D	FMETL	3160	576	1.18	34.3	10.4.	12.5	ND	6.25		V,S,P,M
12/11/2001	FMETL	3600	4490	7.83	29.3	12.5	ND	ND	7.15		V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 12/11/2001

NOTES:

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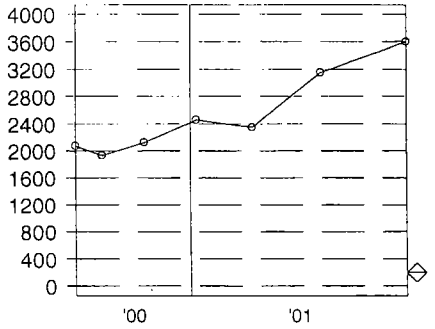
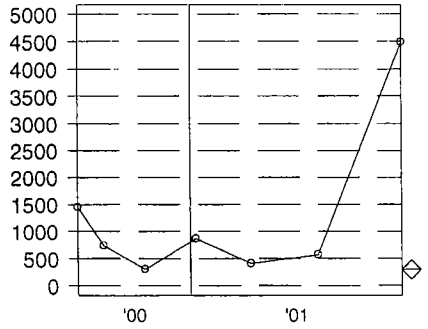
FORT MONMOUTH

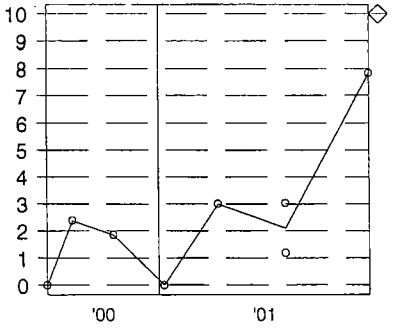
GW MONITORING
BLDG. 283

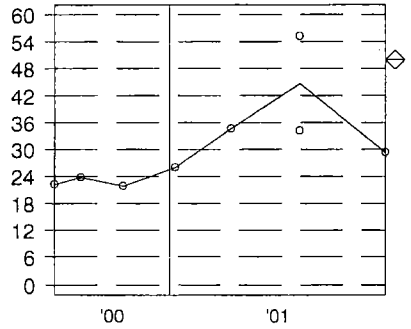
Source 2 of 3

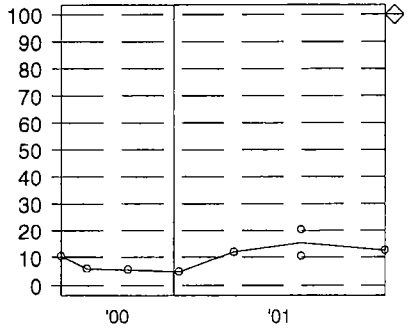
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

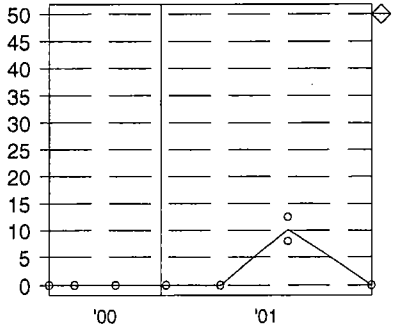


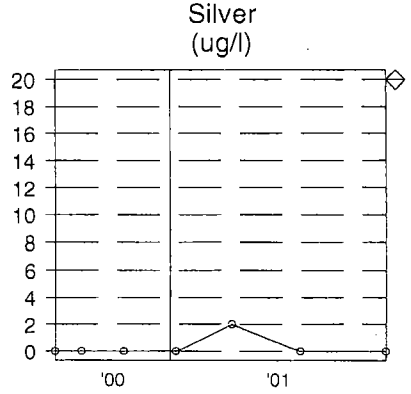


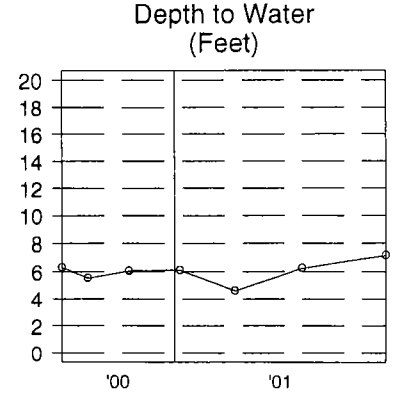












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 12/11/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-15-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	V,S,P,M
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	V,S,P,M
10/17/2000	FMETL	ND	ND	670.35	303.92	810.07	3829.91	ND	ND	152.89	V,S,P,M
10/17/2000D	FMETL	ND	ND	621.26	254.97	791.70	3577.78	ND	ND	126.93	V,S,P,M
01/05/2001	FMETL	23.44	ND	1009.73	320.72	1160.45	5143.75	ND	ND	223.45	V,S,P,M
04/04/2001	FMETL	ND	18.56	264	235.04	502.14	3221.45	8.32	ND	65.12	V,S,P,M
07/24/2001	FMETL	ND	ND	502.20	241.61	604.67	2797.88	ND	ND	ND	V,S,P,M
12/11/2001	FMETL	ND	ND	1055.06	24.78	711.17	1524.1	ND	ND	89.93	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/11/2001

NOTES:

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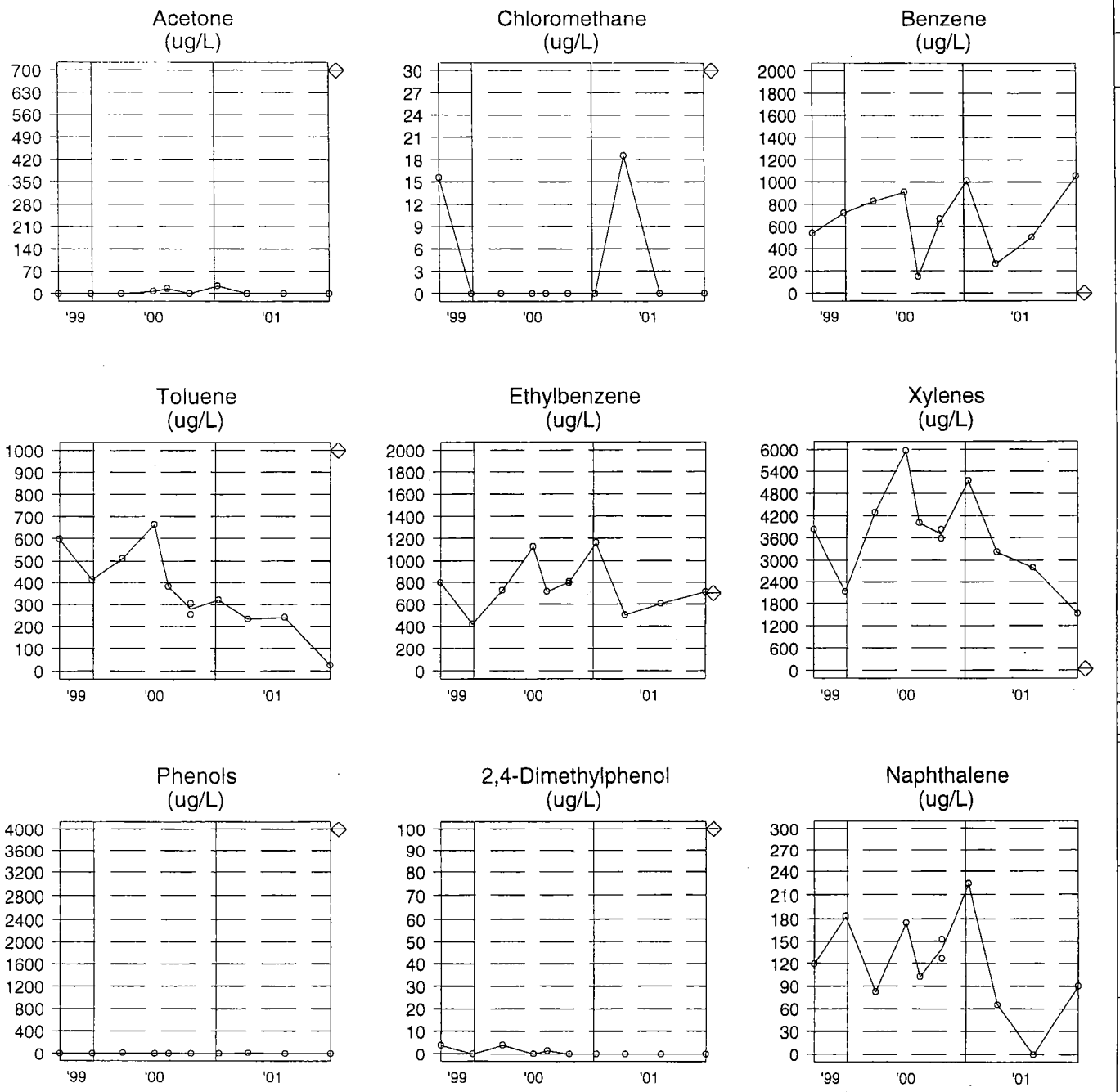
FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/11/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-15-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	2-Methyl naphthalene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	NLE	200	8	300	10	50	100	50	NLE	-
09/20/1999	FMETL	25.25	309	4.74	2330	22.0	14.5	4.11	6.49	7.20	V,S,P,M
12/27/1999	FMETL	26.28	123	ND	2060	6.92	44.0	3.62	4.73	6.81	V,S,P,M
03/23/2000	FMETL	7.43	241	ND	2010	15.3	11.9	6.43	7.29	6.38	V,S,P,M
06/28/2000	FMETL	25.10	81.4	ND	2130	11.5	8.31	6.01	4.36	7.83	V,S,P,M
08/10/2000	FMETL	25.13	812	3.40	2060	31.9	5.97	ND	8.40	6.28	V,S,P,M
10/17/2000	FMETL	24.87	917	2.38	3340	14.5	4.68	ND	6.69	7.09	V,S,P,M
10/17/2000D	FMETL	20.73	973	4.89	3210	15.9	5.06	ND	6.23	7.09	V,S,P,M
01/05/2001	FMETL	28.12	360	3.72	3220	25.3	6.47	2.85	6.22	7.32	V,S,P,M
04/04/2001	FMETL	6.10	2200	3.00	4360	23.0	8.10	5.00	5.00	4.81	V,S,P,M
07/24/2001	FMETL	ND	1780	6.78	4050	12.3	36.0	12.2	30.0	6.75	V,S,P,M
12/11/2001	FMETL	13.36	1470	3.09	7120	11.8	15.0	8.52	ND	8.54	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/11/2001

NOTES:

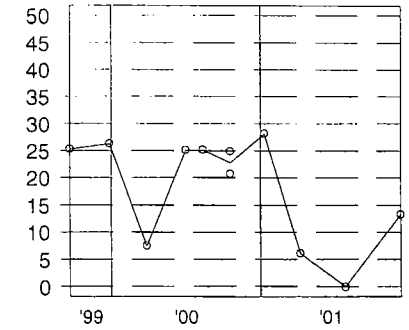
Page 2 of 2.

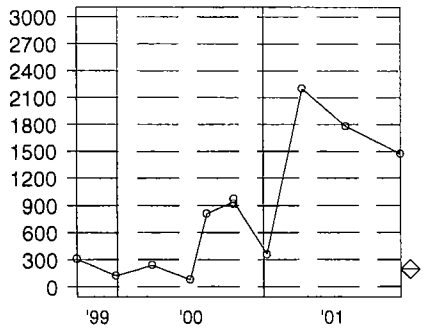
FORT MONMOUTH

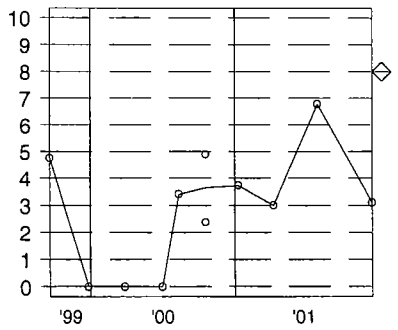
GW MONITORING
BLDG. 283

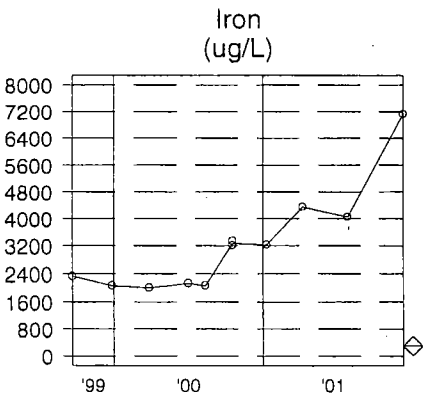
Source 1 of 3

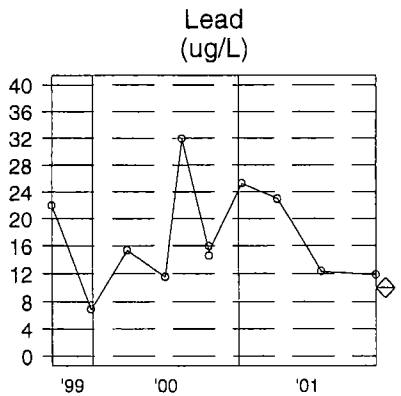
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

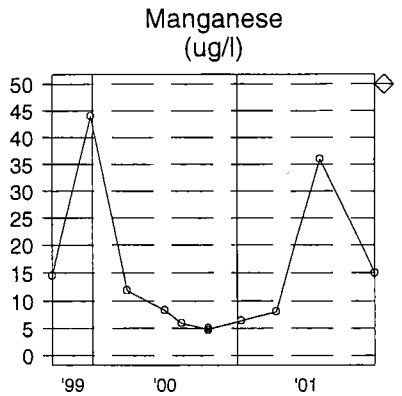


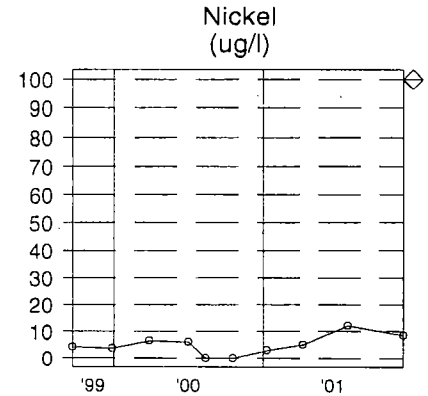


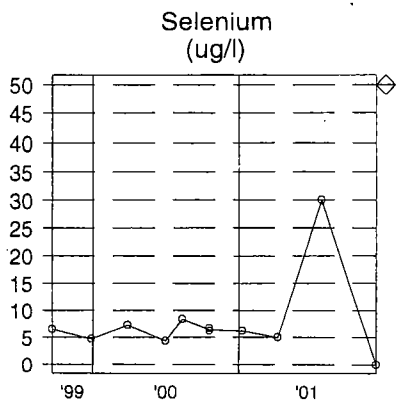


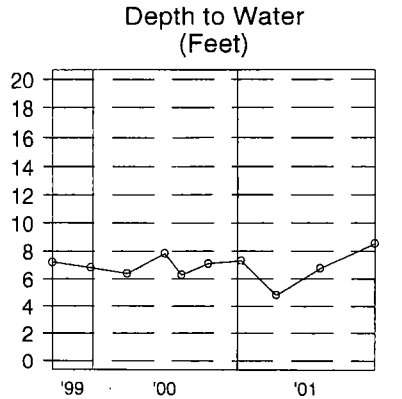












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/11/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-15-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Silver	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	20	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	3.27	6.94	V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	ND	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	ND	5.75	V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	ND	7.00	V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	ND	7.67	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 12/11/2001

NOTES:

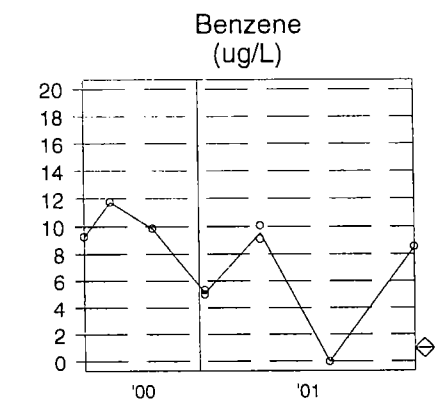
Page 1 of 1.

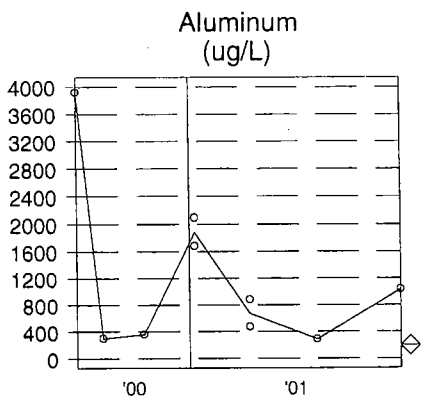
FORT MONMOUTH

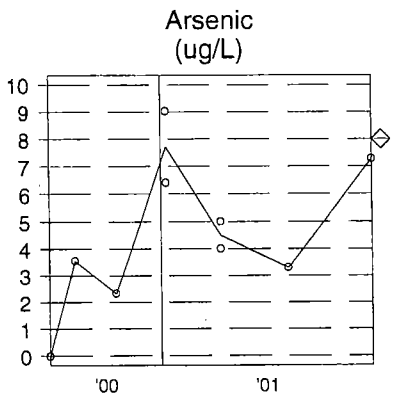
GW MONITORING
BLDG. 283

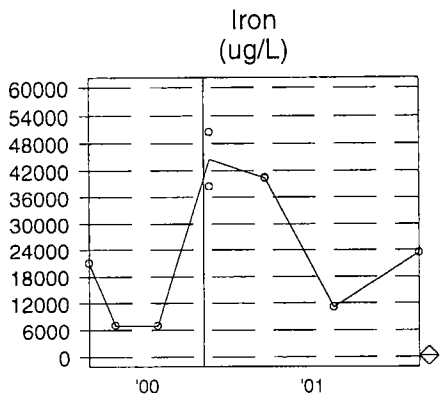
Source 3 of 3

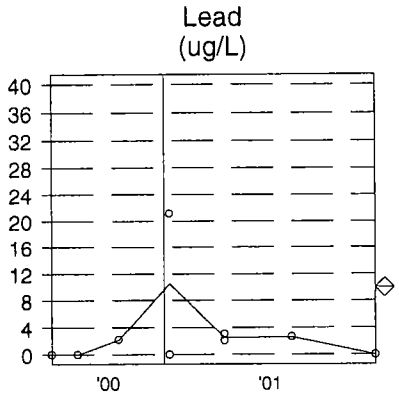
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

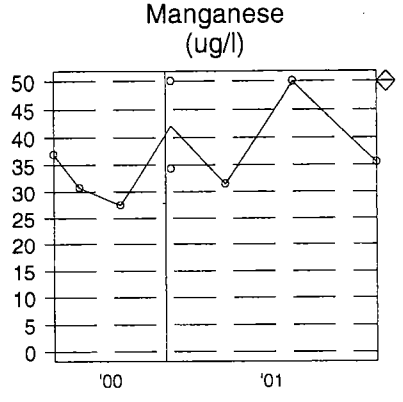


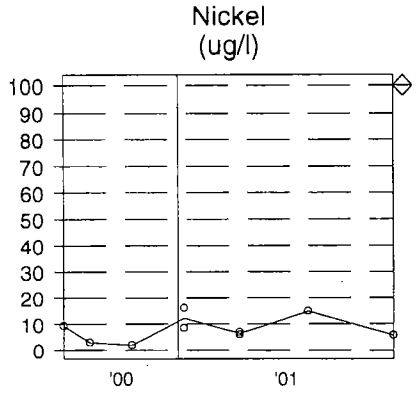


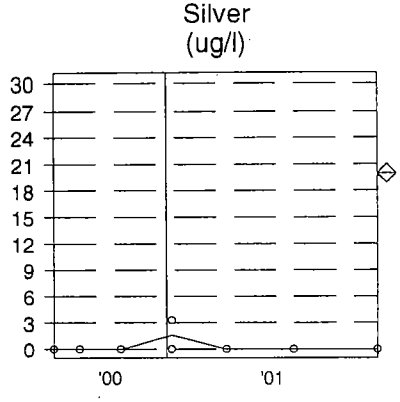


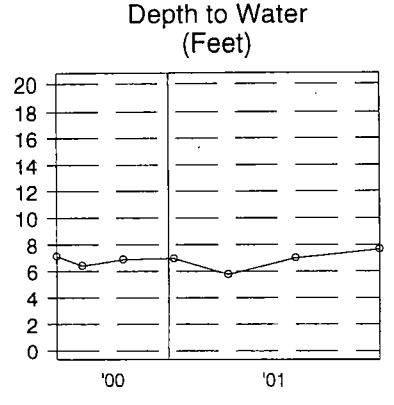












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 12/11/2001

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

01-15-2002 x:\mtech46\fm\283\gw\283.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. 283 #11

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
2014501	0283MW01	29-40367	03/08/02
2014502	0283MW02	29-40887	03/08/02
2014503	0283MW03	29-41650	03/08/02

NJDEP Laboratory Certification # 13461

5-17-02
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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: FALCON
Phone #: X24223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells 1st Qrtr '02

Samplers Name / Company: Cory McCormack, TUS

Analysis Parameters

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL MTLS	Pest/PCB	BNA 625				Hg Lead	Comments: MCL/HNO3/4°C Remarks / Preservation Method
20145 01	283 mw01	3/8/02	0954	AQ	5	✓	✓	✓	✓				0.0	29-40367
02	283 mw02		0945			✓	✓	✓	✓				0.0	29-40587
03	283 mw03		~~0950~~ 1034			✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Cory McCormack	3/8/02 1400				
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 7/28/0 from 296 sim data. CPM
Tide: N/A

print legibly

Coc.xls2/20/02

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 #: 532-6223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: 296 wells 1st Qrtr '02

Samplers Name / Company: Corey McCormack, TUS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA's	TAL Mtls	Pest/PCB	BNA's				Hexanol	Comments: Remarks / Preservation Method
														HCl/HNO3/4°C
20142 01	Trip	3/8/02	0721	AQ	2	✓							1	
02	Field Blank		0900		5	✓	✓	✓	✓				1	
03	Dupe		—		5	✓	✓	✓	✓				1	
04	296 mw01		0939		5	✓	✓	✓	✓				0.0	29-30979
05	296 mw02		1340		~~5~~ 5	✓	✓	✓	✓				0.0	29-30980
06	296 mw03		1323		5	✓	✓	✓	✓				0.0	29-30075
07	296 mw04 *		1338		5	✓	✓	✓	✓				0.0	29-33789
08	296 mw06		1331		~~9~~ 5	✓	✓	✓	✓				0.0	29-30978
09	296 mw07		1248		5	✓	✓	✓	✓				0.0	29-30973
10	296 mw08		1256		5	✓	✓	✓	✓				0.0	29-30974

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	3/8/02 1400				
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 T/FB/D with 283,290,mls of same date. ism
Tide: H-L

print legibly

Coc.xls2/20/02

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 03/08/02
WEATHER: Overcast, cold.
TIDE: NA

LNAPLs: NA
DNAPLs: NA
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.43 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 13.32 ft
(13.32) X 0.65 X 3 = 25.97
GALLONS OF H2O TO BE PURGED: 26 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: 08:05
pH 4.79 su — TEMP 15.79 °C
DISSOLVED O_2 2.11 mg/L — SPECIFIC CONDUCTIVITY 35.71 ms/cm

PURGE END TIME: 09:58
pH 4.11 su — TEMP 15.60 °C
DISSOLVED O_2 1.20 mg/L — SPECIFIC CONDUCTIVITY 35.79 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.51 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 26 gal

SAMPLE START TIME: 09:54
pH 4.09 su — TEMP 15.61 °C
DISSOLVED O_2 0.98 mg/L — SPECIFIC CONDUCTIVITY 35.80 ms/cm

SAMPLE END TIME: 10:04

COMMENTS: Low pH.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 03/08/02
WEATHER: Overcast, cold.
TIDE: NA

LNAPLs: NA
DNAPLs: NA
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 7.47 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 12.22 ft
(12.22) X 0.65 X 3 = 23.82
GALLONS OF H2O TO BE PURGED: 24 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: 08:00
pH 6.07 su — TEMP 15.78 °C
DISSOLVED O_2 3.24 mg/L — SPECIFIC CONDUCTIVITY 32.11 ms/cm

PURGE END TIME: 09:58
pH 5.80 su — TEMP 15.60 °C
DISSOLVED O_2 1.27 mg/L — SPECIFIC CONDUCTIVITY 26.20 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 10.95 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 24 gal

SAMPLE START TIME: 09:45
pH 5.81 su — TEMP 15.58 °C
DISSOLVED O_2 0.97 mg/L — SPECIFIC CONDUCTIVITY 24.30 ms/cm

SAMPLE END TIME: 09:50

COMMENTS: Strong odors of old oil. No phases.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 03/08/02
WEATHER: Overcast, cold.
TIDE: NA

LNAPLs: NA
DNAPLs: NA
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 7.10 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 16.95 ft
(16.95) X 0.65 X 3 = 33.05
GALLONS OF H2O TO BE PURGED: 33 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: 08:10
pH 5.80 su — TEMP 15.98 °C
DISSOLVED O_2 3.22 mg/L — SPECIFIC CONDUCTIVITY 17.21 ms/cm

PURGE END TIME: 10:33
pH 5.62 su — TEMP 15.41 °C
DISSOLVED O_2 1.37 mg/L — SPECIFIC CONDUCTIVITY 17.33 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 8.63 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)

TOTAL VOLUME PURGED: 33 gal

SAMPLE START TIME: 10:34
pH 5.61 su — TEMP 15.40 °C
DISSOLVED O_2 1.07 mg/L — SPECIFIC CONDUCTIVITY 17.34 ms/cm

SAMPLE END TIME: 10:40

COMMENTS:

VOLATILE ORGANICS

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 #13461

Data File	**VB011012.D**	Sample Name	**MB 18Mar02**
Operator	**Skelton**	Field ID	**MB 18Mar02**
Date Acquired	**18 Mar 2002 10:20 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene			not detected	1	0.49 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene			not detected	1000	0.36 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.40 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.99 ug/L	
95-47-6	o-Xylene			not detected	nle	0.26 ug/L	
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **MB 18Mar02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20145 Location: 283Wel SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: MB 18Mar02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011012.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. _____ Date Analyzed: 3/18/02

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	**VB011044.D**	Sample Name	**MB 19Mar02**
Operator	**Skelton**	Field ID	**MB 19Mar02**
Date Acquired	**19 Mar 2002 10:14 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene			not detected	1	0.49 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene			not detected	1000	0.36 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.40 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.99 ug/L	
95-47-6	o-Xylene			not detected	nle	0.26 ug/L	
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **MB 19Mar02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20145 Location: 283Wel SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB 19Mar02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011044.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. Date Analyzed: 3/19/02

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	**VB011017.D**	Sample Name	**2014201**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**18 Mar 2002 2:04 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene			not detected	1	0.49 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene			not detected	1000	0.36 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.40 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.99 ug/L	
95-47-6	o-Xylene			not detected	nle	0.26 ug/L	
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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.

TripBlank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20142 Location: 296Wel SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2014201

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011017.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. Date Analyzed: 3/18/02

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	**VB011018.D**	Sample Name	**2014202**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**18 Mar 2002 2:45 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene			not detected	1	0.49 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene			not detected	1000	0.36 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.40 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.99 ug/L	
95-47-6	o-Xylene			not detected	nle	0.26 ug/L	
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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.: 20142 Location: 296Wel SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2014202

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011018.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. Date Analyzed: 3/18/02

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	**VB011029.D**	Sample Name	**2014501**
Operator	**Skelton**	Field ID	**283MW01**
Date Acquired	**18 Mar 2002 10:06 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene			not detected	1	0.49 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene			not detected	1000	0.36 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.40 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.99 ug/L	
95-47-6	o-Xylene			not detected	nle	0.26 ug/L	
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20145 Location: 283Wel SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 2014501

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011029.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. _____ Date Analyzed: 3/18/02

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	**VB011030.D**	Sample Name	**2014502**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**18 Mar 2002 10:47 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene	18.68	50138754	327.69 ug/L	1	0.49 ug/L	E
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene	23.71	22735357	133.55 ug/L	1000	0.36 ug/L	E
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene	27.54	46556154	244.30 ug/L	700	0.40 ug/L	E
1330-20-7	m+p-Xylenes	27.74	46051295	695.07 ug/L	nle	0.99 ug/L	E
95-47-6	o-Xylene	28.83	48548670	349.75 ug/L	nle	0.26 ug/L	E
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB011048.D**	Sample Name	**2014502**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**19 Mar 2002 1:08 pm**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	168.20 ug/L	
107131	Acrylonitrile			not detected	50	68.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	132.20 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	7.80 ug/L	
108203	Di-isopropyl ether			not detected	nle	8.60 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	6.80 ug/L	
74-87-3	Chloromethane			not detected	30	7.40 ug/L	
75-01-4	Vinyl Chloride			not detected	5	6.60 ug/L	
74-83-9	Bromomethane			not detected	10	11.20 ug/L	
75-00-3	Chloroethane			not detected	nle	8.80 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	9.60 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	8.00 ug/L	
67-64-1	Acetone			not detected	700	18.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	7.40 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.40 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	14.40 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	9.20 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	17.80 ug/L	
78-93-3	2-Butanone			not detected	300	13.60 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	9.00 ug/L	
67-66-3	Chloroform			not detected	6	7.20 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	10.80 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	7.80 ug/L	
71-43-2	Benzene	18.68	5095563	710.22 ug/L	1	9.80 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	10.80 ug/L	
79-01-6	Trichloroethene			not detected	1	8.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	13.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	14.20 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	5.80 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.40 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	14.40 ug/L	
108-88-3	Toluene	23.70	1378523	172.69 ug/L	1000	7.20 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	9.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	13.80 ug/L	
127-18-4	Tetrachloroethene			not detected	1	14.60 ug/L	
591-78-6	2-Hexanone			not detected	nle	13.20 ug/L	
124-48-1	Dibromochloromethane			not detected	10	22.60 ug/L	
108-90-7	Chlorobenzene			not detected	4	9.00 ug/L	
100-41-4	Ethylbenzene	27.55	8061355	925.08 ug/L	700	8.00 ug/L	D
1330-20-7	m+p-Xylenes	27.74	6671615	2202.11 ug/L	nle	19.80 ug/L	D
95-47-6	o-Xylene	28.84	9787940	1542.05 ug/L	nle	5.20 ug/L	D
100-42-5	Styrene			not detected	100	7.80 ug/L	
75-25-2	Bromoform			not detected	4	17.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	17.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	8.60 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	10.40 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20145 Location: 283Wel SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2014502

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011030.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. Date Analyzed: 3/18/02

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. 000078-78-4	Butane, 2-methyl-	6.43	970	JN
2.	unknown	7.26	1400	J
3. 000563-46-2	1-Butene, 2-methyl-	7.91	420	JN
4. 000107-83-5	Pentane, 2-methyl-	10.62	580	JN
5. 000142-29-0	Cyclopentene	11.26	320	JN
6.	unknown	11.67	1100	J
7. 000110-82-7	Cyclohexane	15.27	1300	JN
8. 000110-82-7	Cyclohexane	17.54	1200	JN
9.	unknown	30.94	440	J
10.	unknown	32.02	520	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB011045.D**	Sample Name	**2014503**
Operator	**Skelton**	Field ID	**283MW03**
Date Acquired	**19 Mar 2002 11:05 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	8.41 ug/L	
107131	Acrylonitrile			not detected	50	3.40 ug/L	
75650	tert-Butyl alcohol			not detected	nle	6.61 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.39 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.43 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.34 ug/L	
74-87-3	Chloromethane			not detected	30	0.37 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.33 ug/L	
74-83-9	Bromomethane			not detected	10	0.56 ug/L	
75-00-3	Chloroethane			not detected	nle	0.44 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.48 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.40 ug/L	
67-64-1	Acetone			not detected	700	0.91 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.37 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.22 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.72 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.46 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.89 ug/L	
78-93-3	2-Butanone			not detected	300	0.68 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.45 ug/L	
67-66-3	Chloroform			not detected	6	0.36 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.54 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.39 ug/L	
71-43-2	Benzene	18.67	1041981	8.38 ug/L	1	0.49 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.54 ug/L	
79-01-6	Trichloroethene			not detected	1	0.43 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.65 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.71 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.29 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.32 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.72 ug/L	
108-88-3	Toluene			not detected	1000	0.36 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.47 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.69 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.73 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.66 ug/L	
124-48-1	Dibromochloromethane			not detected	10	1.13 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.45 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.40 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.99 ug/L	
95-47-6	o-Xylene			not detected	nle	0.26 ug/L	
100-42-5	Styrene			not detected	100	0.39 ug/L	
75-25-2	Bromoform			not detected	4	0.85 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.87 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.25 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.43 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.52 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20145 Location: 283Wel SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 2014503

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011045.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: not dec. _____ Date Analyzed: 3/19/02

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	**BNA06633.D**	Sample Name	**MB-031302**
Operator	**BPatel**	Misc Info	**MB-031302**
Date Acquired	**21-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06633.D**	Sample Name	**MB-031302**
Operator	**BPatel**	Misc Info	**MB-031302**
Date Acquired	**21-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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-031302**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20145 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-031302

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06633.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: decanted: (Y/N) N Date Extracted: 3/13/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/21/02

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	7.39	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06631.D**	Sample Name	**MB-3049**
Operator	**BPatel**	Misc Info	**MB-031102**
Date Acquired	**21-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA06631.D**	Sample Name	**MB-3049**
Operator	**BPatel**	Misc Info	**MB-031102**
Date Acquired	**21-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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-3049**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20142 Location: 296 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-3049

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06631.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: decanted: (Y/N) N Date Extracted: 3/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/21/02

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	7.40	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06638.D**	Sample Name	**2014202**
Operator	**BPatel**	Misc Info	**Field Blank**
Date Acquired	**21-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA06638.D**	Sample Name	**2014202**
Operator	**BPatel**	Misc Info	**Field Blank**
Date Acquired	**21-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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.: 20142 Location: 296 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2014202

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06638.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: decanted: (Y/N) N Date Extracted: 3/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/21/02

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	7.40	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06653.D**	Sample Name	**2014501**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**22-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

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Data File Name	**BNA06653.D**	Sample Name	**2014501**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**22-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20145 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2014501

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06653.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: decanted: (Y/N) N Date Extracted: 3/13/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/22/02

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	7.39	6	J
2.	unknown	7.48	5	J
3.	unknown	8.22	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06654.D**	Sample Name	**2014502**
Operator	**BPatel**	Misc Info	**283MW02**
Date Acquired	**22-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene	13.94	6933033	80.67 ug/L	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene	15.59	752363	13.24 ug/L	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06654.D**	Sample Name	**2014502**
Operator	**BPatel**	Misc Info	**283MW02**
Date Acquired	**22-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20145 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2014502

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06654.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: decanted: (Y/N) N Date Extracted: 3/13/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/22/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.08	42	J
2.	unknown	5.54	36	J
3.	unknown	5.58	130	J
4.	unknown	6.43	70	J
5. 000625-23-0	2-Hexanol, 2-methyl-	7.27	110	JN
6.	unknown	7.52	210	J
7. 000590-67-0	Cyclohexanol, 1-methyl-	8.68	91	JN
8.	unknown	8.75	49	J
9.	unknown	9.27	68	J
10.	unknown	9.46	46	J
11.	unknown	9.59	34	J
12.	unknown	9.67	43	J
13. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.91	110	JN
14. 000622-96-8	Benzene, 1-ethyl-4-methyl-	9.96	52	JN
15. 000108-67-8	Benzene, 1,3,5-trimethyl-	10.06	100	JN
16. 000611-14-3	Benzene, 1-ethyl-2-methyl-	10.26	69	JN
17. 000526-73-8	Benzene, 1,2,3-trimethyl-	10.55	230	JN
18. 000611-14-3	Benzene, 1-ethyl-2-methyl-	11.06	94	JN
19. 000496-11-7	Indane	11.33	70	JN
20. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.65	31	JN
21. 000768-00-3	Benzene, (1-methyl-1-propenyl)-,	13.27	32	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06655.D**	Sample Name	**2014503**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**22-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06655.D**	Sample Name	**2014503**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**22-Mar-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20145 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 2014503

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06655.D

Level: (low/med) LOW Date Received: 3/8/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 3/13/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/22/02

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	7.39	6	J
2.	unknown	7.48	4	J

PEST/PCB's

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	MB-3053
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	3/14/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/18/02
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2014202
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/8/02
	Bldg. 173	**Extraction Date:**	3/14/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/18/02
Analysis:	EPA Method 608	**Location :**	296 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2014501
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/8/02
	Bldg. 173	**Extraction Date:**	3/14/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/19/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	283 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	0.0011	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2014502
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/8/02
	Bldg. 173	**Extraction Date:**	3/14/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/19/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	283 MW02
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2014503
	DPW, SELFM-PW-EV	**Date Rec'd:**	3/8/02
	Bldg. 173	**Extraction Date:**	3/14/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	3/19/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	283 MW03
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

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 0770

Lab ID #:
Sample Prepared: 03/21/03

Site: 296
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	03/22/03	78.3	200	10.0
Antimony	03/22/03	3.40	20	2.0
Arsenic	03/22/03	ND	8	2.0
Barium	03/22/03	2.37	2000	0.5
Beryllium	03/22/03	ND	20	0.5
Cadmium	03/22/03	ND	4	0.5
Calcium	03/22/03	123	NLE	20.0
Chromium	03/22/03	1.13	100	0.5
Cobalt	03/22/03	ND	NLE	0.5
Copper	03/22/03	5.39	1000	2.0
Iron	03/22/03	292	300	10.0
Lead	03/22/03	1.30	10	1.0
Magnesium	03/22/03	53.8	NLE	10.0
Manganese	03/22/03	2.77	50	0.5
Mercury	03/18/02	ND	2	0.1
Nickel	03/22/03	ND	100	1.0
Potassium	03/22/03	1060	NLE	40.0
Selenium	03/22/03	5.85	50	3.0
Silver	03/22/03	ND	20	1.0
Sodium	03/22/03	879	50000	20.0
Thallium	03/22/03	ND	10	2.0
Vanadium	03/22/03	ND	NLE	0.5
Zinc	03/22/03	9.60	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 #: 2014202
Sample Prepared: 03/21/03

Site: 296
Ft. Monmouth, New Jersey

Field ID#: Field B Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/22/02	93.4	200	10.0
Antimony	03/22/02	ND	20	2.0
Arsenic	03/22/02	ND	8	2.0
Barium	03/22/02	2.69	2000	0.5
Beryllium	03/22/02	ND	20	0.5
Cadmium	03/22/02	ND	4	0.5
Calcium	03/22/02	144	NLE	20.0
Chromium	03/22/02	ND	100	0.5
Cobalt	03/22/02	ND	NLE	0.5
Copper	03/22/02	6.95	1000	2.0
Iron	03/22/02	54.3	300	10.0
Lead	03/22/02	ND	10	1.0
Magnesium	03/22/02	22.9	NLE	10.0
Manganese	03/22/02	0.850	50	0.5
Mercury	03/18/02	ND	2	0.1
Nickel	03/22/02	ND	100	1.0
Potassium	03/22/02	377	NLE	40.0
Selenium	03/22/02	6.01	50	3.0
Silver	03/22/02	ND	20	1.0
Sodium	03/22/02	1080	50000	20.0
Thallium	03/22/02	ND	10	2.0
Vanadium	03/22/02	ND	NLE	0.5
Zinc	03/22/02	12.9	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 #: 2014501
Sample Received: 03/08/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/21/02	3520	200	10.0
Antimony	03/21/02	ND	20	2.0
Arsenic	03/21/02	ND	8	2.0
Barium	03/21/02	96.0	2000	0.5
Beryllium	03/21/02	1.05	20	0.5
Cadmium	03/21/02	ND	4	0.5
Calcium	03/21/02	8380	NLE	20.0
Chromium	03/21/02	4.99	100	0.5
Cobalt	03/21/02	4.84	NLE	0.5
Copper	03/21/02	9.42	1000	2.0
Iron	03/21/02	897	300	2.0
Lead	03/21/02	1.36	10	2.0
Magnesium	03/21/02	18600	NLE	10.0
Manganese	03/21/02	36.1	50	0.5
Mercury	03/18/02	ND	2	0.1
Nickel	03/21/02	11.9	100	1.0
Potassium	03/21/02	5900	NLE	40.0
Selenium	03/21/02	10.4	50	3.0
Silver	03/21/02	ND	20	1.0
Sodium	03/21/02	50000	50000	20.0
Thallium	03/21/02	ND	10	2.0
Vanadium	03/21/02	1.36	NLE	0.5
Zinc	03/21/02	87.1	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 #: 2014502
Sample Received: 03/08/02
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/21/02	249	200	10.0
Antimony	03/21/02	ND	20	2.0
Arsenic	03/21/02	ND	8	2.0
Barium	03/21/02	43.5	2000	0.5
Beryllium	03/21/02	ND	20	0.5
Cadmium	03/21/02	ND	4	0.5
Calcium	03/21/02	3900	NLE	20.0
Chromium	03/21/02	3.24	100	0.5
Cobalt	03/21/02	ND	NLE	0.5
Copper	03/21/02	11.5	1000	2.0
Iron	03/21/02	3220	300	2.0
Lead	03/21/02	9.02	10	2.0
Magnesium	03/21/02	1950	NLE	10.0
Manganese	03/21/02	14.3	50	0.5
Mercury	03/18/02	ND	2	0.1
Nickel	03/21/02	4.99	100	1.0
Potassium	03/21/02	2240	NLE	40.0
Selenium	03/21/02	13.4	50	3.0
Silver	03/21/02	ND	20	1.0
Sodium	03/21/02	16700	50000	20.0
Thallium	03/21/02	ND	10	2.0
Vanadium	03/21/02	0.773	NLE	0.5
Zinc	03/21/02	23.9	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 #: 2014503
Sample Received: 03/08/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/21/02	503	200	10.0
Antimony	03/21/02	ND	20	2.0
Arsenic	03/21/02	3.25	8	2.0
Barium	03/21/02	197	2000	0.5
Beryllium	03/21/02	ND	20	0.5
Cadmium	03/21/02	ND	4	0.5
Calcium	03/21/02	10400	NLE	20.0
Chromium	03/21/02	4.81	100	0.5
Cobalt	03/21/02	1.23	NLE	0.5
Copper	03/21/02	ND	1000	2.0
Iron	03/21/02	19100	300	2.0
Lead	03/21/02	ND	10	2.0
Magnesium	03/21/02	2190	NLE	10.0
Manganese	03/21/02	33.9	50	0.5
Mercury	03/18/02	ND	2	0.1
Nickel	03/21/02	5.30	100	1.0
Potassium	03/21/02	7650	NLE	40.0
Selenium	03/21/02	7.75	50	3.0
Silver	03/21/02	ND	20	1.0
Sodium	03/21/02	7490	50000	20.0
Thallium	03/21/02	ND	10	2.0
Vanadium	03/21/02	1.38	NLE	0.5
Zinc	03/21/02	12.1	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

LTM

	Lab	Aluminum	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water			Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet			-
NJDEP Criteria:	-	200	300	10	50	100	50	NLE			-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	ND	6.31			V,S,P,M
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	ND	5.54			V,S,P,M
10/17/2000	FMETL	2120	306	1.85	21.8	5.56	ND	6.07			V,S,P,M
01/05/2001	FMETL	2460	868	ND	26.0	4.89	ND	6.11			V,S,P,M
04/04/2001	FMETL	2350	410	3.00	34.7	12.0	ND	4.62			V,S,P,M
07/24/2001	FMETL	3150	575	3.03	55.2	20.4	7.93	6.25			V,S,P,M
07/24/2001D	FMETL	3160	576	1.18	34.3	10.4	12.5	6.25			V,S,P,M
12/11/2001	FMETL	3600	4490	7.83	29.3	12.5	ND	7.15			V,S,P,M
03/08/2002	FMETL	3520	897	1.36	36.1	11.9	10.4	6.43			V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 03/08/2002

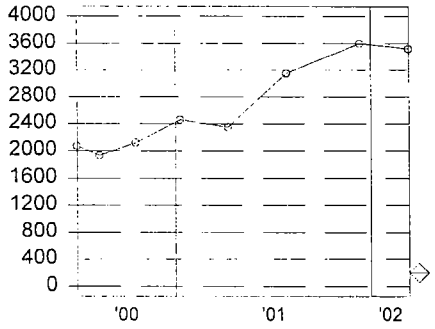
NOTES:

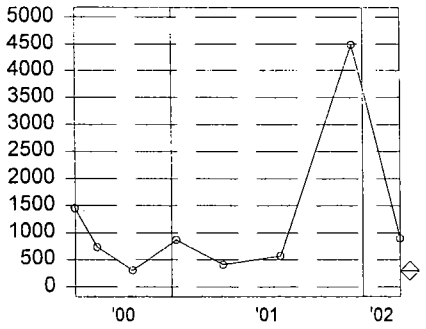
FORT MONMOUTH

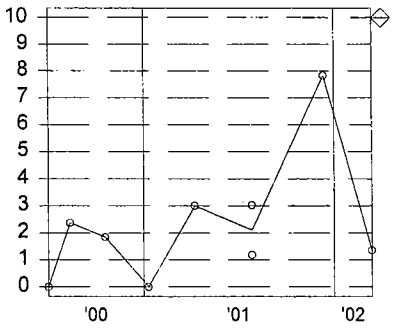
GW MONITORING
BLDG. 283

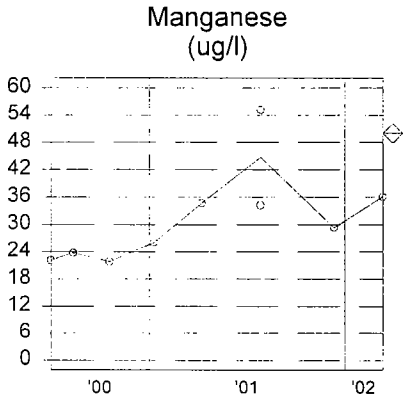
Source 2 of 3

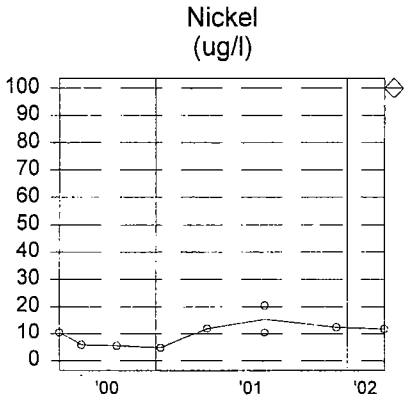
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

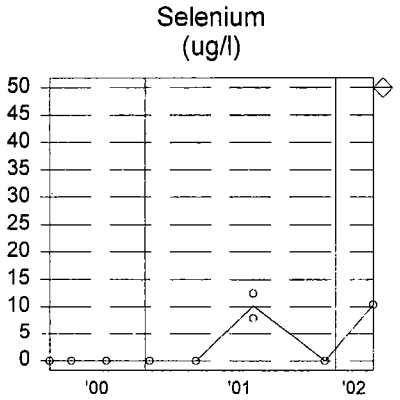


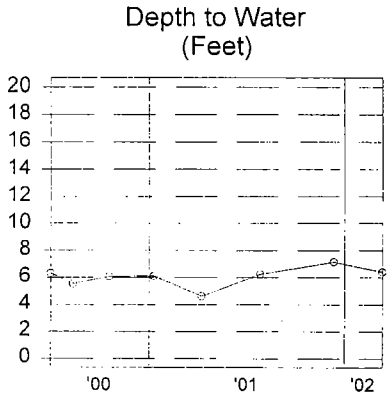












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 03/08/2002

LEGEND:

PARAMETER

○ = Date Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

05-17-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	V,S,P,M
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	V,S,P,M
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	V,S,P,M
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	V,S,P,M
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	V,S,P,M
10/17/2000	FMETL	ND	ND	670.35	303.92	810.07	3829.91	ND	ND	152.89	V,S,P,M
10/17/2000D	FMETL	ND	ND	621.26	254.97	791.70	3577.78	ND	ND	126.93	V,S,P,M
01/05/2001	FMETL	23.44	ND	1009.73	320.72	1160.45	5143.75	ND	ND	223.45	V,S,P,M
04/04/2001	FMETL	ND	18.56	264	235.04	502.14	3221.45	8.32	ND	65.12	V,S,P,M
07/24/2001	FMETL	ND	ND	502.20	241.61	604.67	2797.88	ND	ND	ND	V,S,P,M
12/11/2001	FMETL	ND	ND	1055.06	24.78	711.17	1524.1	ND	ND	89.93	V,S,P,M
03/08/2002	FMETL	ND	ND	710.22	172.69	925.08	3744.16	ND	ND	80.67	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/08/2002

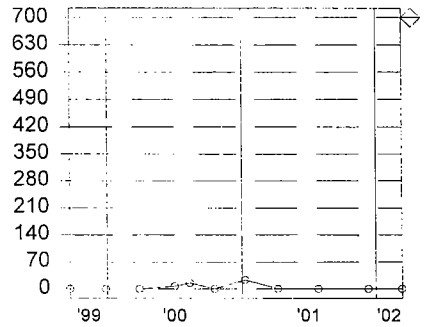
NOTES:

FORT MONMOUTH

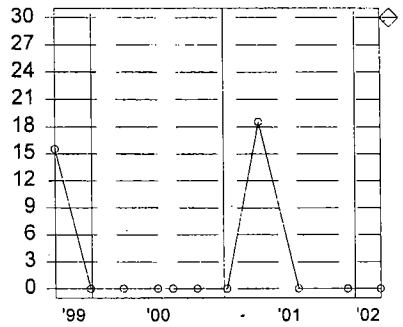
GW MONITORING
BLDG. 283

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

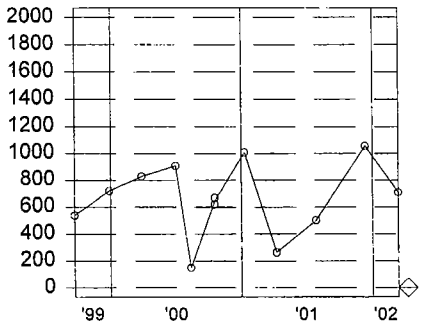
Acetone
(ug/L)



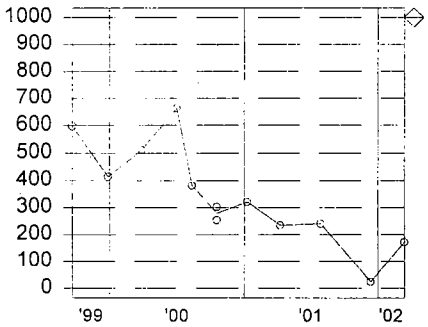
Chloromethane
(ug/L)



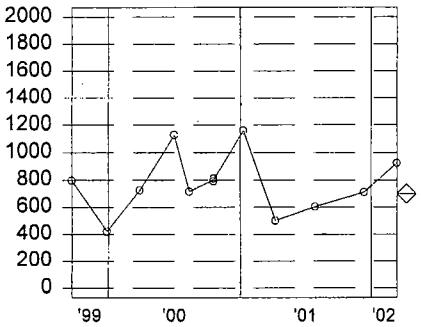
Benzene
(ug/L)



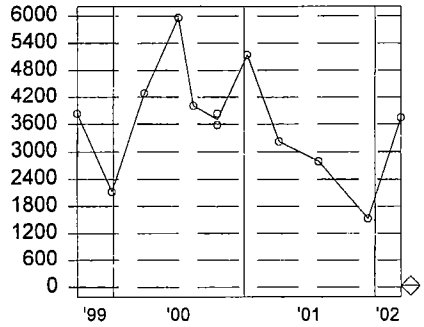
Toluene
(ug/L)



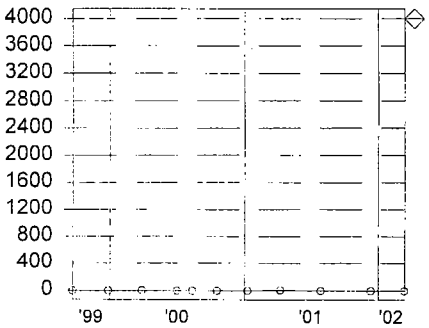
Ethylbenzene
(ug/L)



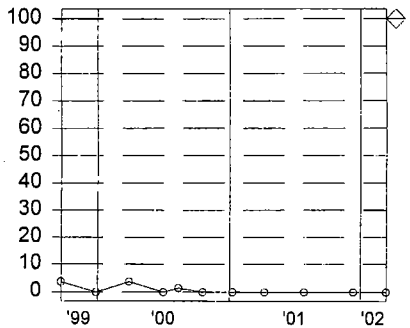
Xylenes
(ug/L)



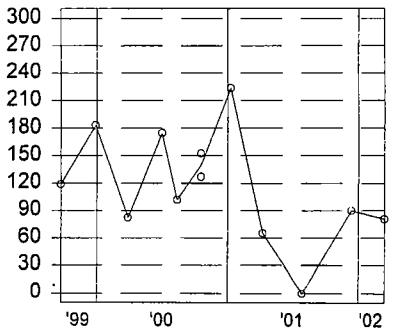
Phenols
(ug/L)



2,4-Dimethylphenol
(ug/L)



Naphthalene
(ug/L)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/08/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

05-17-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	2-Methyl naphthalene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	NLE	200	8	300	10	50	100	50	NLE	-
09/20/1999	FMETL	25.25	309	4.74	2330	22.0	14.5	4.11	6.49	7.20	V,S,P,M
12/27/1999	FMETL	26.28	123	ND	2060	6.92	44.0	3.62	4.73	6.81	V,S,P,M
03/23/2000	FMETL	7.43	241	ND	2010	15.3	11.9	6.43	7.29	6.38	V,S,P,M
06/28/2000	FMETL	25.10	81.4	ND	2130	11.5	8.31	6.01	4.36	7.83	V,S,P,M
08/10/2000	FMETL	25.13	812	3.40	2060	31.9	5.97	ND	8.40	6.28	V,S,P,M
10/17/2000	FMETL	24.87	917	2.38	3340	14.5	4.68	ND	6.69	7.09	V,S,P,M
10/17/2000D	FMETL	20.73	973	4.89	3210	15.9	5.06	ND	6.23	7.09	V,S,P,M
01/05/2001	FMETL	28.12	360	3.72	3220	25.3	6.47	2.85	6.22	7.32	V,S,P,M
04/04/2001	FMETL	6.10	2200	3.00	4360	23.0	8.10	5.00	5.00	4.81	V,S,P,M
07/24/2001	FMETL	ND	1780	6.78	4050	12.3	36.0	12.2	30.0	6.75	V,S,P,M
12/11/2001	FMETL	13.36	1470	3.09	7120	11.8	15.0	8.52	ND	8.54	V,S,P,M
03/08/2002	FMETL	13.24	249	ND	3220	9.02	14.3	4.99	13.4	7.47	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/08/2002

NOTES:

Page 2 of 2.

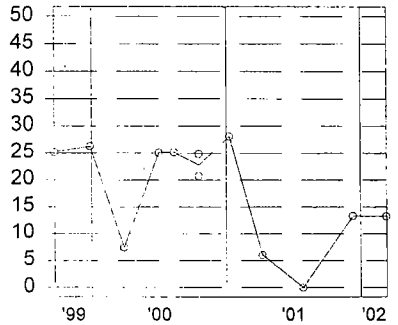
FORT MONMOUTH

GW MONITORING
BLDG. 283

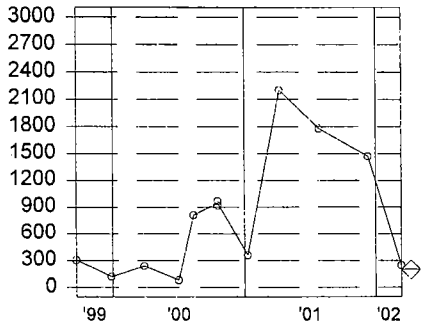
Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

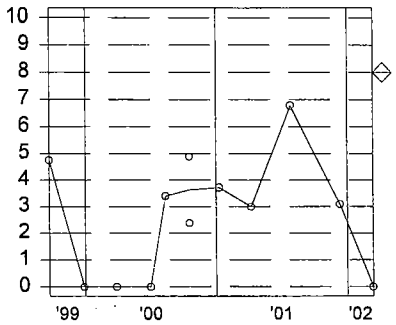
2-Methylnaphthalene (ug/L)



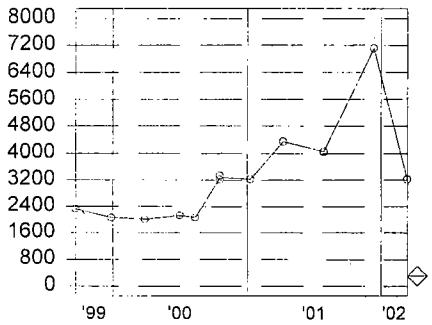
Aluminum (ug/L)



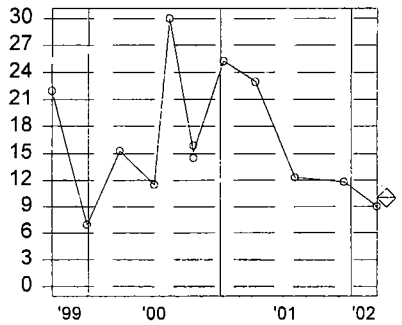
Arsenic (ug/L)



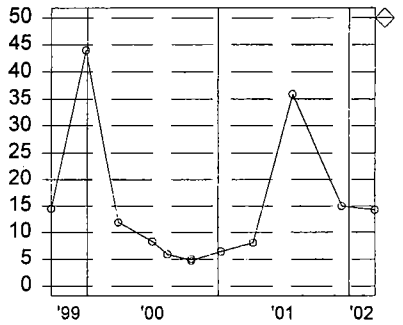
Iron (ug/L)



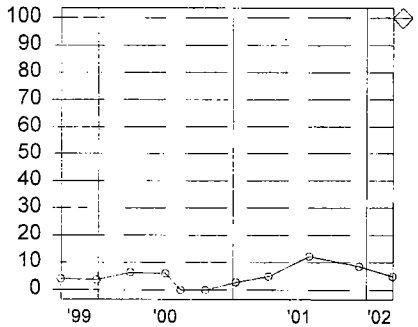
Lead (ug/L)



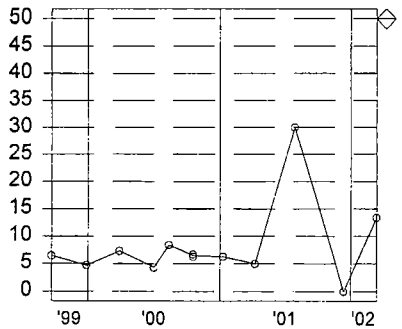
Manganese (ug/l)



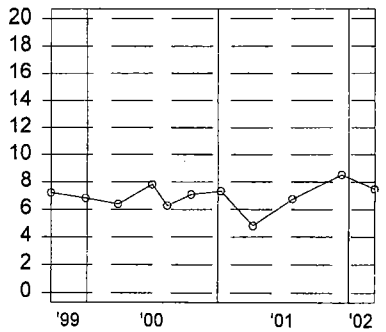
Nickel (ug/l)



Selenium (ug/l)



Depth to Water (Feet)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 03/08/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

05-17-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Silver	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	20	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	3.27	6.94	V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	ND	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	ND	5.75	V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	ND	7.00	V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	ND	7.67	V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	5.30	ND	7.10	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 03/08/2002

NOTES:

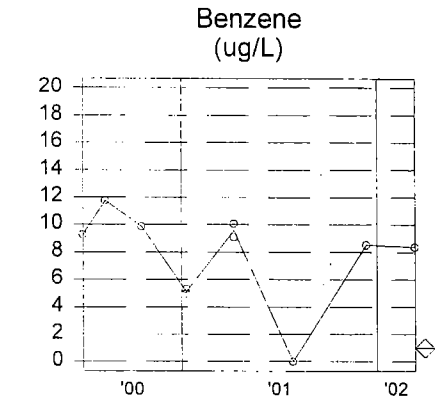
Page 1 of 1.

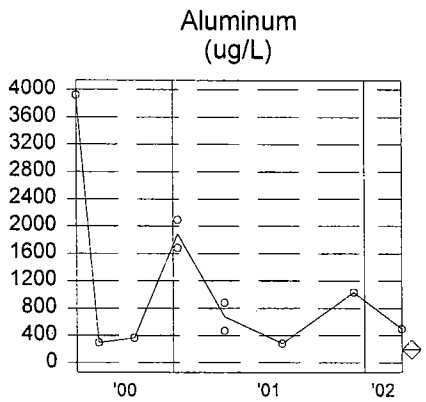
FORT MONMOUTH

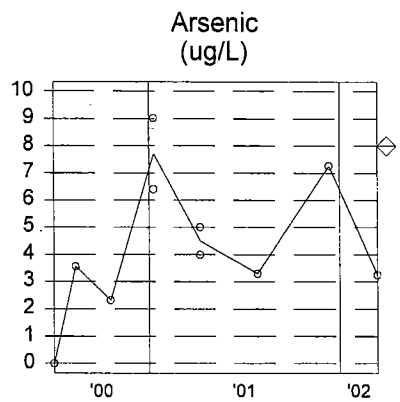
GW MONITORING
BLDG. 283

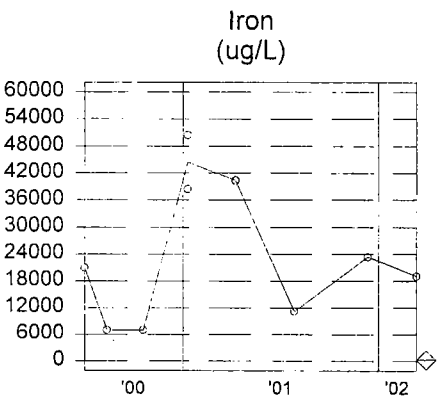
Source 3 of 3

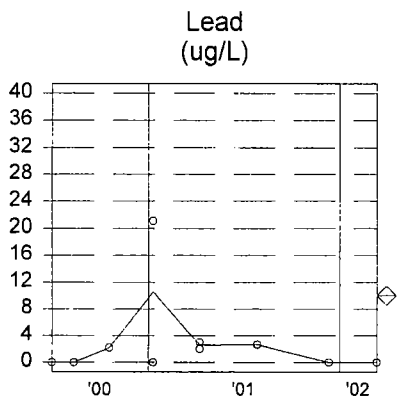
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

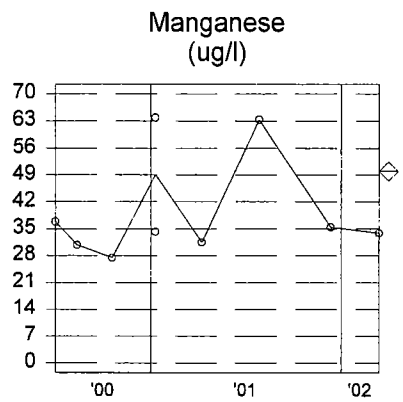


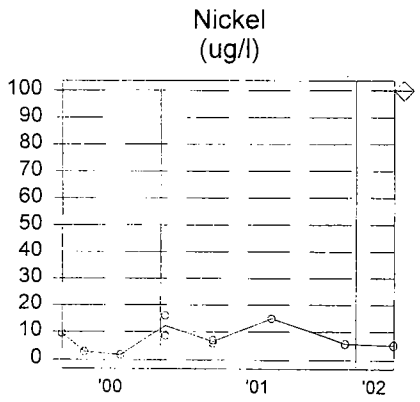


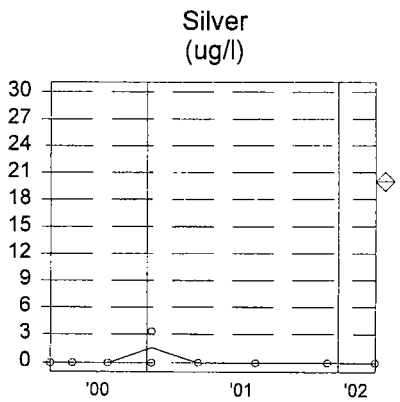


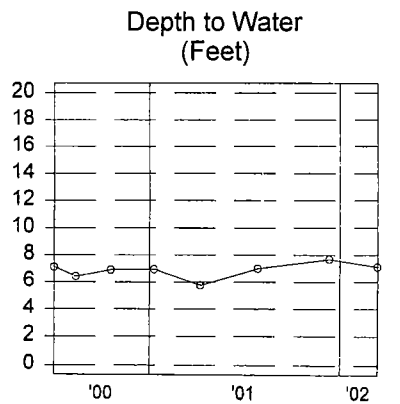












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 03/08/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

05-17-2002 x:\mtech46\fm\283\gw\283.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #12

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
2029204	0283MW01	29-40367	05/16/02
2029205	0283MW02	29-40887	05/16/02
2029206	0283MW03	29-41650	05/16/02

NJDEP Laboratory Certification # 13461

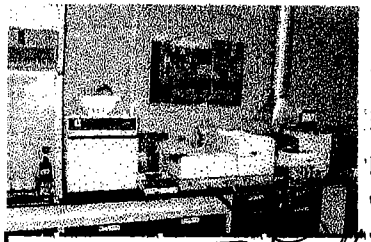
6-7-02
Daniel Wright/Date:
Laboratory Director

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

3ldg. 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 #: X26223
( )DERA ( )OMA ( )Other:

Project No:
Location: 283 ~~MW~~ wells
2nd Qtr '02

Sampler's Name / Company: Corey McCormack, TUS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL MTLS	Pest+PCB	BNA+25				Hex Read	Comments: Remarks / Preservation Method
														HCL/HNO_3/<4°C
20292 01	Trip	5/16/02	0741	AQ	2	✓							—	
02	Field Blank		0915		5	✓	✓	✓	✓				—	
03	Dupe		→		5	✓	✓	✓	✓				—	
04	283 mw01 *		1052		5	✓	✓	✓	✓				0.0	29-40367
05	283 mw02		1049		5	✓	✓	✓	✓				0.0	29-40887
06	283 mw03		1114		9	✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	5/16/02 1405	J. Fallow			
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 T/FB/D w/ 290, M18 See data. can
Tide: N/A MS/MSD hrs.

print legibly

Coc4/29/02

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/16/02
WEATHER: Sunny and warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.14 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.61 ft
(13.61) X .65 X 3 =26.53
GALLONS OF H2O TO BE PURGED: 27 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: 08:54
pH 6.57 su TEMP 16.1 °C
DISSOLVED O2 5.55 mg/L SPECIFIC CONDUCTIVITY 201 ms/cm

PURGE END TIME: 10:51
pH 6.41 su TEMP 15.8 °C
DISSOLVED O2 4.60 mg/L SPECIFIC CONDUCTIVITY 191 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.51 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 10:52
pH 6.40 su TEMP 15.7 °C
DISSOLVED O2 4.59 mg/L SPECIFIC CONDUCTIVITY 188 ms/cm

SAMPLE END TIME: 10:57

COMMENTS: DUP. Here. Low drain down.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/16/02
WEATHER: Sunny and warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.90 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 12.79 ft
(12.79) X .65 X 3 =24.94
GALLONS OF H2O TO BE PURGED: 25 gal
PURGE METHOD: (FLOW OF <0.5 TO >5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.4 ppm

PURGE START TIME: 09:00
pH 6.59 su — TEMP 16.8 °C
DISSOLVED O2 4.87 mg/L — SPECIFIC CONDUCTIVITY 83 ms/cm

PURGE END TIME: 10:48
pH 6.50 su — TEMP 16.0 °C
DISSOLVED O2 3.91 mg/L — SPECIFIC CONDUCTIVITY 87 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 10.75 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 25 gal

SAMPLE START TIME: 10:49
pH 6.50 su — TEMP 16.0 °C
DISSOLVED O2 3.90 mg/L — SPECIFIC CONDUCTIVITY 88 ms/cm

SAMPLE END TIME: 10:51

COMMENTS: Strong odor of fuel.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/16/02
WEATHER: Sunny and warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.90 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 17.15 ft
(17.15) X .65 X 3 = 33.44
GALLONS OF H2O TO BE PURGED: 33 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: 08:50
pH 6.93 su — TEMP 16.8 °C
DISSOLVED O2 5.21 mg/L — SPECIFIC CONDUCTIVITY 103 ms/cm

PURGE END TIME: 11:13
pH 6.87 su — TEMP 15.9 °C
DISSOLVED O2 4.37 mg/L — SPECIFIC CONDUCTIVITY 97 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 7.32 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 33 gal

SAMPLE START TIME: 11:14
pH 6.86 su — TEMP 15.9 °C
DISSOLVED O2 4.38 mg/L — SPECIFIC CONDUCTIVITY 96 ms/cm

SAMPLE END TIME: 11:19

COMMENTS: MS/MSD here. Slightly cloudy while bailing.

VOLATILE ORGANICS

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	**VC008317.D**	Sample Name	**MB 26May02**
Operator	**Skelton**	Field ID	**MB 26May02**
Date Aquired	**26-May-02**	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	
75-35-3	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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 26May02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 26May02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008317.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. _____ Date Analyzed: 5/26/02

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	**VC008326.D**	Sample Name	**2029201**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**26-May-02**	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	
75-35-3	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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2029201

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008326.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. Date Analyzed: 5/26/02

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	**VC008327.D**	Sample Name	**2029202**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**26-May-02**	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	
75-35-3	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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2029202

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008327.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. Date Analyzed: 5/26/02

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	**VC008328.D**	Sample Name	**2029203**
Operator	**Skelton**	Field ID	**Dupe**
Date Aquired	**26-May-02**	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	
75-35-3	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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2029203

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008328.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. Date Analyzed: 5/26/02

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	**VC008329.D**	Sample Name	**2029204**
Operator	**Skelton**	Field ID	**283MW01**
Date Aquired	**26-May-02**	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	
75-35-3	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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2029204

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008329.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. Date Analyzed: 5/26/02

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	**VC008330.D**	Sample Name	**2029205**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**26-May-02**	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	
75-35-3	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	18.64	14898316	422.54 ug/L	1	0.23 ug/L	E
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	23.66	4115577	105.07 ug/L	1000	0.37 ug/L	E
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	27.41	28695330	821.73 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.69	21442873	1809.32 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.69	21506876	955.62 ug/L	nle	0.62 ug/L	E
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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VA009266.D**	Sample Name	**2029205**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**4 Jun 2002 3:40 pm**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	
156-59-4	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	
71-43-2	Benzene	18.55	1077993	395.51 ug/L	1	4.60 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	
108-88-3	Toluene	23.23	257682	99.10 ug/L	1000	7.40 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	
100-41-4	Ethylbenzene	26.84	1924202	659.80 ug/L	700	13.00 ug/L	D
1330-20-7	m+p-Xylenes	27.11	1666272	1488.40 ug/L	nle	22.80 ug/L	D
1330-20-7	o-Xylene	28.09	1583856	704.44 ug/L	nle	12.40 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 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: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2029205

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008330.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. Date Analyzed: 5/26/02

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: 13

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.29	12	J
2.	unknown	6.99	33	J
3. 000109-66-0	Pentane	7.92	13	JN
4.	unknown	11.50	9	J
5. 000107-83-5	Pentane, 2-methyl-	11.69	9	JN
6.	unknown	11.90	19	J
7. 000096-37-7	Cyclopentane, methyl-	15.65	31	JN
8. 000110-82-7	Cyclohexane	17.66	30	JN
9. 000110-83-8	Cyclohexene	18.84	30	JN
10. 000108-87-2	Cyclohexane, methyl-	20.79	80	JN
11. 000622-96-8	Benzene, 1-ethyl-4-methyl-	30.75	8	JN
12. 000108-67-8	Benzene, 1,3,5-trimethyl-	30.95	6	JN
13. 000108-67-8	Benzene, 1,3,5-trimethyl-	31.84	18	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC008331.D**	Sample Name	**2029206**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**26-May-02**	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	
75-35-3	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	18.65	194918	6.21 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			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: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2029206

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008331.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: not dec. Date Analyzed: 5/26/02

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. 000275-51-4	Azulene	29.37	71	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06801.D**	Sample Name	**MB-052002**
Operator	**BPatel**	Misc Info	**MB-052002**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06801.D**	Sample Name	**MB-052002**
Operator	**BPatel**	Misc Info	**MB-052002**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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-052002**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-052002

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06801.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/20/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/21/02

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	7.47	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06817.D**	Sample Name	**MB-052102**
Operator	**BPatel**	Misc Info	**MB-052102**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06817.D**	Sample Name	**MB-052102**
Operator	**BPatel**	Misc Info	**MB-052102**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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-052102**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-052102

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06817.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/21/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/21/02

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	7.47	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06813.D**	Sample Name	**2029202**
Operator	**BPatel**	Misc Info	**Field Blank**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphtbalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06813.D**	Sample Name	**2029202**
Operator	**BPatel**	Misc Info	**Field Blank**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2029202

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06813.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/20/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/21/02

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	7.48	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06814.D**	Sample Name	**2029203**
Operator	**BPatel**	Misc Info	**Dupe**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA06814.D**	Sample Name	**2029203**
Operator	**BPatel**	Misc Info	**Dupe**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2029203

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06814.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/20/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/21/02

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	7.48	6	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06815.D**	Sample Name	**2029204**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA06815.D**	Sample Name	**2029204**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2029204

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06815.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/20/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/21/02

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	7.48	5	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06816.D**	Sample Name	**2029205**
Operator	**BPatel**	Misc Info	**283MW02**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	ug/L	
105-67-9	2,4-Dimethylphenol	12.92	36275	1.75 ug/L	100	0.93	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene	13.93	5412552	101.90 ug/L	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene	15.58	555369	16.78 ug/L	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

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Data File Name	**BNA06816.D**	Sample Name	**2029205**
Operator	**BPatel**	Misc Info	**283MW02**
Date Acquired	**21-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2029205

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06816.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/20/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	000590-36-3	2-Pentanol, 2-methyl-	5.07	77	JN
2.	000077-74-7	3-Pentanol, 3-methyl-	5.57	240	JN
3.	001462-03-9	Cyclopentanol, 1-methyl-	6.43	130	JN
4.	000625-23-0	2-Hexanol, 2-methyl-	7.26	190	JN
5.		unknown	7.51	380	J
6.		unknown	8.32	43	J
7.	000590-67-0	Cyclohexanol, 1-methyl-	8.68	170	JN
8.		unknown	8.74	91	J
9.		unknown	9.27	120	J
10.		unknown	9.46	76	J
11.		unknown	9.58	54	J
12.		unknown	9.67	75	J
13.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.90	160	JN
14.	000620-14-4	Benzene, 1-ethyl-3-methyl-	9.95	75	JN
15.	000095-36-3	1,2,4-Trimethylbenzene	10.05	150	JN
16.	000611-14-3	Benzene, 1-ethyl-2-methyl-	10.24	94	JN
17.	000108-67-8	Benzene, 1,3,5-trimethyl-	10.54	340	JN
18.	000526-73-8	Benzene, 1,2,3-trimethyl-	11.06	130	JN
19.		unknown	11.33	91	J
20.	000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.64	43	JN
21.	000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	12.12	48	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA06819.D**	Sample Name	**2029206**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**22-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	0.61	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.64	ug/L	
62-53-3	Aniline			not detected	NLE	0.78	ug/L	
108-95-2	Phenol			not detected	4000	0.65	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.80	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.76	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.95	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.17	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.09	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.81	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.84	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.27	ug/L	
78-59-1	Isophorone			not detected	100	0.88	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	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	1.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.04	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.05	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.11	ug/L	
91-20-3	Naphthalene			not detected	NLE	1.06	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.77	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.16	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.92	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.11	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.26	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.99	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.01	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.10	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.95	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.09	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.93	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.98	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.85	ug/L	
83-32-9	Acenaphthene			not detected	400	1.02	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.97	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.06	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA06819.D**	Sample Name	**2029206**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**22-May-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.16	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.10	ug/L	
86-73-7	Fluorene			not detected	300	0.84	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.92	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.92	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.06	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.10	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.06	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.87	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.08	ug/L	
87-86-5	Pentachlorophenol			not detected	1	1.41	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.08	ug/L	
120-12-7	Anthracene			not detected	2000	0.93	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.90	ug/L	
92-87-5	Benzidine			not detected	50	1.81	ug/L	
129-00-0	Pyrene			not detected	200	1.01	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.13	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.87	ug/L	
218-01-9	Chrysene			not detected	20	1.05	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.99	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.20	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.07	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.24	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.04	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.32	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.12	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.00	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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20292 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2029206

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA06819.D

Level: (low/med) LOW Date Received: 5/16/02

% Moisture: decanted: (Y/N) N Date Extracted: 5/21/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/22/02

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	7.47	6	J

PEST/PCB's

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	MB 5/17
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	5/17/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/18/02
Analysis:	EPA Method 608	**Location :**	
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2029202
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/16/02
	Bldg. 173	**Extraction Date:**	5/17/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/18/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2029203
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/16/02
	Bldg. 173	**Extraction Date:**	5/17/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/18/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2029204
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/16/02
	Bldg. 173	**Extraction Date:**	5/17/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/18/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	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	0.0011	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2029205
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/16/02
	Bldg. 173	**Extraction Date:**	5/17/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/18/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	MW02
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2029206
	DPW, SELFM-PW-EV	**Date Rec'd:**	5/16/02
	Bldg. 173	**Extraction Date:**	5/17/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	5/18/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	P. Van Bergen	**Field ID:**	MW03
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

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 #:
Sample Prepared: 05/21/02

Site: M-12
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	05/24/02	31.4	200	10.0
Antimony	05/24/02	ND	20	2.0
Arsenic	05/24/02	23.6	8	2.0
Barium	05/24/02	1.35	2000	0.5
Beryllium	05/24/02	ND	20	0.5
Cadmium	05/24/02	ND	4	0.5
Calcium	05/24/02	328	NLE	20.0
Chromium	05/24/02	ND	100	0.5
Cobalt	05/24/02	ND	NLE	0.5
Copper	05/24/02	4.03	1000	2.0
Iron	05/24/02	46.1	300	10.0
Lead	05/24/02	ND	10	1.0
Magnesium	05/24/02	ND	NLE	10.0
Manganese	05/24/02	2.91	50	0.5
Mercury	05/20/02	ND	2	0.1
Nickel	05/24/02	ND	100	1.0
Potassium	05/24/02	52.2	NLE	40.0
Selenium	05/24/02	12.9	50	3.0
Silver	05/24/02	ND	20	1.0
Sodium	05/24/02	1020	50000	20.0
Thallium	05/24/02	ND	10	2.0
Vanadium	05/24/02	ND	NLE	0.5
Zinc	05/24/02	13.1	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 #: 2029202
Sample Received: 05/16/02
Sample Matrix: Aqueous

Site: 283

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	05/24/02	78.6	200	10.0
Antimony	05/24/02	ND	20	2.0
Arsenic	05/24/02	23.6	8	2.0
Barium	05/24/02	1.75	2000	0.5
Beryllium	05/24/02	ND	20	0.5
Cadmium	05/24/02	ND	4	0.5
Calcium	05/24/02	288	NLE	20.0
Chromium	05/24/02	ND	100	0.5
Cobalt	05/24/02	ND	NLE	0.5
Copper	05/24/02	5.60	1000	2.0
Iron	05/24/02	142	300	2.0
Lead	05/24/02	ND	10	2.0
Magnesium	05/24/02	24.8	NLE	10.0
Manganese	05/24/02	2.86	50	0.5
Mercury	05/20/02	0.20	2	0.1
Nickel	05/24/02	ND	100	1.0
Potassium	05/24/02	47.6	NLE	40.0
Selenium	05/24/02	8.49	50	3.0
Silver	05/24/02	ND	20	1.0
Sodium	05/24/02	935	50000	20.0
Thallium	05/24/02	ND	10	2.0
Vanadium	05/24/02	ND	NLE	0.5
Zinc	05/24/02	18.5	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 #: 2029203
Sample Received: 05/16/02
Sample Matrix: Aqueous

Site: 283

Field ID#: Dupe

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	05/24/02	3540	200	10.0
Antimony	05/24/02	ND	20	2.0
Arsenic	05/24/02	25.9	8	2.0
Barium	05/24/02	99.3	2000	0.5
Beryllium	05/24/02	0.799	20	0.5
Cadmium	05/24/02	ND	4	0.5
Calcium	05/24/02	8970	NLE	20.0
Chromium	05/24/02	4.05	100	0.5
Cobalt	05/24/02	4.32	NLE	0.5
Copper	05/24/02	6.06	1000	2.0
Iron	05/24/02	723	300	2.0
Lead	05/24/02	ND	10	2.0
Magnesium	05/24/02	18300	NLE	10.0
Manganese	05/24/02	35.7	50	0.5
Mercury	05/20/02	0.12	2	0.1
Nickel	05/24/02	11.3	100	1.0
Potassium	05/24/02	5790	NLE	40.0
Selenium	05/24/02	12.7	50	3.0
Silver	05/24/02	ND	20	1.0
Sodium	05/24/02	53800	50000	20.0
Thallium	05/24/02	ND	10	2.0
Vanadium	05/24/02	1.40	NLE	0.5
Zinc	05/24/02	76.7	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 #: 2029204
Sample Received: 05/16/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	05/24/02	3330	200	10.0
Antimony	05/24/02	ND	20	2.0
Arsenic	05/24/02	27.7	8	2.0
Barium	05/24/02	94.4	2000	0.5
Beryllium	05/24/02	0.782	20	0.5
Cadmium	05/24/02	ND	4	0.5
Calcium	05/24/02	8570	NLE	20.0
Chromium	05/24/02	3.03	100	0.5
Cobalt	05/24/02	4.19	NLE	0.5
Copper	05/24/02	4.35	1000	2.0
Iron	05/24/02	577	300	2.0
Lead	05/24/02	ND	10	2.0
Magnesium	05/24/02	17600	NLE	10.0
Manganese	05/24/02	33.9	50	0.5
Mercury	05/20/02	0.11	2	0.1
Nickel	05/24/02	10.9	100	1.0
Potassium	05/24/02	5580	NLE	40.0
Selenium	05/24/02	13.7	50	3.0
Silver	05/24/02	ND	20	1.0
Sodium	05/24/02	51500	50000	20.0
Thallium	05/24/02	ND	10	2.0
Vanadium	05/24/02	0.943	NLE	0.5
Zinc	05/24/02	72.2	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 #: 2029205
Sample Received: 05/16/02
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	05/24/02	996	200	10.0
Antimony	05/24/02	ND	20	2.0
Arsenic	05/24/02	24.2	8	2.0
Barium	05/24/02	34.0	2000	0.5
Beryllium	05/24/02	ND	20	0.5
Cadmium	05/24/02	ND	4	0.5
Calcium	05/24/02	2590	NLE	20.0
Chromium	05/24/02	11.4	100	0.5
Cobalt	05/24/02	0.623	NLE	0.5
Copper	05/24/02	8.35	1000	2.0
Iron	05/24/02	4040	300	2.0
Lead	05/24/02	7.47	10	2.0
Magnesium	05/24/02	1480	NLE	10.0
Manganese	05/24/02	11.2	50	0.5
Mercury	05/20/02	0.11	2	0.1
Nickel	05/24/02	3.70	100	1.0
Potassium	05/24/02	1960	NLE	40.0
Selenium	05/24/02	15.7	50	3.0
Silver	05/24/02	2.87	20	1.0
Sodium	05/24/02	16500	50000	20.0
Thallium	05/24/02	ND	10	2.0
Vanadium	05/24/02	4.21	NLE	0.5
Zinc	05/24/02	57.1	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 #: 2029206
Sample Received: 05/16/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	05/24/02	246	200	10.0
Antimony	05/24/02	ND	20	2.0
Arsenic	05/24/02	29.9	8	2.0
Barium	05/24/02	150	2000	0.5
Beryllium	05/24/02	ND	20	0.5
Cadmium	05/24/02	0.597	4	0.5
Calcium	05/24/02	10800	NLE	20.0
Chromium	05/24/02	2.29	100	0.5
Cobalt	05/24/02	1.02	NLE	0.5
Copper	05/24/02	14.1	1000	2.0
Iron	05/24/02	13000	300	2.0
Lead	05/24/02	ND	10	2.0
Magnesium	05/24/02	1950	NLE	10.0
Manganese	05/24/02	33.3	50	0.5
Mercury	05/20/02	ND	2	0.1
Nickel	05/24/02	10.2	100	1.0
Potassium	05/24/02	7000	NLE	40.0
Selenium	05/24/02	7.31	50	3.0
Silver	05/24/02	ND	20	1.0
Sodium	05/24/02	8200	50000	20.0
Thallium	05/24/02	ND	10	2.0
Vanadium	05/24/02	ND	NLE	0.5
Zinc	05/24/02	36.1	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

LTM

	Lab	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	200	8	300	10	50	100	50	NLE		-
06/28/2000	FMETL	2070	ND	1450	ND	22.2	10.4	ND	6.31		V,S,P,M
08/10/2000	FMETL	1930	ND	739	2.38	23.8	5.91	ND	5.54		V,S,P,M
10/17/2000	FMETL	2120	ND	306	1.85	21.8	5.56	ND	6.07		V,S,P,M
01/05/2001	FMETL	2460	ND	868	ND	26.0	4.89	ND	6.11		V,S,P,M
04/04/2001	FMETL	2350	ND	410	3.00	34.7	12.0	ND	4.62		V,S,P,M
07/24/2001	FMETL	3150	ND	575	3.03	55.2	20.4	7.93	6.25		V,S,P,M
07/24/2001D	FMETL	3160	ND	576	1.18	34.3	10.4	12.5	6.25		V,S,P,M
12/11/2001	FMETL	3600	ND	4490	7.83	29.3	12.5	ND	7.15		V,S,P,M
03/08/2002	FMETL	3520	ND	897	1.36	36.1	11.9	10.4	6.43		V,S,P,M
05/16/2002	FMETL	3330	27.7	577	ND	33.9	10.9	13.7	6.14		V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 05/16/2002

NOTES:

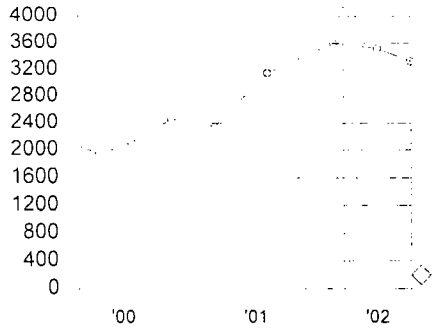
FORT MONMOUTH

GW MONITORING
BLDG. 283

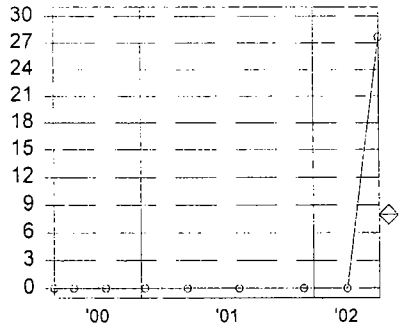
Source 2 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

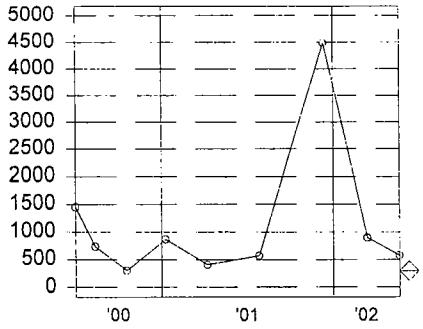
Aluminum
(ug/L)



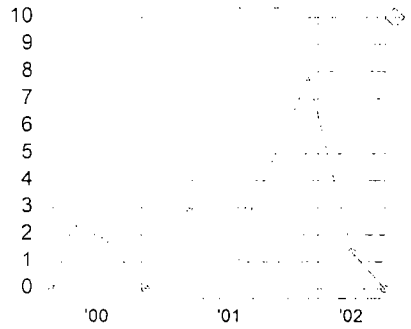
Arsenic
(ug/L)



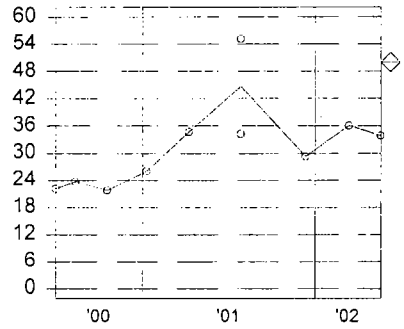
Iron
(ug/L)



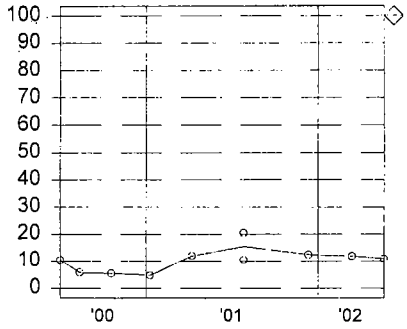
Lead
(ug/L)



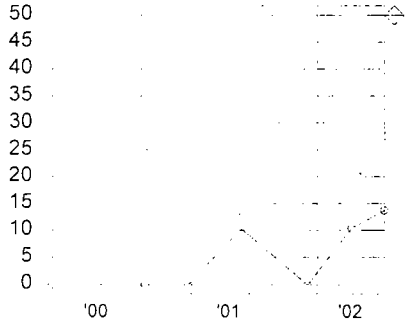
Manganese
(ug/l)



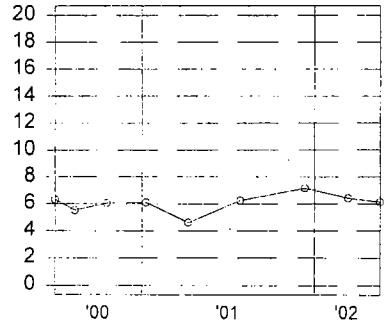
Nickel
(ug/l)



Selenium
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 05/16/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-06-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	2,4-Di methyl phenol	Naphtha lene	2-Methyl naphtha lene	Aluminum	Arsenic	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	1	1000	700	40	100	NLE	NLE	200	8	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	3.88	119.2	25.25	309	4.74	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	ND	183.38	26.28	123	ND	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	3.90	82.44	7.43	241	ND	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	ND	174.92	25.10	81.4	ND	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	1.48	101.97	25.13	812	3.40	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	ND	152.89	24.87	917	2.38	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	ND	126.93	20.73	973	4.89	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	ND	223.45	28.12	360	3.72	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	ND	65.12	6.10	2200	3.00	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	ND	ND	ND	1780	6.78	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	ND	89.93	13.36	1470	3.09	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	ND	80.67	13.24	249	ND	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	1.75	101.90	16.78	996	24.2	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/16/2002

NOTES:

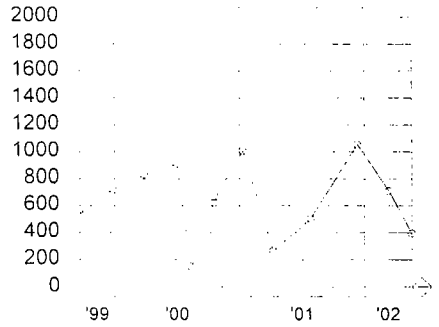
FORT MONMOUTH

GW MONITORING
BLDG. 283

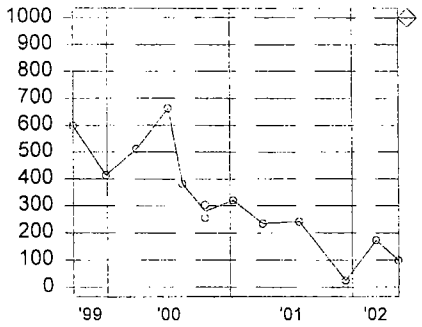
Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

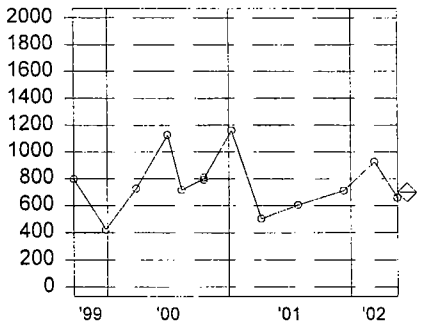
Benzene
(ug/L)



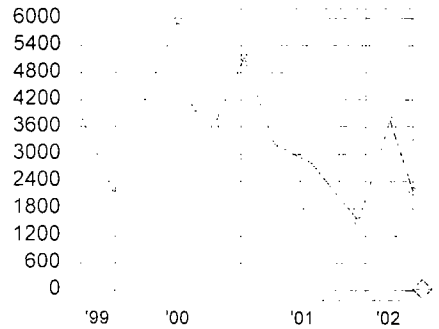
Toluene
(ug/L)



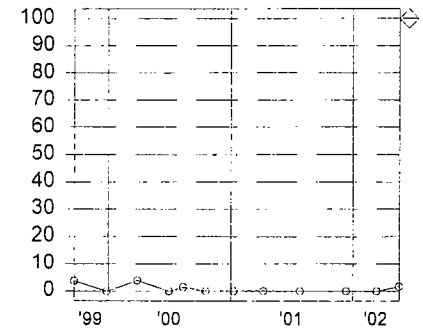
Ethylbenzene
(ug/L)



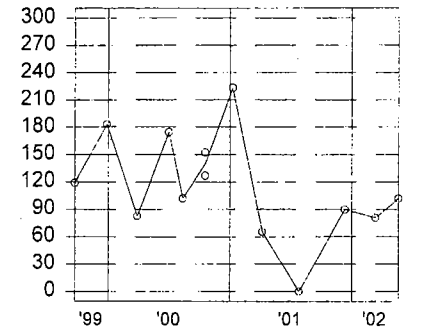
Xylenes
(ug/L)



2,4-Dimethylphenol
(ug/L)



Naphthalene
(ug/L)



2-Methylnaphthalene
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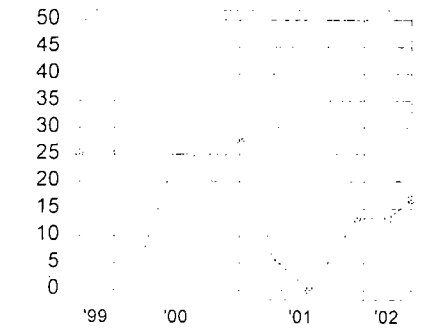
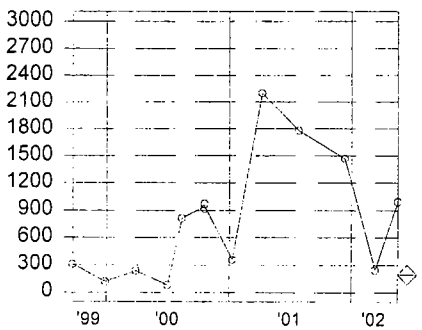


Aluminum
(ug/L)



Arsenic
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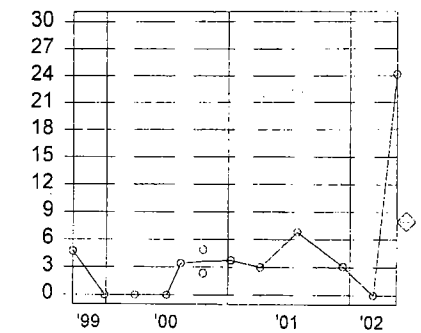


SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/16/2002

LEGEND:

PARAMETER

c = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-06-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/l	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	300	10	50	100	50	NLE				-
09/20/1999	FMETL	2330	22.0	14.5	4.11	6.49	7.20				V,S,P,M
12/27/1999	FMETL	2060	6.92	44.0	3.62	4.73	6.81				V,S,P,M
03/23/2000	FMETL	2010	15.3	11.9	6.43	7.29	6.38				V,S,P,M
06/28/2000	FMETL	2130	11.5	8.31	6.01	4.36	7.83				V,S,P,M
08/10/2000	FMETL	2060	31.9	5.97	ND	8.40	6.28				V,S,P,M
10/17/2000	FMETL	3340	14.5	4.68	ND	6.69	7.09				V,S,P,M
10/17/2000D	FMETL	3210	15.9	5.06	ND	6.23	7.09				V,S,P,M
01/05/2001	FMETL	3220	25.3	6.47	2.85	6.22	7.32				V,S,P,M
04/04/2001	FMETL	4360	23.0	8.10	5.00	5.00	4.81				V,S,P,M
07/24/2001	FMETL	4050	12.3	36.0	12.2	30.0	6.75				V,S,P,M
12/11/2001	FMETL	7120	11.8	15.0	8.52	ND	8.54				V,S,P,M
03/08/2002	FMETL	3220	9.02	14.3	4.99	13.4	7.47				V,S,P,M
05/16/2002	FMETL	4040	7.47	11.2	3.70	15.7	6.90				V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/16/2002

NOTES:

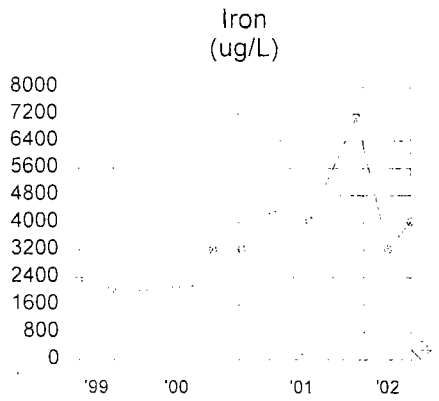
Page 2 of 2.

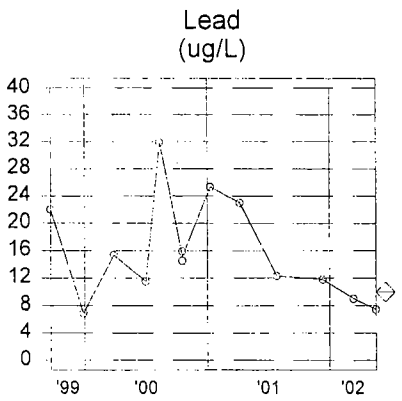
FORT MONMOUTH

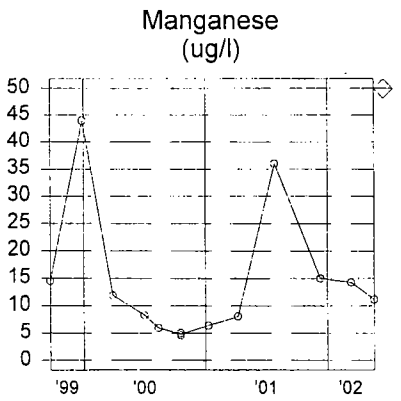
GW MONITORING
BLDG. 283

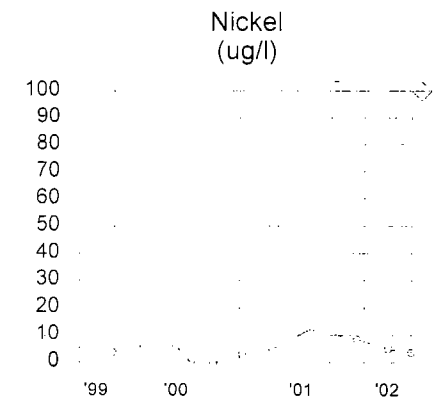
Source 1 of 3

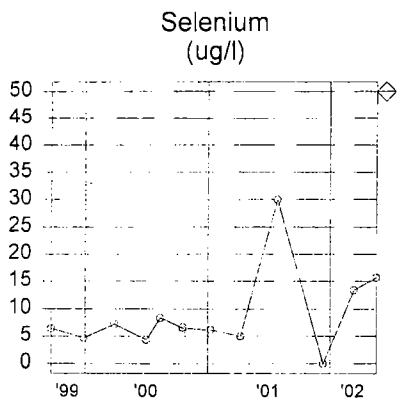
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

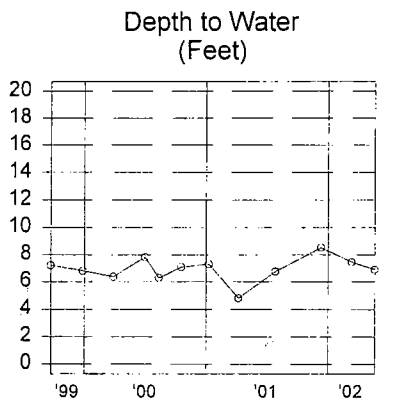












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/16/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-06-2002 x:\mtech46\fm\283\gw\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	1	200	8	300	10	50	100	NLE		-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	7.12		V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	6.41		V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	6.88		V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	6.94		V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	6.94		V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	5.75		V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	5.75		V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	7.00		V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	7.67		V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	5.30	7.10		V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	10.2	6.90		V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 05/16/2002

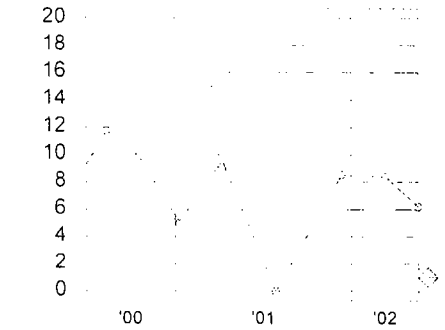
NOTES:

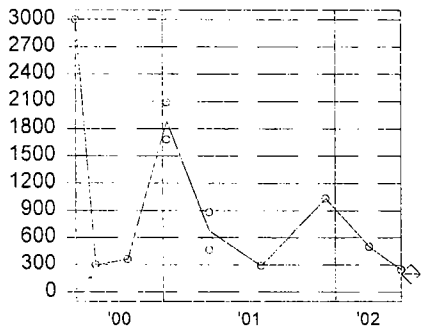
FORT MONMOUTH

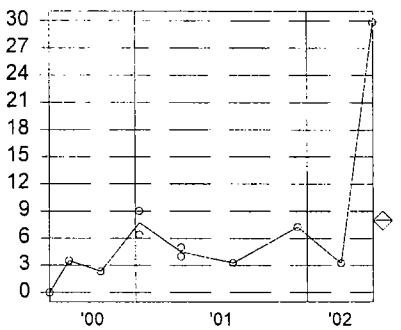
GW MONITORING
BLDG. 283

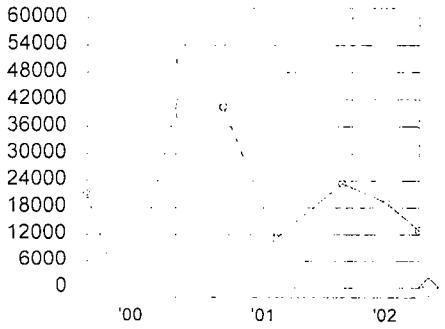
Source 3 of 3

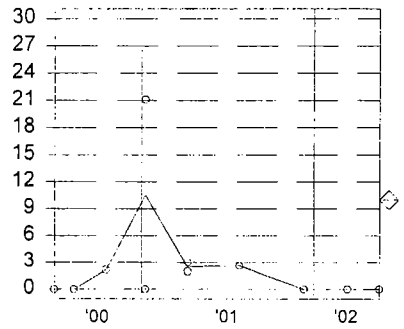
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

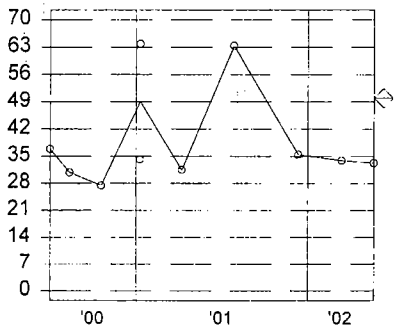


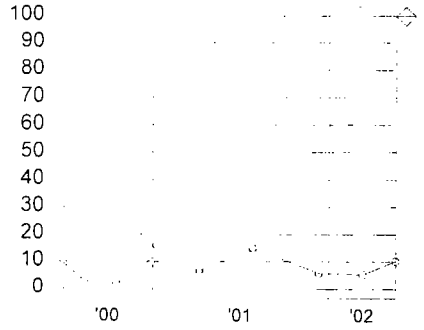


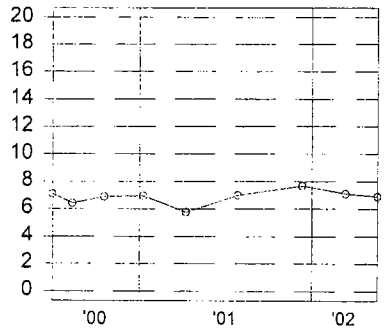












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 05/16/2002

LEGEND:

PARAMETER

o = Date Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-06-2002 x:\mtech46\fm\283\gw\283.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #13

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
2064701	0283MW01	29-40367	09/10/02
2064702	0283MW02	29-40887	09/10/02
2064703	0283MW03	29-41650	09/10/02

NJDEP Laboratory Certification # 13461

10-23-02
Daniel Wright/Date:
Laboratory Director

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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: 126223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells
3rd Qrtr '02

Samplers Name / Company: Corey McCormach, TOS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA 15	TAL Mtls	Pest / PCB	BNA +25				Hnu Read	Comments: Remarks / Preservation Method
														HCl/HNO3/4°C
20647 01	283 mw01	9/10/02	0959	AQ	5								0.0	29 - 40367
02	283 mw02	"	0953	"	1								0.0	29 - 40887
03	283 mw03	"	1033	"	1								0.0	29 - 41650

Analysis Parameters

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormach	9/10/02 1600	J. Villafuerte			
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 T/FB/D from 296 Sure dup. con
Tide: N/A

print legibly

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 #: 532 6223
( )DERA ( )OMA ( )Other:_____
Project No:
Location: 296 Wells
3rd Qtr '02
Samplers Name / Company: Corey McCormach, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL MHS	Pest / PCB	BNA+25				Hex Cr	Comments: HCL/HNO3/4°C Remarks / Preservation Method
20644 01	Trip	9/10/02	0727	AQ	2	✓							—	
02	Field Blanks		0750		5	✓	✓	✓	✓				—	
03	Dupe		—		5	✓	✓	✓	✓				—	
04	296 mw01		1159		5	✓	✓	✓	✓				0.0	29-30979
05	296 mw02		1207			✓	✓	✓	✓				0.0	29-30980
06	296 mw03		1437			✓	✓	✓	✓				0.0	29-30075
07	296 mw04		1452			✓	✓	✓	✓				0.0	29-33989
08	296 mw06		1433			✓	✓	✓	✓				0.0	29-30978
09	296 mw07		1222			✓	✓	✓	✓				0.0	29-30973
10	296 mw08		1214			✓	✓	✓	✓				0.0	29-30974

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormach	9/10/02 1600				
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: H
Shows T/FB/D w/ M18, 283, 290 on Same day, Corr

print legibly

Coc8/7/02

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40367
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 09/10/02
WEATHER: Sunny and warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 5.91 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.84 ft
(13.84) X .65 X 3 =26.98
GALLONS OF H2O TO BE PURGED: 27 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: 08:00
pH 6.63 su TEMP 15.7 °C
DISSOLVED O_2 4.81 mg/L SPECIFIC CONDUCTIVITY 221.3 ms/cm

PURGE END TIME: 09:57
pH 6.57 su TEMP 15.0 °C
DISSOLVED O_2 3.81 mg/L SPECIFIC CONDUCTIVITY 210.9 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.55 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 09:59
pH 6.54 su TEMP 15.1 °C
DISSOLVED O_2 3.76 mg/L SPECIFIC CONDUCTIVITY 208.7 ms/cm

SAMPLE END TIME: 10:06

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 09/10/02
WEATHER: Sunny and warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 5.93 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.76 ft
(13.76) X .65 X 3 =26.83
GALLONS OF H2O TO BE PURGED: 27 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: 07:55
pH 6.69 su TEMP 17.9 °C
DISSOLVED O_2 5.31 mg/L SPECIFIC CONDUCTIVITY 97.49 ms/cm

PURGE END TIME: 09:52
pH 6.57 su TEMP 16.4 °C
DISSOLVED O_2 3.99 mg/L SPECIFIC CONDUCTIVITY 95.32 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 10.46 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 09:53
pH 6.56 su TEMP 16.5 °C
DISSOLVED O_2 4.03 mg/L SPECIFIC CONDUCTIVITY 95.27 ms/cm

SAMPLE END TIME: 09:58

COMMENTS: Strong odor, no Hnu reading.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 09/10/02
WEATHER: Sunny and warm.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.51 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 17.54 ft
(17.54) X .65 X 3 = 34.20
GALLONS OF H2O TO BE PURGED: 34 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: 08:05
pH 7.03 su TEMP 17.5 °C
DISSOLVED O_2 4.77 mg/L SPECIFIC CONDUCTIVITY 99.72 ms/cm

PURGE END TIME: 10:32
pH 6.92 su TEMP 16.1 °C
DISSOLVED O_2 3.81 mg/L SPECIFIC CONDUCTIVITY 96.30 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.55 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 34 gal

SAMPLE START TIME: 10:33
pH 6.90 su TEMP 16.1 °C
DISSOLVED O_2 3.59 mg/L SPECIFIC CONDUCTIVITY 96.27 ms/cm

SAMPLE END TIME: 10:38

COMMENTS:

VOLATILE ORGANICS

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	**VC008512.D**	Sample Name	**MB 19Sept02**
Operator	**Skelton**	Field ID	**MB 19Sept02**
Date Aquired	**19-Sep-02**	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	
75-35-3	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	
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	
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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 19Sept02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20647 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 19Sept02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008512.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. Date Analyzed: 9/19/02

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	**VC008552.D**	Sample Name	**MB 24Sept02**
Operator	**Skelton**	Field ID	**MB 24Sept02**
Date Aquired	**24-Sep-02**	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	
75-35-3	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	
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	
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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 24Sept02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20647 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 24Sept02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008552.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. Date Analyzed: 9/24/02

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	**VB011875.D**	Sample Name	**MB 20Sept02**
Operator	**Skelton**	Field ID	**MB 20Sept02**
Date Acquired	**20 Sep 2002 11:16 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	
156-59-2	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	
124-48-1	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	
1330-20-7	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. **MB 20Sept02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20647 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 20Sept02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011875.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. _____ Date Analyzed: 9/20/02

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	**VB011888.D**	Sample Name	**2064401**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**20 Sep 2002 8:06 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	
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	
124-48-1	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	
1330-20-7	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.: 20644 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2064401

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011888.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. Date Analyzed: 9/20/02

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	**VB011889.D**	Sample Name	**2064402**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**20 Sep 2002 8:47 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	
124-48-1	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	
1330-20-7	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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20644 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2064402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011889.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. Date Analyzed: 9/20/02

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	**VB011900.D**	Sample Name	**2064701s**
Operator	**Skelton**	Field ID	**283MW01**
Date Acquired	**21 Sep 2002 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			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	
124-48-1	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	
1330-20-7	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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20647 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2064701s

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB011900.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. Date Analyzed: 9/21/02

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	**VC008542.D**	Sample Name	**2064702**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**20-Sep-02**	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	
75-35-3	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	
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	
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	18.57	23763320	239.12 ug/L	1	0.23 ug/L	E
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	23.58	13664796	128.06 ug/L	1000	0.37 ug/L	E
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	27.31	39821421	285.44 ug/L	700	0.65 ug/L	E
1330-20-7	m+p-Xylenes	27.60	40694967	756.98 ug/L	nle	1.14 ug/L	E
1330-20-7	o-Xylene	28.59	40749063	394.13 ug/L	nle	0.62 ug/L	E
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

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC008553.D**	Sample Name	**2064702**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**24-Sep-02**	Multiplier	**50**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	92.50 ug/L	
107131	Acrylonitrile			not detected	50	139.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	426.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	8.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	12.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	84.00 ug/L	
74-87-3	Chloromethane			not detected	30	58.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	53.00 ug/L	
74-83-9	Bromomethane			not detected	10	55.00 ug/L	
75-00-3	Chloroethane			not detected	nle	50.50 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	25.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	12.00 ug/L	
67-64-1	Acetone			not detected	700	68.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	23.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	12.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	8.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	6.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	39.00 ug/L	
78-93-3	2-Butanone			not detected	300	31.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	8.50 ug/L	
67-66-3	Chloroform			not detected	6	15.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	11.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	23.50 ug/L	
71-43-2	Benzene	18.56	228729	223.80 ug/L	1	11.50 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	9.00 ug/L	
79-01-6	Trichloroethene			not detected	1	11.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	20.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	27.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	32.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	34.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	29.50 ug/L	
108-88-3	Toluene	23.57	99596	94.08 ug/L	1000	18.50 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	43.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	24.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	16.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	35.50 ug/L	
126-48-1	Dibromochloromethane			not detected	10	43.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	19.50 ug/L	
100-41-4	Ethylbenzene	27.32	525512	476.21 ug/L	700	32.50 ug/L	D
1330-20-7	m+p-Xylenes	27.60	512751	1196.27 ug/L	nle	57.00 ug/L	D
1330-20-7	o-Xylene	28.60	565474	714.51 ug/L	nle	31.00 ug/L	D
100-42-5	Styrene			not detected	100	28.00 ug/L	
75-25-2	Bromoform			not detected	4	35.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	23.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	27.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	28.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	32.00 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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20647 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2064702

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008542.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. _____ Date Analyzed: 9/20/02

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.	unknown	6.92	19	J
2.	unknown	7.85	11	J
3.	unknown	11.79	11	J
4.	unknown	15.58	28	J
5. 000110-82-7	Cyclohexane	17.57	30	JN
6.	unknown	18.76	30	J
7. 000108-87-2	Cyclohexane, methyl-	20.71	93	JN
8. 000620-14-4	Benzene, 1-ethyl-3-methyl-	30.68	20	JN
9. 000611-14-3	Benzene, 1-ethyl-2-methyl-	30.74	8	JN
10. 000095-63-6	Benzene, 1,2,4-trimethyl-	30.88	13	JN
11. 000611-14-3	Benzene, 1-ethyl-2-methyl-	31.39	11	JN
12. 000526-73-8	Benzene, 1,2,3-trimethyl-	31.78	33	JN
13. 000526-73-8	Benzene, 1,2,3-trimethyl-	32.78	15	JN
14.	unknown	33.27	10	J
15.	unknown	34.53	6	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC008554.D**	Sample Name	**2064703**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**24-Sep-02**	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	
75-35-3	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	
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	
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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 20647 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2064703

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC008554.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: not dec. _____ Date Analyzed: 9/24/02

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	**BN05858.D**	Sample Name	**MB-091202**
Operator	**B.Patel**	Misc Info	**MB-091202 Aq**
Date Acquired	**12-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05858.D**	Sample Name	**MB-091202**
Operator	**B.Patel**	Misc Info	**MB-091202 Aq**
Date Acquired	**12-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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-091202**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20647 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-091202

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05858.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/12/02

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	6.86	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05859.D**	Sample Name	**2064402**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**12-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05859.D**	Sample Name	**2064402**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**12-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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.: 20644 Location: 296 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 2064402

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05859.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/12/02

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	6.86	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05872.D**	Sample Name	**2064701**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**13-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05872.D**	Sample Name	**2064701**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**13-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	27.61	45492	1.26 ug/L	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20647 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 2064701

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05872.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/13/02

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	6.83	17	J
2.	unknown	24.61	26	J
3.	unknown	26.33	16	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05873.D**	Sample Name	**2064702**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**13-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene	13.31	6429262	138.00 ug/L	NLE	0.68	ug/L	E
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene	14.95	802775	30.03 ug/L	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05873.D**	Sample Name	**2064702**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**13-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	27.61	37377	1.09 ug/L	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05875.D**	Sample Name	**2064702 (1:2)**
Operator	**B.Patel**	Misc Info	**283MW02 (1:2) Dil**
Date Acquired	**13-Sep-02**	Sample Multiplier	**2**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	2.54	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	1.56	ug/L	
62-53-3	Aniline			not detected	NLE	2.22	ug/L	
108-95-2	Phenol			not detected	4000	0.90	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.20	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.94	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.80	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.60	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	1.86	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.98	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.56	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	1.92	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.56	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.02	ug/L	
67-72-1	Hexachloroethane			not detected	10	1.76	ug/L	
98-95-3	Nitrobenzene			not detected	10	2.30	ug/L	
78-59-1	Isophorone			not detected	100	1.84	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	2.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.64	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	1.66	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.48	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	1.54	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	1.32	ug/L	
91-20-3	Naphthalene	13.30	4002764	135.69 ug/L	NLE	1.36	ug/L	D
106-47-8	4-Chloroaniline			not detected	NLE	2.48	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	1.68	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	ug/L	
91-57-6	2-Methylnaphthalene	14.95	462882	27.34 ug/L	NLE	1.24	ug/L	D
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.06	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.68	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.98	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	1.62	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.72	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	1.58	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	1.68	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.90	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.32	ug/L	
83-32-9	Acenaphthene			not detected	400	1.72	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.74	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	1.70	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	1.16	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05875.D**	Sample Name	**2064702 (1:2)**
Operator	**B.Patel**	Misc Info	**283MW02 (1:2) Dil**
Date Acquired	**13-Sep-02**	Sample Multiplier	**2**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	1.72	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.42	ug/L	
86-73-7	Fluorene			not detected	300	1.72	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.34	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.38	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.52	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.66	ug/L	
103-33-3	Azobenzene			not detected	NLE	1.50	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.32	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	1.22	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.72	ug/L	
85-01-8	Phenanthrene			not detected	NLE	1.68	ug/L	
120-12-7	Anthracene			not detected	2000	1.44	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	1.22	ug/L	
206-44-0	Fluoranthene			not detected	300	1.20	ug/L	
92-87-5	Benzidine			not detected	50	5.42	ug/L	
129-00-0	Pyrene			not detected	200	1.78	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	1.34	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	1.38	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.58	ug/L	
218-01-9	Chrysene			not detected	20	1.82	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	2.12	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.18	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	1.76	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.92	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	1.44	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	5.12	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.82	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.32	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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20647 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 2064702

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05873.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: decanted: (Y/N) N Date Extracted: 9/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/13/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000590-36-3	2-Pentanol, 2-methyl-	4.35	210	JN
2.	unknown	4.82	110	J
3.	unknown	6.63	110	J
4.	unknown	6.90	510	J
5. 000590-67-0	Cyclohexanol, 1-methyl-	8.08	150	JN
6.	unknown	8.15	85	J
7.	unknown	8.70	120	J
8.	unknown	8.89	70	J
9.	unknown	9.00	48	J
10.	unknown	9.09	71	J
11.	unknown	9.15	71	J
12. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.32	200	JN
13. 000622-96-8	Benzene, 1-ethyl-4-methyl-	9.36	97	JN
14. 000095-36-3	1,2,4-Trimethylbenzene	9.47	160	JN
15. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.65	120	JN
16.	unknown	9.85	47	J
17. 000108-67-8	Benzene, 1,3,5-trimethyl-	9.96	340	JN
18. 000620-14-4	Benzene, 1-ethyl-3-methyl-	10.47	160	JN
19. 000496-11-7	Indane	10.73	140	JN
20. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.05	50	JN
21. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.54	61	JN
22. 027133-93-3	2,3-Dihydro-1-methylindene	12.66	49	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN05874.D**	Sample Name	**2064703**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**13-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN05874.D**	Sample Name	**2064703**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**13-Sep-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	27.61	51173	1.33 ug/L	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20647 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 2064703

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN05874.D

Level: (low/med) LOW Date Received: 9/10/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 9/11/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/13/02

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	6.86	17	J
2. 000000-00-0	Butyl hexadecanoate	24.60	24	JN
3. 000123-95-5	Octadecanoic acid, butyl ester	26.32	14	JN

PEST/PCB's

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	MB 9/12
	DPW, SELFM-PW-EV	**Date Rec'd:**	
	Bldg. 173	**Extraction Date:**	9/12/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	SKELTON	**Field ID:**	METHOD 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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2064402
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/10/02
	Bldg. 173	**Extraction Date:**	9/12/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/02
Analysis:	EPA Method 608	**Location :**	296 WELLS
Matrix:	Aqueous		
Analyst:	SKELTON	**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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2064701
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/10/02
	Bldg. 173	**Extraction Date:**	9/12/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	SKELTON	**Field ID:**	283MW01
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2064702
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/10/02
	Bldg. 173	**Extraction Date:**	9/12/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	SKELTON	**Field ID:**	283MW02
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	**Lab. ID # :**	2064703
	DPW, SELFM-PW-EV	**Date Rec'd:**	9/10/02
	Bldg. 173	**Extraction Date:**	9/12/02
	Ft. Monmouth, NJ 07703	**Analysis Date:**	9/26/02
Analysis:	EPA Method 608	**Location :**	283 WELLS
Matrix:	Aqueous		
Analyst:	SKELTON	**Field ID:**	283MW03
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

Column-Primary: Rtx-CLPesticides 30m/.32mm ID/.25um
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.25um
PQL = Practical Quantitation Limit

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 0770

Lab ID #:
Sample Prepared: 09/25/02

Site: 296
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	09/19/02	23.7	200	10.0
Antimony	09/19/02	ND	20	2.0
Arsenic	09/19/02	ND	8	2.0
Barium	09/19/02	ND	2000	0.5
Beryllium	09/19/02	ND	20	0.5
Cadmium	09/19/02	ND	4	0.5
Calcium	09/19/02	ND	NLE	20.0
Chromium	09/19/02	ND	100	0.5
Cobalt	09/19/02	ND	NLE	0.5
Copper	09/19/02	2.51	1000	2.0
Iron	09/19/02	23.4	300	10.0
Lead	09/19/02	ND	10	1.0
Magnesium	09/19/02	ND	NLE	10.0
Manganese	09/19/02	ND	50	0.5
Mercury	09/26/02	ND	2	0.1
Nickel	09/19/02	ND	100	1.0
Potassium	09/19/02	183	NLE	40.0
Selenium	09/19/02	4.02	50	3.0
Silver	09/19/02	ND	20	1.0
Sodium	09/19/02	816	50000	20.0
Thallium	09/19/02	ND	10	2.0
Vanadium	09/19/02	ND	NLE	0.5
Zinc	09/19/02	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 #:
Sample Prepared: 10/01/02
Sample Matrix: AQ

Site:

Field ID: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ppm)

Element	Date of Analysis	Result (mg/L)	MDL (mg/L)
Aluminum	10/03/02	0.149	0.01
Antimony	10/03/02	ND	0.002
Arsenic	10/03/02	0.0116	0.002
Barium	10/03/02	0.0036	0.0005
Beryllium	10/03/02	ND	0.0005
Cadmium	10/03/02	ND	0.0005
Calcium	10/03/02	0.197	0.02
Chromium	10/03/02	0.0013	0.0005
Cobalt	10/03/02	ND	0.0005
Copper	10/03/02	0.0032	0.002
Iron	10/03/02	ND	0.002
Lead	10/03/02	ND	0.001
Magnesium	10/03/02	ND	0.01
Manganese	10/03/02	0.00083	0.0005
Mercury	10/03/02	ND	0.0001
Nickel	10/03/02	ND	0.001
Potassium	10/03/02	0.556	0.04
Selenium	10/03/02	0.0089	0.003
Silver	10/03/02	ND	0.001
Sodium	10/03/02	1.60	0.02
Thallium	10/03/02	ND	0.002
Vanadium	10/03/02	ND	0.0005
Zinc	10/03/02	0.0119	0.005

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 #: 2064402
Sample Received: 09/10/02
Sample Matrix: Aqueous

Site: 296
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	09/19/02	51.9	200	10.0
Antimony	09/19/02	ND	20	2.0
Arsenic	09/19/02	2.49	8	2.0
Barium	09/19/02	3.69	2000	0.5
Beryllium	09/19/02	ND	20	0.5
Cadmium	09/19/02	ND	4	0.5
Calcium	09/19/02	209	NLE	20.0
Chromium	09/19/02	0.849	100	0.5
Cobalt	09/19/02	ND	NLE	0.5
Copper	09/19/02	5.75	1000	2.0
Iron	09/19/02	54.0	300	10.0
Lead	09/19/02	ND	10	1.0
Magnesium	09/19/02	38.6	NLE	10.0
Manganese	09/19/02	1.87	50	0.5
Mercury	09/26/02	ND	2	0.1
Nickel	09/19/02	ND	100	1.0
Potassium	09/19/02	168	NLE	40.0
Selenium	09/19/02	ND	50	3.0
Silver	09/19/02	ND	20	1.0
Sodium	09/19/02	697	50000	20.0
Thallium	09/19/02	ND	10	2.0
Vanadium	09/19/02	ND	NLE	0.5
Zinc	09/19/02	11.5	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 #: 2064701
Sample Received: 09/10/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/03/02	3350	200	10.0
Antimony	10/03/02	ND	20	2.0
Arsenic	10/03/02	3.16	8	2.0
Barium	10/03/02	110	2000	0.5
Beryllium	10/03/02	1.11	20	0.5
Cadmium	10/03/02	ND	4	0.5
Calcium	10/03/02	8600	NLE	20.0
Chromium	10/03/02	3.31	100	0.5
Cobalt	10/03/02	4.93	NLE	0.5
Copper	10/03/02	8.24	1000	2.0
Iron	10/03/02	692	300	2.0
Lead	10/03/02	ND	10	2.0
Magnesium	10/03/02	17700	NLE	10.0
Manganese	10/03/02	33.1	50	0.5
Mercury	10/02/02	ND	2	0.1
Nickel	10/03/02	11.9	100	1.0
Potassium	10/03/02	11000	NLE	40.0
Selenium	10/03/02	8.98	50	3.0
Silver	10/03/02	ND	20	1.0
Sodium	10/03/02	54400	50000	20.0
Thallium	10/03/02	ND	10	2.0
Vanadium	10/03/02	0.967	NLE	0.5
Zinc	10/03/02	86.8	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 #: 2064702
Sample Received: 09/10/02
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/03/02	267	200	10.0
Antimony	10/03/02	ND	20	2.0
Arsenic	10/03/02	7.95	8	2.0
Barium	10/03/02	24.4	2000	0.5
Beryllium	10/03/02	ND	20	0.5
Cadmium	10/03/02	ND	4	0.5
Calcium	10/03/02	1670	NLE	20.0
Chromium	10/03/02	2.58	100	0.5
Cobalt	10/03/02	ND	NLE	0.5
Copper	10/03/02	2.36	1000	2.0
Iron	10/03/02	2490	300	2.0
Lead	10/03/02	9.58	10	2.0
Magnesium	10/03/02	9.32	NLE	10.0
Manganese	10/03/02	6.62	50	0.5
Mercury	10/03/02	ND	2	0.1
Nickel	10/03/02	2.12	100	1.0
Potassium	10/03/02	2260	NLE	40.0
Selenium	10/03/02	11.1	50	3.0
Silver	10/03/02	ND	20	1.0
Sodium	10/03/02	15500	50000	20.0
Thallium	10/03/02	ND	10	2.0
Vanadium	10/03/02	1.32	NLE	0.5
Zinc	10/03/02	21.6	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 #: 2064703
Sample Received: 09/10/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	10/03/02	393	200	10.0
Antimony	10/03/02	ND	20	2.0
Arsenic	10/03/02	6.61	8	2.0
Barium	10/03/02	135	2000	0.5
Beryllium	10/03/02	ND	20	0.5
Cadmium	10/03/02	ND	4	0.5
Calcium	10/03/02	11400	NLE	20.0
Chromium	10/03/02	1.50	100	0.5
Cobalt	10/03/02	0.919	NLE	0.5
Copper	10/03/02	13.1	1000	2.0
Iron	10/03/02	10700	300	2.0
Lead	10/03/02	ND	10	2.0
Magnesium	10/03/02	2230	NLE	10.0
Manganese	10/03/02	35.7	50	0.5
Mercury	10/02/02	ND	2	0.1
Nickel	10/03/02	5.55	100	1.0
Potassium	10/03/02	8150	NLE	40.0
Selenium	10/03/02	5.54	50	3.0
Silver	10/03/02	ND	20	1.0
Sodium	10/03/02	8430	50000	20.0
Thallium	10/03/02	ND	10	2.0
Vanadium	10/03/02	ND	NLE	0.5
Zinc	10/03/02	50.8	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

LTM

	Lab	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	200	8	300	10	50	100	50	NLE		-
06/28/2000	FMETL	2070	ND	1450	ND	22.2	10.4	ND	6.31		V,S,P,M
08/10/2000	FMETL	1930	ND	739	2.38	23.8	5.91	ND	5.54		V,S,P,M
10/17/2000	FMETL	2120	ND	306	1.85	21.8	5.56	ND	6.07		V,S,P,M
01/05/2001	FMETL	2460	ND	868	ND	26.0	4.89	ND	6.11		V,S,P,M
04/04/2001	FMETL	2350	ND	410	3.00	34.7	12.0	ND	4.62		V,S,P,M
07/24/2001	FMETL	3150	ND	575	3.03	55.2	20.4	7.93	6.25		V,S,P,M
07/24/2001D	FMETL	3160	ND	576	1.18	34.3	10.4	12.5	6.25		V,S,P,M
12/11/2001	FMETL	3600	ND	4490	7.83	29.3	12.5	ND	7.15		V,S,P,M
03/08/2002	FMETL	3520	ND	897	1.36	36.1	11.9	10.4	6.43		V,S,P,M
05/16/2002	FMETL	3330	27.7	577	ND	33.9	10.9	13.7	6.14		V,S,P,M
09/10/2002	FMETL	3350	3.16	692	ND	33.1	11.9	8.98	5.91		V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 09/10/2002

NOTES:

FORT MONMOUTH

GW MONITORING
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U.S.ARMY
FORT MONMOUTH
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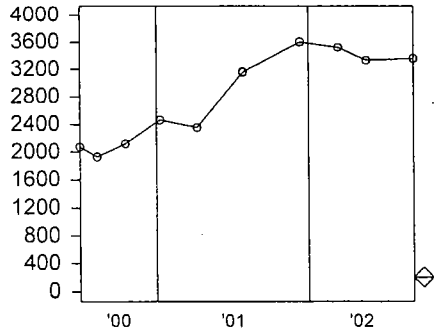
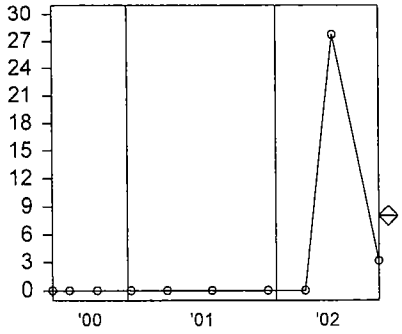
Aluminum
(ug/L)



Arsenic
(ug/L)



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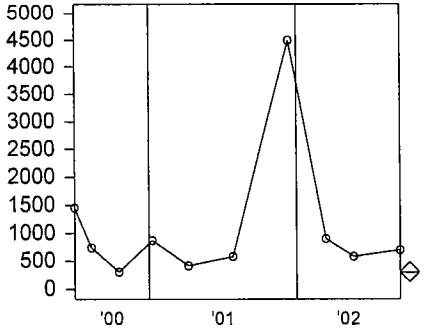
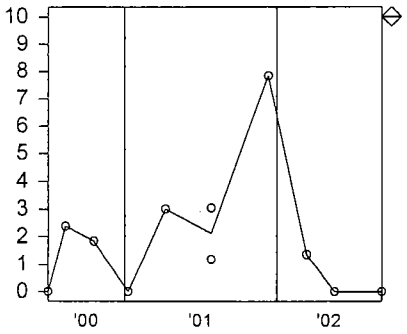
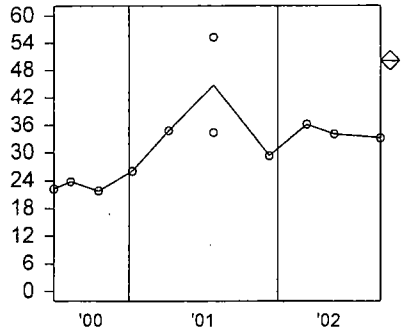
(ug/L)



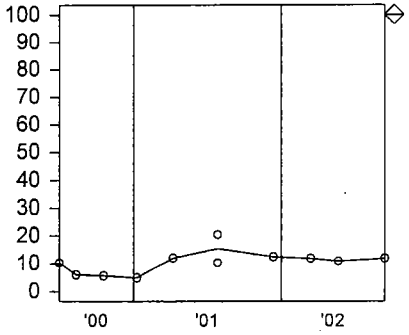
Lead
(ug/L)



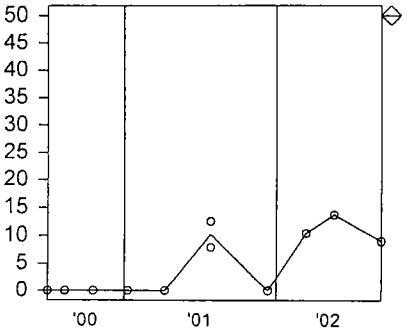
Manganese
(ug/l)



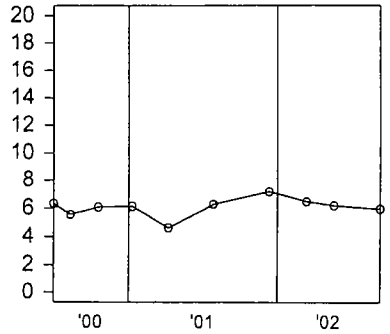
Nickel
(ug/l)



Selenium
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 09/10/2002

LEGEND:

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o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-23-2002 X:\MtechData\283\283.wsf

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	Naphtha lene	2-Methyl naphtha lene	Aluminum	Arsenic	Iron	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	1	1000	700	40	NLE	NLE	200	8	300	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	119.2	25.25	309	4.74	2330	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	183.38	26.28	123	ND	2060	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	82.44	7.43	241	ND	2010	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	174.92	25.10	81.4	ND	2130	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	101.97	25.13	812	3.40	2060	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	152.89	24.87	917	2.38	3340	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	126.93	20.73	973	4.89	3210	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	223.45	28.12	360	3.72	3220	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	65.12	6.10	2200	3.00	4360	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	ND	ND	1780	6.78	4050	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	89.93	13.36	1470	3.09	7120	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	80.67	13.24	249	ND	3220	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	101.90	16.78	996	24.2	4040	V,S,P,M
09/10/2002	FMETL	223.80	94.08	476.21	1910.78	135.69	30.03	267	7.95	2490	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 09/10/2002

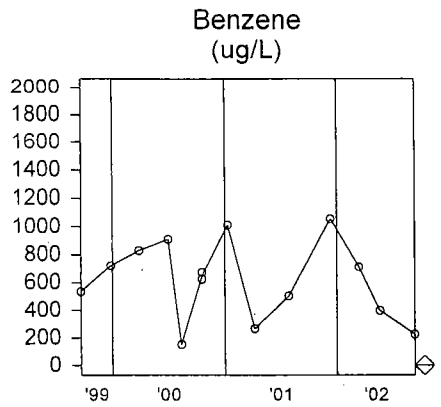
NOTES:

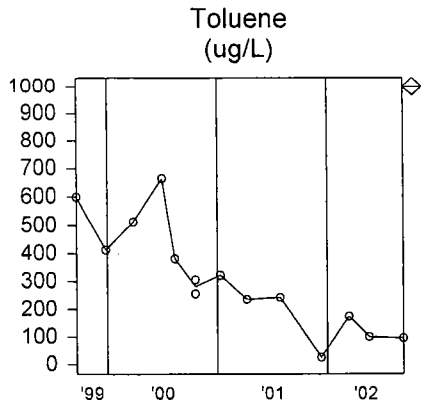
FORT MONMOUTH

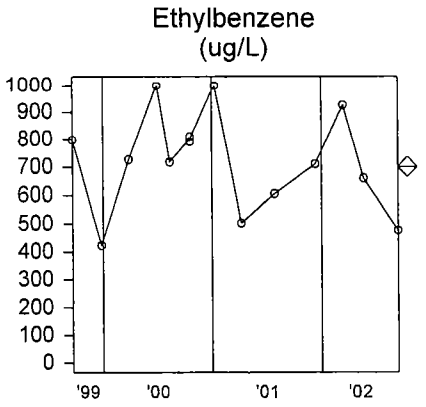
GW MONITORING
BLDG. 283

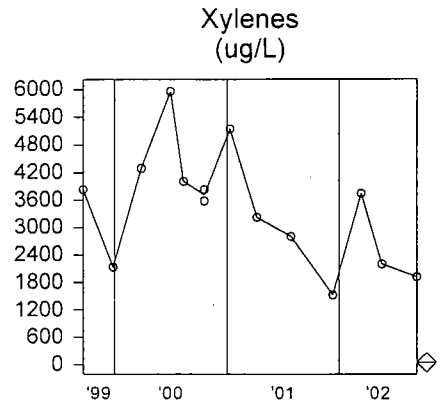
Source 1 of 3

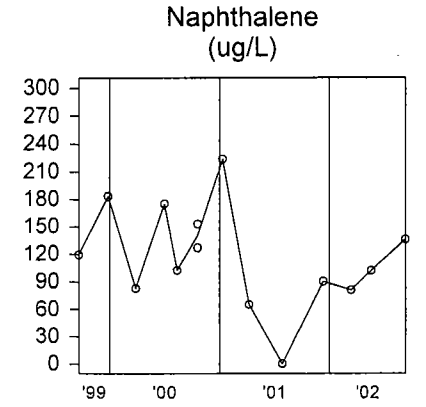
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

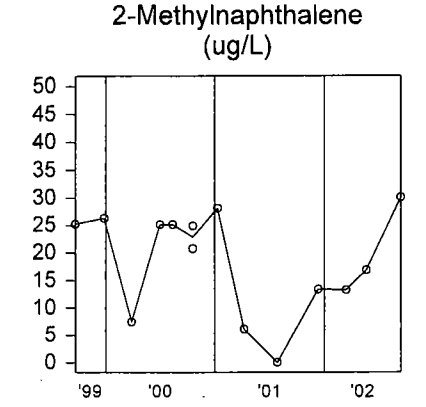


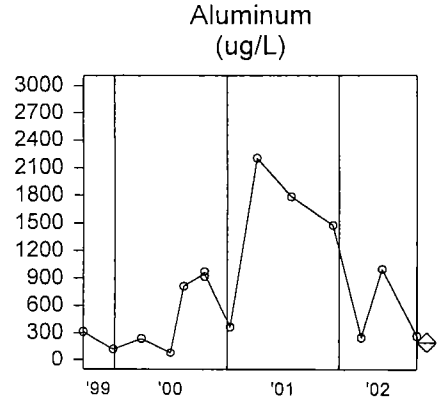


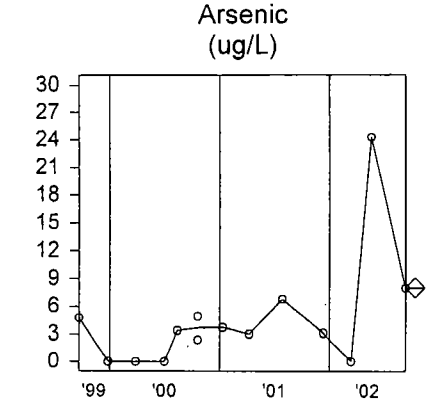


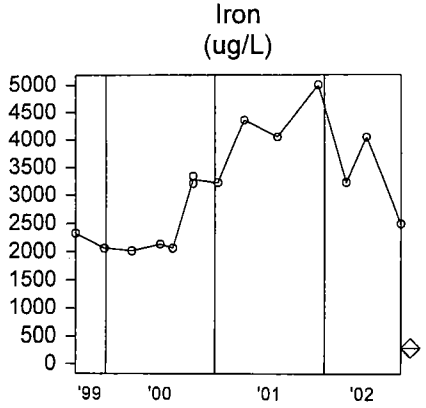












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 09/10/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-23-2002 X:\MtechData\283\283.wsf

	Lab	Lead	Manganese	Nickel	Selenium	Depth to Water					Notes
Units:	-	ug/L	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	10	50	100	50	NLE					-
09/20/1999	FMETL	22.0	14.5	4.11	6.49	7.20					V,S,P,M
12/27/1999	FMETL	6.92	44.0	3.62	4.73	6.81					V,S,P,M
03/23/2000	FMETL	15.3	11.9	6.43	7.29	6.38					V,S,P,M
06/28/2000	FMETL	11.5	8.31	6.01	4.36	7.83					V,S,P,M
08/10/2000	FMETL	31.9	5.97	ND	8.40	6.28					V,S,P,M
10/17/2000	FMETL	14.5	4.68	ND	6.69	7.09					V,S,P,M
10/17/2000D	FMETL	15.9	5.06	ND	6.23	7.09					V,S,P,M
01/05/2001	FMETL	25.3	6.47	2.85	6.22	7.32					V,S,P,M
04/04/2001	FMETL	23.0	8.10	5.00	5.00	4.81					V,S,P,M
07/24/2001	FMETL	12.3	36.0	12.2	30.0	6.75					V,S,P,M
12/11/2001	FMETL	11.8	15.0	8.52	ND	8.54					V,S,P,M
03/08/2002	FMETL	9.02	14.3	4.99	13.4	7.47					V,S,P,M
05/16/2002	FMETL	7.47	11.2	3.70	15.7	6.90					V,S,P,M
09/10/2002	FMETL	9.58	6.62	2.12	11.1	5.93					V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 09/10/2002

NOTES:

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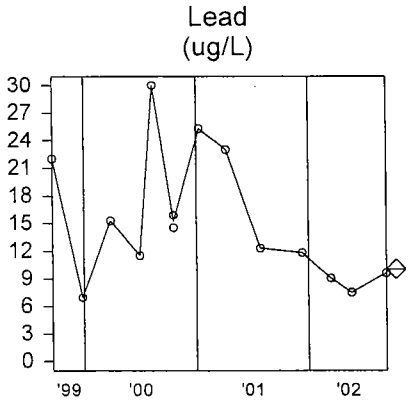
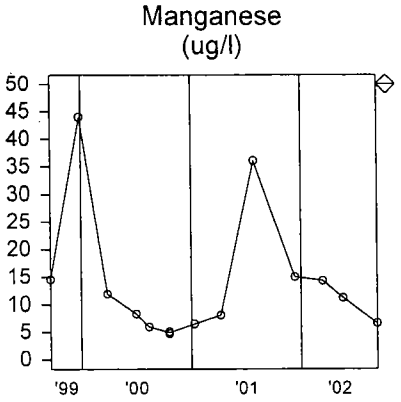
FORT MONMOUTH

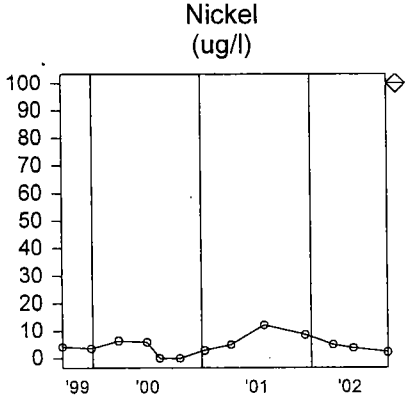
GW MONITORING
BLDG. 283

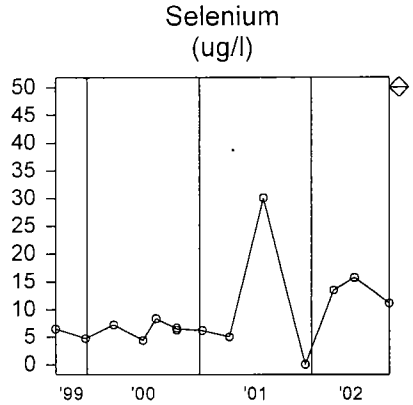
Source 1 of 3

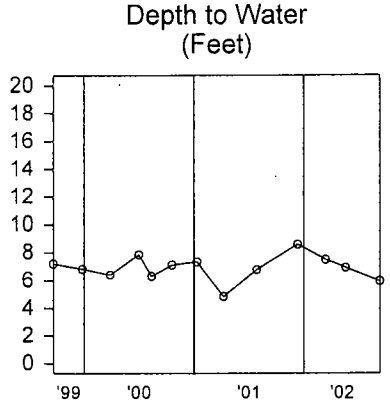
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 09/10/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-23-2002 X:\MtechData\283\283.wsf

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	50	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	ND	6.94	V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	ND	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	ND	5.75	V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	ND	7.00	V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	ND	7.67	V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	5.30	7.75	7.10	V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	10.2	7.31	6.90	V,S,P,M
09/10/2002	FMETL	ND	393	6.61	10700	ND	35.7	5.55	5.54	6.51	V,S,P,M

SOURCE: 0283MW03

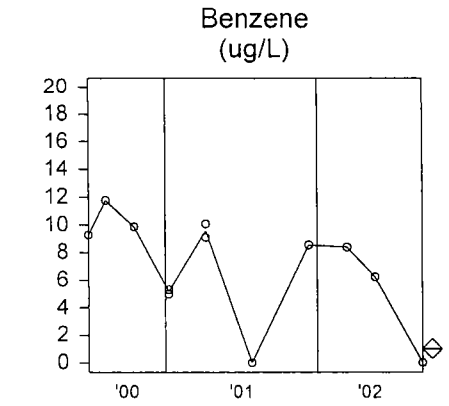
Sampling Dates:
06/28/2000 - 09/10/2002

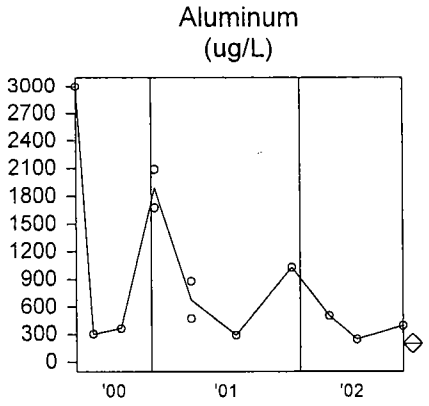
NOTES:

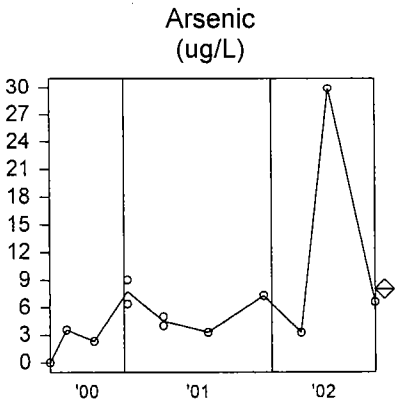
FORT MONMOUTH

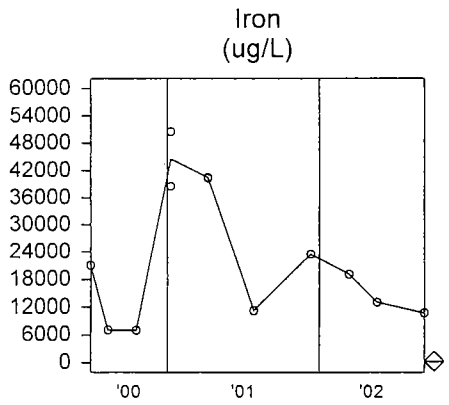
GW MONITORING
BLDG. 283

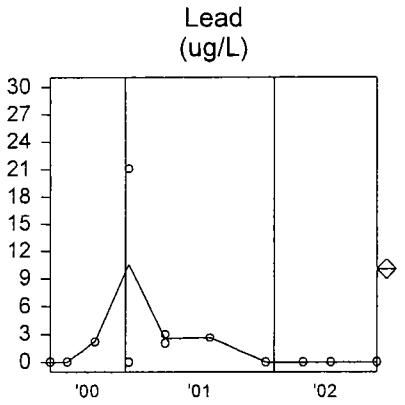
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

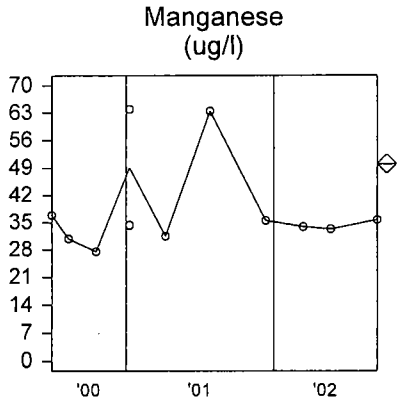


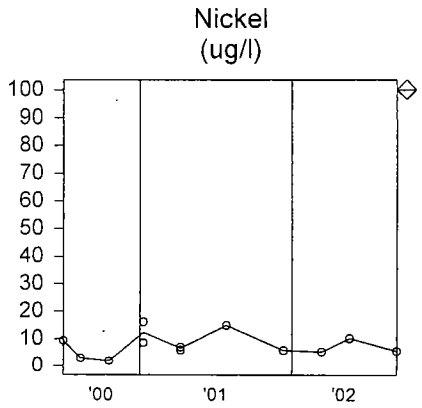


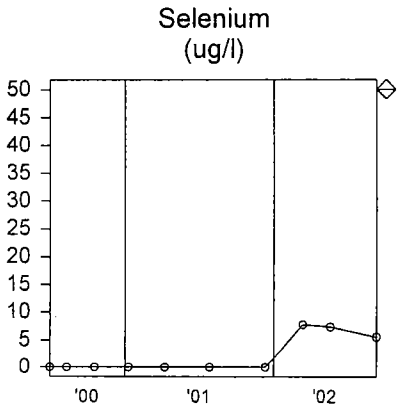


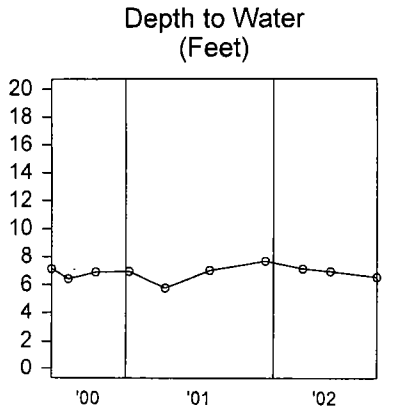












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 09/10/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

10-23-2002 X:\MtechData\283\283.wsf

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #14

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
2086401	0283MW01	29-40367	12/03/02
2086402	0283MW02	29-40887	12/03/02
2086403	0283MW03	29-41650	12/03/02

NJDEP Laboratory Certification # 13461

2-11-03
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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: X21223
( )DERA ( )OMA ( )Other:_____
Project No:
Location: 283 wells 4th Qrtr '02
Samplers Name / Company: Corey McCormack, TUS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOCs	TAL Metals	PesT/PCB	BNA+25				Hardness	Comments: HCl/HNO3/<4°C Remarks / Preservation Method
20864 01	283 mw01	12/03/02	1021	AQ	5	✓	✓	✓	✓				0.0	29-40367
02	283 mw02	"	1015	"	"	✓	✓	✓	✓				0.0	29-40887
03	283 mw03	"	1056	"	"	✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McConnell	12/03/02 1545	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 from 296 sm data. cpm
Tide: N/A

print legibly

Coc10/28/02

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 #: ~~X-2834~~ 21223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 296 wells
4th Qtr '02

Samplers Name / Company: Corey McCormack, TUS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VO+15	TAL Mtls	Pest/PCB	BNA+25				Hardhead	Comments: Remarks / Preservation Method
						Analysis Parameters								HCl/HNO$_3$/4°C
208601 01	Trip	12/03/02	0720	AQ	2	✓							—	
02	Field Blank		0815		5	✓	✓	✓	✓				—	
03	Dupe		—		5	✓	✓	✓	✓				—	
04	296 mw01		1252		5	✓	✓	✓	✓				0.0	29-30979
05	296 mw02		1426		5	✓	✓	✓	✓				0.0	29-30980
06	296 mw03		1529		5	✓	✓	✓	✓				0.0	29-30975
07	296 mw04		1517		9	✓	✓	✓	✓				0.0	29-33989
08	296 mw06 *		1536		5	✓	✓	✓	✓				0.0	29-30978
09	296 mw07		1511		5	✓	✓	✓	✓				0.0	29-30973
10	296 mw08		1241		5	✓	✓	✓	✓				0.0	29-30974

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	12/03/02 1545				
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: MS/MSD Low
Tidei L→H Shows T/FB/D w/ M18, 290, 283 sw dot. cpm

print legibly

Coc10/28/02

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/03/02
WEATHER: Sunny, and cold.
TIDE: NA

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.37 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.38 ft
(14.38) X 0.65 X 3 = 28.04
GALLONS OF H_2O TO BE PURGED: 28 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: 08:18
pH 3.40 su — TEMP 15.98 °C
DISSOLVED O_2 2.07 mg/L — SPECIFIC CONDUCTIVITY 492.3 ms/cm

PURGE END TIME: 10:19
pH 3.47 su — TEMP 16.00 °C
DISSOLVED O_2 0.07 mg/L — SPECIFIC CONDUCTIVITY 489.7 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.97 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 28 gal

SAMPLE START TIME: 10:21
pH 3.49 su — TEMP 16.01 °C
DISSOLVED O_2 0.07 mg/L — SPECIFIC CONDUCTIVITY 488.1 ms/cm

SAMPLE END TIME: 10:26

COMMENTS: Low pH.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/03/02
WEATHER: Sunny and cold.
TIDE: NA

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.28 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.41 ft
(14.41) X 0.65 X 3 = 28.09
GALLONS OF H_2O TO BE PURGED: 28 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: 08:13
pH 4.76 su — TEMP 13.10 °C
DISSOLVED O_2 4.41 mg/L — SPECIFIC CONDUCTIVITY 210.7 ms/cm

PURGE END TIME: 10:14
pH 4.77 su — TEMP 13.09 °C
DISSOLVED O_2 3.33 mg/L — SPECIFIC CONDUCTIVITY 210.7 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 10.73 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 28 gal

SAMPLE START TIME: 10:15
pH 4.75 su — TEMP 13.03 °C
DISSOLVED O_2 3.15 mg/L — SPECIFIC CONDUCTIVITY 210.7 ms/cm

SAMPLE END TIME: 10:20

COMMENTS: Odor.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 12/03/02
WEATHER: Sunny and cold.
TIDE: NA

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.31 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 17.74 ft
(17.74) X 0.65 X 3 = 34.59
GALLONS OF H_2O TO BE PURGED: 35 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: 08:24
pH 5.15 su — TEMP 15.72 °C
DISSOLVED O_2 2.65 mg/L — SPECIFIC CONDUCTIVITY 232.6 ms/cm

PURGE END TIME: 10:55
pH 5.18 su — TEMP 15.83 °C
DISSOLVED O_2 2.07 mg/L — SPECIFIC CONDUCTIVITY 232.6 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.73 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 35 gal

SAMPLE START TIME: 10:56
pH 5.17 su — TEMP 15.82 °C
DISSOLVED O_2 1.96 mg/L — SPECIFIC CONDUCTIVITY 232.8 ms/cm

SAMPLE END TIME: 11:00

COMMENTS: Water was white and cloudy.

VOLATILE ORGANICS

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 #13461

Data File	**VB012235.D**	Sample Name	**MB 06Dec02**
Operator	**Skelton**	Field ID	**MB 06Dec02**
Date Acquired	**6 Dec 2002 7:06 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	
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	
124-48-1	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	
1330-20-7	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\624fy02.crt

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

MB 06Dec02

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20861 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 06Dec02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012235.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/6/02

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	**VB012268.D**	Sample Name	**MB 9Dec02**
Operator	**Skelton**	Field ID	**MB 9Dec02**
Date Acquired	**9 Dec 2002 12:10 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	
124-48-1	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	
1330-20-7	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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **MB 9Dec02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20864 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 9Dec02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012268.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/9/02

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	**VB012249.D**	Sample Name	**2086101**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**7 Dec 2002 4:29 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	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform	16.59	83800	1.50 ug/L	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	
124-48-1	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	
1330-20-7	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.: 20861 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2086101

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012249.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/7/02

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.	unknown	24.87	8	J
2. 000091-20-3	Naphthalene	27.89	15	JN
3.	unknown	29.23	6	J
4. 000124-18-5	Decane	30.33	38	JN
5.	unknown	31.03	11	J
6. 001678-93-9	Cyclohexane, butyl-	31.83	8	JN
7. 006975-98-0	Decane, 2-methyl-	32.16	6	JN
8.	unknown	33.00	6	J
9. 001120-21-4	Undecane	33.11	14	JN
10. 000091-57-6	Naphthalene, 2-methyl-	34.86	12	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB012250.D**	Sample Name	**2086102**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**7 Dec 2002 5:09 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	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	16.59	77738	1.37 ug/L	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	
124-48-1	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	
1330-20-7	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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20861 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2086102

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012250.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/7/02

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. 000124-18-5	Decane	30.33	10	JN
2.	unknown	31.03	4	J
3. 001120-21-4	Undecane	33.11	6	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB012271.D**	Sample Name	**2086401**
Operator	**Skelton**	Field ID	**283MW01**
Date Acquired	**9 Dec 2002 2:36 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	
124-48-1	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	
1330-20-7	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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20864 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2086401

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012271.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/9/02

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. 000091-20-3	Naphthalene	27.71	11	JN
2.	unknown	29.03	7	J
3.	unknown	29.17	6	J
4. 000124-18-5	Decane	30.33	48	JN
5. 002847-72-5	Decane, 4-methyl-	31.03	12	JN
6. 001678-93-9	Cyclohexane, butyl-	31.83	6	JN
7. 006975-98-0	Decane, 2-methyl-	32.16	7	JN
8. 000091-17-8	Naphthalene, decahydro-	33.00	7	JN
9. 001120-21-4	Undecane	33.11	16	JN
10. 000091-57-6	Naphthalene, 2-methyl-	34.83	10	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB012285.D**	Sample Name	**2086402**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**10 Dec 2002 12:05 am**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	18.50 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	
71-43-2	Benzene	18.04	1551059	119.40 ug/L	1	2.30 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	5.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	
108-88-3	Toluene	23.11	602738	39.32 ug/L	1000	3.70 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	
124-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	
100-41-4	Ethylbenzene	26.87	5930192	349.99 ug/L	700	6.50 ug/L	D
1330-20-7	m+p-Xylenes	27.15	3789304	600.86 ug/L	nle	11.40 ug/L	D
95-47-6	o-Xylene	28.15	4884687	369.50 ug/L	nle	6.20 ug/L	D
100-42-5	Styrene			not detected	100	5.60 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20864 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2086402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012285.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/10/02

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.	unknown	6.34	990	J
2. 000109-66-0	Pentane	7.22	430	JN
3.	unknown	10.69	190	J
4. 000107-83-5	Pentane, 2-methyl-	10.89	270	JN
5. 000109-67-1	1-Pentene	11.09	430	JN
6. 000096-14-0	Pentane, 3-methyl-	11.87	220	JN
7. 000096-37-7	Cyclopentane, methyl-	14.98	1100	JN
8. 000110-82-7	Cyclohexane	17.02	1200	JN
9. 000108-87-2	Cyclohexane, methyl-	20.19	350	JN
10. 000095-63-6	Benzene, 1,2,4-trimethyl-	31.37	540	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB012272.D**	Sample Name	**2086403**
Operator	**Skelton**	Field ID	**283MW03**
Date Acquired	**9 Dec 2002 3:16 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	18.04	452142	3.45 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	
124-48-1	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	
1330-20-7	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. **283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 20864 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 2086403

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB012272.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: not dec. Date Analyzed: 12/9/02

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. 000124-18-5	Decane	30.33	7	JN
2. 001120-21-4	Undecane	33.11	3	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06003.D**	Sample Name	**MB-120502**
Operator	**B.Patel**	Misc Info	**MB-120502**
Date Acquired	**9-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06003.D**	Sample Name	**MB-120502**
Operator	**B.Patel**	Misc Info	**MB-120502**
Date Acquired	**9-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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-120502**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20861 Location: 296 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: MB-120502

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06003.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: decanted: (Y/N) N Date Extracted: 12/5/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/9/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.71	9	J
2.	unknown	27.53	4	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06017.D**	Sample Name	**MB-120902**
Operator	**B.Patel**	Misc Info	**MB-120902**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06017.D**	Sample Name	**MB-120902**
Operator	**B.Patel**	Misc Info	**MB-120902**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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-120902**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20864 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-120902

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06017.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/9/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/10/02

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	7.71	11	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06013.D**	Sample Name	**2086102**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**9-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06013.D**	Sample Name	**2086102**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**9-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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.: 20861 Location: 296 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 2086102

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06013.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/5/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/9/02

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	7.71	8	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06030.D**	Sample Name	**2086401**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06030.D**	Sample Name	**2086401**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20864 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 2086401

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06030.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: decanted: (Y/N) N Date Extracted: 12/9/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/10/02

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	7.71	14	J
2.	unknown	8.44	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06031.D**	Sample Name	**2086402**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene	14.12	4921608	76.68 ug/L	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene	15.76	444821	11.88 ug/L	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

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Data File Name	**BN06031.D**	Sample Name	**2086402**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20864 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 2086402

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06031.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: decanted: (Y/N) N Date Extracted: 12/9/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/10/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000590-36-3	2-Pentanol, 2-methyl-	5.35	94	JN
2.	unknown	5.84	130	J
3. 001462-03-9	Cyclopentanol, 1-methyl-	6.68	40	JN
4.	unknown	7.49	110	J
5.	unknown	7.73	190	J
6.	unknown	8.54	24	J
7. 000590-67-0	Cyclohexanol, 1-methyl-	8.89	84	JN
8.	unknown	8.96	44	J
9.	unknown	9.47	63	J
10. 005582-82-1	3-Heptanol, 3-methyl-	9.66	39	JN
11.	unknown	9.79	27	J
12.	unknown	9.88	40	J
13. 000620-14-4	Benzene, 1-ethyl-3-methyl-	10.11	80	JN
14. 000611-14-3	Benzene, 1-ethyl-2-methyl-	10.17	59	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	10.26	89	JN
16. 000611-14-3	Benzene, 1-ethyl-2-methyl-	10.46	72	JN
17. 000095-36-3	1,2,4-Trimethylbenzene	10.74	240	JN
18. 000108-67-8	Benzene, 1,3,5-trimethyl-	11.26	93	JN
19. 000496-11-7	Indane	11.53	73	JN
20. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.83	33	JN
21. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	12.32	38	JN
22. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	13.45	33	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06032.D**	Sample Name	**2086403**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	1.27	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.78	ug/L	
62-53-3	Aniline			not detected	NLE	1.11	ug/L	
108-95-2	Phenol			not detected	4000	0.45	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	1.10	ug/L	
95-57-8	2-Chlorophenol			not detected	40	0.97	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.90	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.80	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.93	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.99	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	0.78	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.96	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	0.78	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	1.01	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.88	ug/L	
98-95-3	Nitrobenzene			not detected	10	1.15	ug/L	
78-59-1	Isophorone			not detected	100	0.92	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	0.82	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.83	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	0.74	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.77	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.66	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.68	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.24	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.84	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	0.69	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.62	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.53	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	0.84	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	0.99	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.81	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.86	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.79	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.84	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.95	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.66	ug/L	
83-32-9	Acenaphthene			not detected	400	0.86	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.37	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.85	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.58	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06032.D**	Sample Name	**2086403**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**10-Dec-02**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
121-14-2	2,4-Dinitrotoluene			not detected	10	0.86	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.71	ug/L	
86-73-7	Fluorene			not detected	300	0.86	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.67	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.19	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	0.76	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.83	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.75	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.66	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.61	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.36	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.84	ug/L	
120-12-7	Anthracene			not detected	2000	0.72	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.61	ug/L	
206-44-0	Fluoranthene			not detected	300	0.60	ug/L	
92-87-5	Benzidine			not detected	50	2.71	ug/L	
129-00-0	Pyrene			not detected	200	0.89	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.67	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.69	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.79	ug/L	
218-01-9	Chrysene			not detected	20	0.91	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.06	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	0.59	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.88	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.96	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.72	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	2.56	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.91	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.66	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: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 20864 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 2086403

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06032.D

Level: (low/med) LOW Date Received: 12/3/02

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/9/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/10/02

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	7.71	20	J

PEST/PCB's

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name:
Field ID: Method Blank
Lab ID: MB 06Dec02a
Filename: PPB08124.D
Lab Project : 20861

Location: 296 WELLS
MATRIX: Aqueous
Ext. Batch:
Date Extracted: 12/6/02
Date Analyzed: 6 Jan 2003 3:21 pm
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.05
319-85-7	beta-BHC	ND	0.01	0.20		0.05
58-89-9	gamma-BHC	ND	0.01	0.20		0.05
319-86-8	delta-BHC	ND	0.01	NLE		0.05
76-44-8	Heptachlor	ND	0.01	0.40		0.05
309-00-2	Aldrin	ND	0.01	0.04		0.05
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.05
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.05
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.05
959-98-8	Endosulfan I	ND	0.01	0.40		0.05
72-55-9	4,4'-DDE	ND	0.01	0.10		0.05
60-57-1	Dieldrin	ND	0.01	0.03		0.05
72-20-8	Endrin	ND	0.01	2.00		0.05
33213-65-9	Endosulfan II	ND	0.01	0.40		0.05
72-54-8	4,4'-DDD	ND	0.01	0.10		0.05
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.05
50-29-3	4,4'-DDT	ND	0.01	0.10		0.05
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.05
53494-70-5	Endrin ketone	ND	0.50	0.01		0.05
72-43-5	Methoxychlor	ND	0.50	40.00		0.05
8001-35-2	Toxaphene	ND	0.50	3.00		0.50
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.07
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.07
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.06
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.05
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.05
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.06
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.07

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name:
Field ID: Field Blank
Lab ID: 2086102a
Filename: PPB08126.D
Lab Project : 20861

Location: 296 WELLS
MATRIX: Aqueous
Ext. Batch:
Date Extracted: 12/6/02
Date Analyzed: 6 Jan 2003 4:43 pm
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.05
319-85-7	beta-BHC	ND	0.01	0.20		0.05
58-89-9	gamma-BHC	ND	0.01	0.20		0.05
319-86-8	delta-BHC	ND	0.01	NLE		0.05
76-44-8	Heptachlor	ND	0.01	0.40		0.05
309-00-2	Aldrin	ND	0.01	0.04		0.05
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.05
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.05
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.05
959-98-8	Endosulfan I	ND	0.01	0.40		0.05
72-55-9	4,4'-DDE	ND	0.01	0.10		0.05
60-57-1	Dieldrin	ND	0.01	0.03		0.05
72-20-8	Endrin	ND	0.01	2.00		0.05
33213-65-9	Endosulfan II	ND	0.01	0.40		0.05
72-54-8	4,4'-DDD	ND	0.01	0.10		0.05
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.05
50-29-3	4,4'-DDT	ND	0.01	0.10		0.05
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.05
53494-70-5	Endrin ketone	ND	0.50	0.01		0.05
72-43-5	Methoxychlor	ND	0.50	40.00		0.05
8001-35-2	Toxaphene	ND	0.50	3.00		0.50
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.07
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.07
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.06
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.05
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.05
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.06
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.07

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name:
Field ID: 283MW01
Lab ID: 2086401a
Filename: PPB08149.D
Lab Project : 20864

Location: 283 WELLS
MATRIX: Aqueous
Ext. Batch:
Date Extracted: 10-Dec-02
Date Analyzed: 7 Jan 2003 10:40 pm
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.05
319-85-7	beta-BHC	ND	0.01	0.20		0.05
58-89-9	gamma-BHC	ND	0.01	0.20		0.05
319-86-8	delta-BHC	ND	0.01	NLE		0.05
76-44-8	Heptachlor	ND	0.01	0.40		0.05
309-00-2	Aldrin	ND	0.01	0.04		0.05
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.05
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.05
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.05
959-98-8	Endosulfan I	ND	0.01	0.40		0.05
72-55-9	4,4'-DDE	ND	0.01	0.10		0.05
60-57-1	Dieldrin	ND	0.01	0.03		0.05
72-20-8	Endrin	ND	0.01	2.00		0.05
33213-65-9	Endosulfan II	ND	0.01	0.40		0.05
72-54-8	4,4'-DDD	ND	0.01	0.10		0.05
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.05
50-29-3	4,4'-DDT	ND	0.01	0.10		0.05
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.05
53494-70-5	Endrin ketone	ND	0.50	0.01		0.05
72-43-5	Methoxychlor	ND	0.50	40.00		0.05
8001-35-2	Toxaphene	ND	0.50	3.00		0.50
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.07
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.07
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.06
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.05
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.05
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.06
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.07

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name:
Field ID: 283MW02
Lab ID: 2086402a
Filename: PPB08150.D
Lab Project : 20864

Location: 283 WELLS
MATRIX: Aqueous
Ext. Batch:
Date Extracted: 10-Dec-02
Date Analyzed: 7 Jan 2003 11:20 pm
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.05
319-85-7	beta-BHC	ND	0.01	0.20		0.05
58-89-9	gamma-BHC	ND	0.01	0.20		0.05
319-86-8	delta-BHC	ND	0.01	NLE		0.05
76-44-8	Heptachlor	ND	0.01	0.40		0.05
309-00-2	Aldrin	ND	0.01	0.04		0.05
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.05
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.05
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.05
959-98-8	Endosulfan I	ND	0.01	0.40		0.05
72-55-9	4,4'-DDE	ND	0.01	0.10		0.05
60-57-1	Dieldrin	ND	0.01	0.03		0.05
72-20-8	Endrin	ND	0.01	2.00		0.05
33213-65-9	Endosulfan II	ND	0.01	0.40		0.05
72-54-8	4,4'-DDD	ND	0.01	0.10		0.05
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.05
50-29-3	4,4'-DDT	ND	0.01	0.10		0.05
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.05
53494-70-5	Endrin ketone	ND	0.50	0.01		0.05
72-43-5	Methoxychlor	ND	0.50	40.00		0.05
8001-35-2	Toxaphene	ND	0.50	3.00		0.50
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.07
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.07
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.06
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.05
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.05
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.06
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.07

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name:
Field ID: 283MW03
Lab ID: 2086403a
Filename: PPB08151.D
Lab Project : 20864

Location: 283 WELLS
MATRIX: Aqueous
Ext. Batch:
Date Extracted: 10-Dec-02
Date Analyzed: 8 Jan 2003 12:00 am
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.05
319-85-7	beta-BHC	ND	0.01	0.20		0.05
58-89-9	gamma-BHC	ND	0.01	0.20		0.05
319-86-8	delta-BHC	ND	0.01	NLE		0.05
76-44-8	Heptachlor	ND	0.01	0.40		0.05
309-00-2	Aldrin	ND	0.01	0.04		0.05
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.05
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.05
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.05
959-98-8	Endosulfan I	ND	0.01	0.40		0.05
72-55-9	4,4'-DDE	ND	0.01	0.10		0.05
60-57-1	Dieldrin	ND	0.01	0.03		0.05
72-20-8	Endrin	ND	0.01	2.00		0.05
33213-65-9	Endosulfan II	ND	0.01	0.40		0.05
72-54-8	4,4'-DDD	ND	0.01	0.10		0.05
7421-93-4	Endrin aldéhyde	ND	0.01	NLE		0.05
50-29-3	4,4'-DDT	ND	0.01	0.10		0.05
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.05
53494-70-5	Endrin ketone	ND	0.50	0.01		0.05
72-43-5	Methoxychlor	ND	0.50	40.00		0.05
8001-35-2	Toxaphene	ND	0.50	3.00		0.50
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.07
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.07
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.06
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.05
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.05
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.06
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.07

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

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 #:
Sample Prepared: 12/11/02

Site: M-12
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/12/02	ND	200	10.0
Antimony	12/12/02	2.71	20	2.0
Arsenic	12/12/02	ND	8	2.0
Barium	12/12/02	0.562	2000	0.5
Beryllium	12/12/02	ND	20	0.5
Cadmium	12/12/02	ND	4	0.5
Calcium	12/12/02	79.0	NLE	20.0
Chromium	12/12/02	ND	100	0.5
Cobalt	12/12/02	ND	NLE	0.5
Copper	12/12/02	2.23	1000	2.0
Iron	12/12/02	478	300	10.0
Lead	12/12/02	ND	10	1.0
Magnesium	12/12/02	ND	NLE	10.0
Manganese	12/12/02	3.78	50	0.5
Mercury	12/13/02	ND	2	0.1
Nickel	12/12/02	ND	100	1.0
Potassium	12/12/02	76.4	NLE	40.0
Selenium	12/12/02	5.75	50	3.0
Silver	12/12/02	ND	20	1.0
Sodium	12/12/02	367	50000	20.0
Thallium	12/12/02	ND	10	2.0
Vanadium	12/12/02	ND	NLE	0.5
Zinc	12/12/02	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 0770

Lab ID #:
Sample Prepared: 12/16/02

Site: 296
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/18/02	35.4	200	10.0
Antimony	12/18/02	2.77	20	2.0
Arsenic	12/18/02	ND	8	2.0
Barium	12/18/02	0.811	2000	0.5
Beryllium	12/18/02	ND	20	0.5
Cadmium	12/18/02	0.608	4	0.5
Calcium	12/18/02	208	NLE	20.0
Chromium	12/18/02	ND	100	0.5
Cobalt	12/18/02	ND	NLE	0.5
Copper	12/18/02	ND	1000	2.0
Iron	12/18/02	ND	300	10.0
Lead	12/18/02	ND	10	1.0
Magnesium	12/18/02	22.1	NLE	10.0
Manganese	12/18/02	1.05	50	0.5
Mercury	12/18/02	ND	2	0.1
Nickel	12/18/02	ND	100	1.0
Potassium	12/18/02	672	NLE	40.0
Selenium	12/18/02	ND	50	3.0
Silver	12/18/02	ND	20	1.0
Sodium	12/18/02	ND	50000	20.0
Thallium	12/18/02	3.77	10	2.0
Vanadium	12/18/02	ND	NLE	0.5
Zinc	12/18/02	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.C7:9

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 #: 2086102
Sample Received: 12/03/02
Sample Matrix: Aqueous

Site: 296
Ft. Monmouth, New Jersey

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/26/02	81.7	200	10.0
Antimony	12/26/02	3.58	20	2.0
Arsenic	12/26/02	ND	8	2.0
Barium	12/26/02	1.34	2000	0.5
Beryllium	12/26/02	ND	20	0.5
Cadmium	12/26/02	ND	4	0.5
Calcium	12/26/02	372	NLE	20.0
Chromium	12/26/02	0.953	100	0.5
Cobalt	12/26/02	ND	NLE	0.5
Copper	12/26/02	ND	1000	2.0
Iron	12/26/02	ND	300	10.0
Lead	12/26/02	ND	10	1.0
Magnesium	12/26/02	32.4	NLE	10.0
Manganese	12/26/02	1.75	50	0.5
Mercury	12/23/02	ND	2	0.1
Nickel	12/26/02	ND	100	1.0
Potassium	12/26/02	808	NLE	40.0
Selenium	12/26/02	ND	50	3.0
Silver	12/26/02	ND	20	1.0
Sodium	12/26/02	1090	50000	20.0
Thallium	12/26/02	ND	10	2.0
Vanadium	12/26/02	ND	NLE	0.5
Zinc	12/26/02	29.3	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 #: 2086401
Sample Received: 12/03/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/12/02	3190	200	10.0
Antimony	12/12/02	ND	20	2.0
Arsenic	12/12/02	ND	8	2.0
Barium	12/12/02	108	2000	0.5
Beryllium	12/12/02	0.905	20	0.5
Cadmium	12/12/02	0.887	4	0.5
Calcium	12/12/02	8790	NLE	20.0
Chromium	12/12/02	1.39	100	0.5
Cobalt	12/12/02	4.45	NLE	0.5
Copper	12/12/02	22.1	1000	2.0
Iron	12/12/02	281	300	2.0
Lead	12/12/02	ND	10	2.0
Magnesium	12/12/02	17500	NLE	10.0
Manganese	12/12/02	43.2	50	0.5
Mercury	12/13/02	ND	2	0.1
Nickel	12/12/02	13.4	100	1.0
Potassium	12/12/02	6870	NLE	40.0
Selenium	12/12/02	10.6	50	3.0
Silver	12/12/02	4.44	20	1.0
Sodium	12/12/02	50800	50000	20.0
Thallium	12/12/02	ND	10	2.0
Vanadium	12/12/02	ND	NLE	0.5
Zinc	12/12/02	123	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 #: 2086402
Sample Received: 12/03/02
Sample Matrix: Aqueous

Site: 283

Field ID#:283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/12/02	157	200	10.0
Antimony	12/12/02	ND	20	2.0
Arsenic	12/12/02	6.04	8	2.0
Barium	12/12/02	23.2	2000	0.5
Beryllium	12/12/02	ND	20	0.5
Cadmium	12/12/02	0.779	4	0.5
Calcium	12/12/02	1950	NLE	20.0
Chromium	12/12/02	0.701	100	0.5
Cobalt	12/12/02	ND	NLE	0.5
Copper	12/12/02	4.13	1000	2.0
Iron	12/12/02	1720	300	2.0
Lead	12/12/02	5.84	10	2.0
Magnesium	12/12/02	764	NLE	10.0
Manganese	12/12/02	29.8	50	0.5
Mercury	12/13/02	ND	2	0.1
Nickel	12/12/02	1.56	100	1.0
Potassium	12/12/02	2770	NLE	40.0
Selenium	12/12/02	6.81	50	3.0
Silver	12/12/02	1.24	20	1.0
Sodium	12/12/02	17000	50000	20.0
Thallium	12/12/02	ND	10	2.0
Vanadium	12/12/02	0.858	NLE	0.5
Zinc	12/12/02	10.1	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 #: 2086403
Sample Received: 12/03/02
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	12/12/02	48.3	200	10.0
Antimony	12/12/02	ND	20	2.0
Arsenic	12/12/02	4.18	8	2.0
Barium	12/12/02	20.7	2000	0.5
Beryllium	12/12/02	ND	20	0.5
Cadmium	12/12/02	0.564	4	0.5
Calcium	12/12/02	8150	NLE	20.0
Chromium	12/12/02	ND	100	0.5
Cobalt	12/12/02	0.658	NLE	0.5
Copper	12/12/02	53.6	1000	2.0
Iron	12/12/02	1230	300	2.0
Lead	12/12/02	9.11	10	2.0
Magnesium	12/12/02	1560	NLE	10.0
Manganese	12/12/02	48.2	50	0.5
Mercury	12/13/02	ND	2	0.1
Nickel	12/12/02	3.96	100	1.0
Potassium	12/12/02	6070	NLE	40.0
Selenium	12/12/02	5.69	50	3.0
Silver	12/12/02	2.47	20	1.0
Sodium	12/12/02	7530	50000	20.0
Thallium	12/12/02	ND	10	2.0
Vanadium	12/12/02	ND	NLE	0.5
Zinc	12/12/02	10.9	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

LTM

	Lab	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	200	8	300	10	50	100	50	NLE		-
06/28/2000	FMETL	2070	ND	1450	ND	22.2	10.4	ND	6.31		V,S,P,M
08/10/2000	FMETL	1930	ND	739	2.38	23.8	5.91	ND	5.54		V,S,P,M
10/17/2000	FMETL	2120	ND	306	1.85	21.8	5.56	ND	6.07		V,S,P,M
01/05/2001	FMETL	2460	ND	868	ND	26.0	4.89	ND	6.11		V,S,P,M
04/04/2001	FMETL	2350	ND	410	3.00	34.7	12.0	ND	4.62		V,S,P,M
07/24/2001	FMETL	3150	ND	575	3.03	55.2	20.4	7.93	6.25		V,S,P,M
07/24/2001D	FMETL	3160	ND	576	1.18	34.3	10.4	12.5	6.25		V,S,P,M
12/11/2001	FMETL	3600	ND	4490	7.83	29.3	12.5	ND	7.15		V,S,P,M
03/08/2002	FMETL	3520	ND	897	1.36	36.1	11.9	10.4	6.43		V,S,P,M
05/16/2002	FMETL	3330	27.7	577	ND	33.9	10.9	13.7	6.14		V,S,P,M
09/10/2002	FMETL	3350	3.16	692	ND	33.1	11.9	8.98	5.91		V,S,P,M
12/03/2002	FMETL	3190	ND	281	ND	43.2	13.4	10.6	5.37		V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 12/03/2002

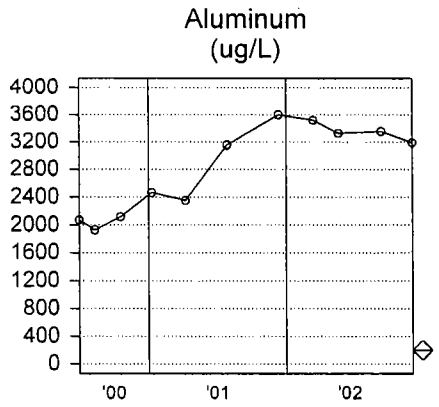
NOTES:

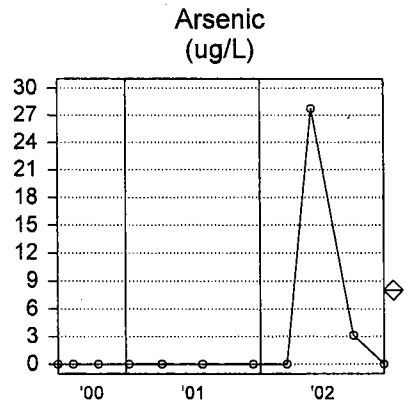
FORT MONMOUTH

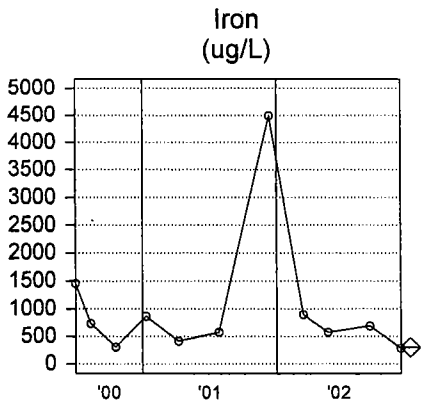
GW MONITORING
BLDG. 283

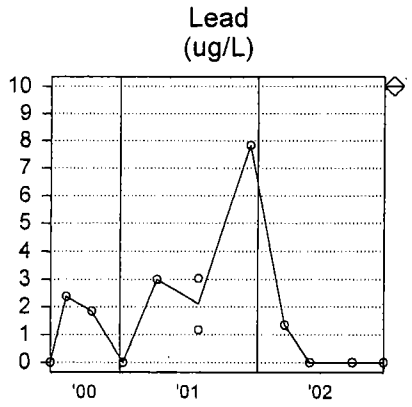
Source 2 of 3

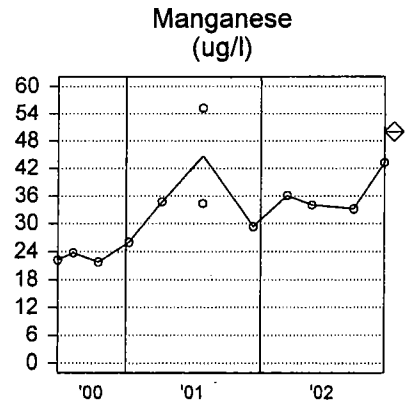
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

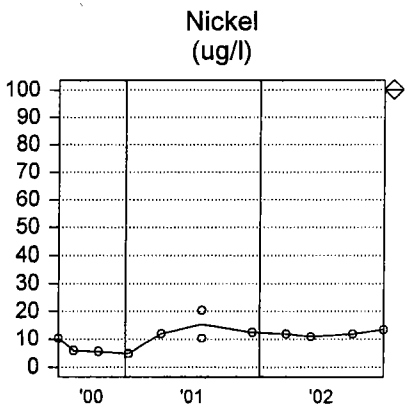


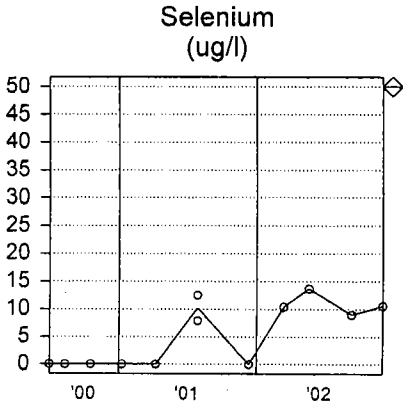


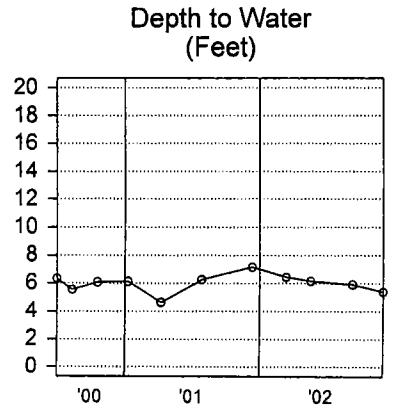












SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 12/03/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-06-2003 X:\MtechData\283\283.WSF

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	Naphtha lene	2-Methyl naphtha lene	Aluminum	Arsenic	Iron	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	1	1000	700	40	NLE	NLE	200	8	300	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	119.2	25.25	309	4.74	2330	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	183.38	26.28	123	ND	2060	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	82.44	7.43	241	ND	2010	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	174.92	25.10	81.4	ND	2130	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	101.97	25.13	812	3.40	2060	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	152.89	24.87	917	2.38	3340	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	126.93	20.73	973	4.89	3210	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	223.45	28.12	360	3.72	3220	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	65.12	6.10	2200	3.00	4360	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	ND	ND	1780	6.78	4050	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	89.93	13.36	1470	3.09	7120	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	80.67	13.24	249	ND	3220	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	101.90	16.78	996	24.2	4040	V,S,P,M
09/10/2002	FMETL	223.80	94.08	476.21	1910.78	135.69	30.03	267	7.95	2490	V,S,P,M
12/03/2002	FMETL	119.4	39.32	349.99	970.72	76.68	11.88	157	6.04	1720	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/03/2002

NOTES:

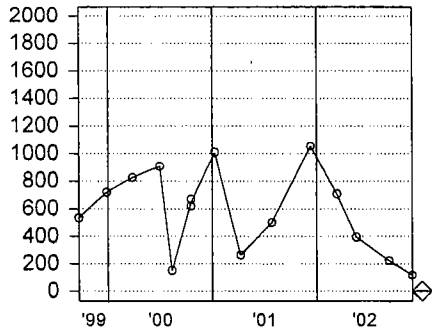
FORT MONMOUTH

GW MONITORING
BLDG. 283

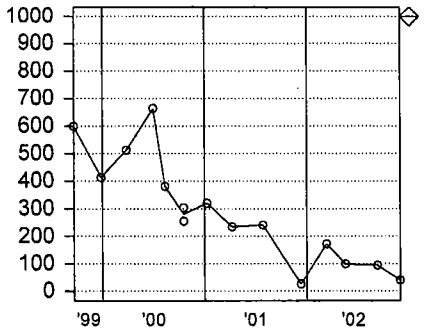
Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

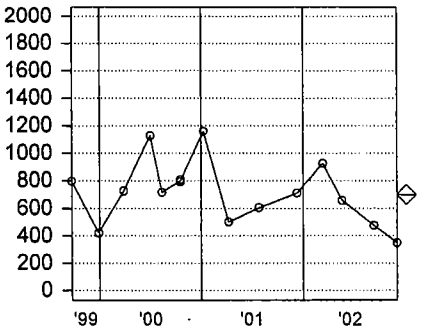
Benzene
(ug/L)



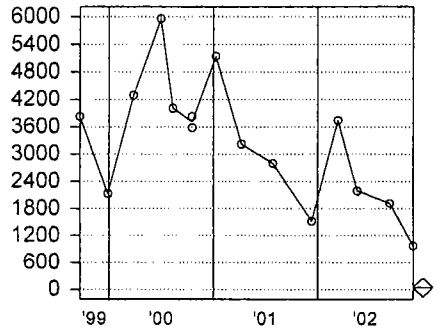
Toluene
(ug/L)



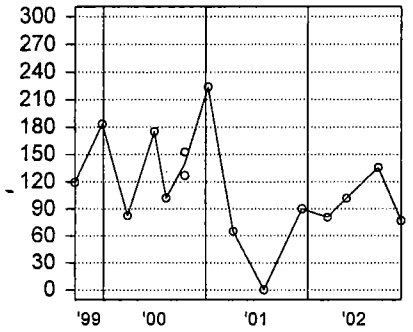
Ethylbenzene
(ug/L)



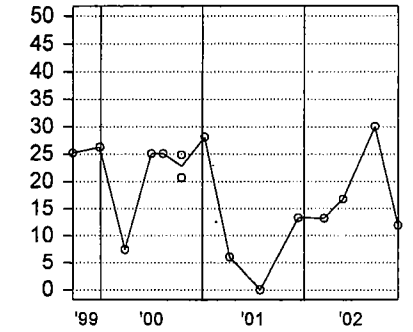
Xylenes
(ug/L)



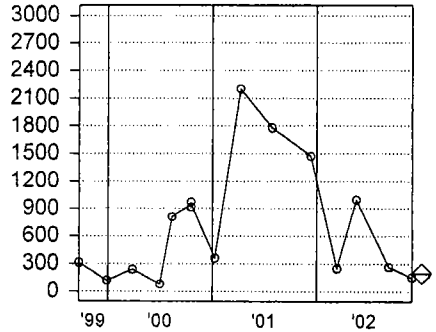
Naphthalene
(ug/L)



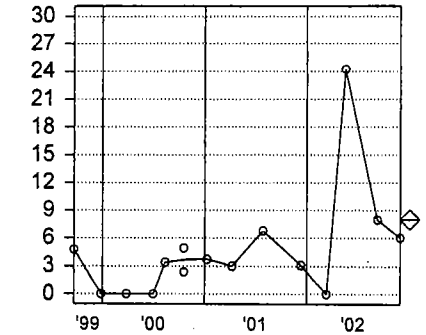
2-Methylnaphthalene
(ug/L)



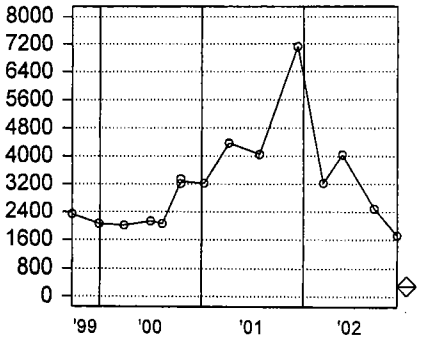
Aluminum
(ug/L)



Arsenic
(ug/L)



Iron
(ug/L)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/03/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-06-2003 X:\MtechData\283\283.WSF

	Lab	Lead	Manganese	Depth to Water							Notes
Units:	-	ug/L	ug/l	Feet							-
NJDEP Criteria:	-	10	50	NLE							-
09/20/1999	FMETL	22.0	14.5	7.20							V,S,P,M
12/27/1999	FMETL	6.92	44.0	6.81							V,S,P,M
03/23/2000	FMETL	15.3	11.9	6.38							V,S,P,M
06/28/2000	FMETL	11.5	8.31	7.83							V,S,P,M
08/10/2000	FMETL	31.9	5.97	6.28							V,S,P,M
10/17/2000	FMETL	14.5	4.68	7.09							V,S,P,M
10/17/2000D	FMETL	15.9	5.06	7.09							V,S,P,M
01/05/2001	FMETL	25.3	6.47	7.32							V,S,P,M
04/04/2001	FMETL	23.0	8.10	4.81							V,S,P,M
07/24/2001	FMETL	12.3	36.0	6.75							V,S,P,M
12/11/2001	FMETL	11.8	15.0	8.54							V,S,P,M
03/08/2002	FMETL	9.02	14.3	7.47							V,S,P,M
05/16/2002	FMETL	7.47	11.2	6.90							V,S,P,M
09/10/2002	FMETL	9.58	6.62	5.93							V,S,P,M
12/03/2002	FMETL	5.84	29.8	5.28							V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/03/2002

NOTES:

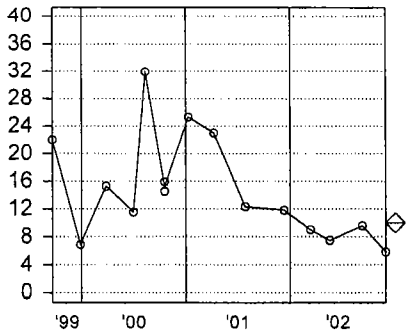
FORT MONMOUTH

GW MONITORING
BLDG. 283

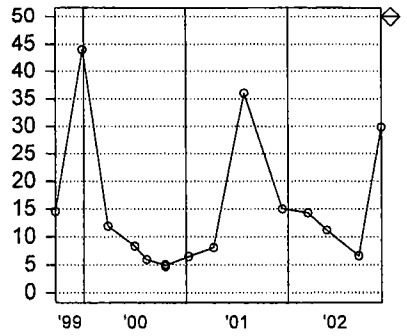
Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

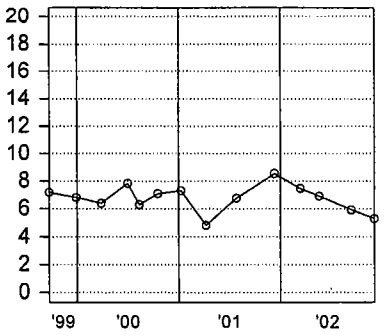
Lead
(ug/L)



Manganese
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 12/03/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-06-2003 X:\MtechData\283\283.WSF

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	50	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	ND	6.94	V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	ND	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	ND	5.75	V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	ND	7.00	V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	ND	7.67	V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	5.30	7.75	7.10	V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	10.2	7.31	6.90	V,S,P,M
09/10/2002	FMETL	ND	393	6.61	10700	ND	35.7	5.55	5.54	6.51	V,S,P,M
12/03/2002	FMETL	3.45	48.3	4.18	1230	9.11	48.2	3.96	5.69	6.31	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 12/03/2002

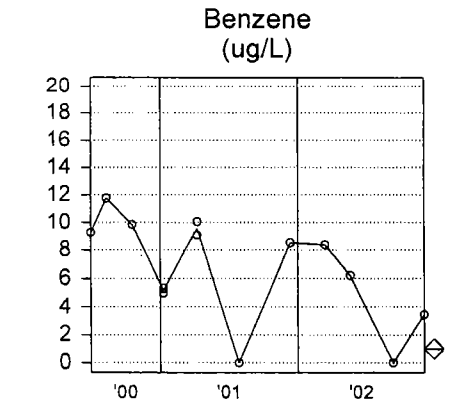
NOTES:

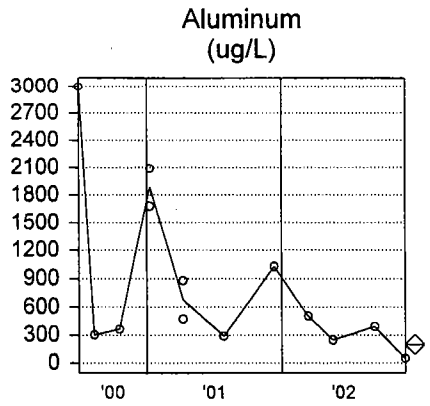
FORT MONMOUTH

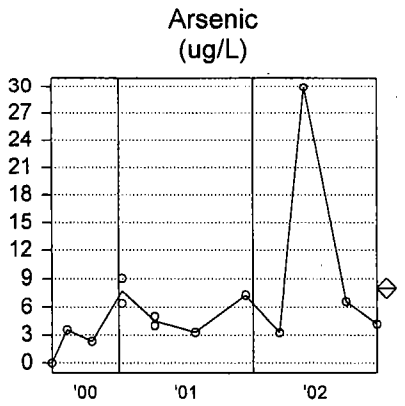
GW MONITORING
BLDG. 283

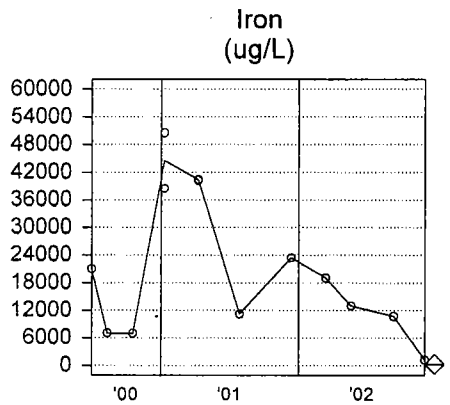
Source 3 of 3

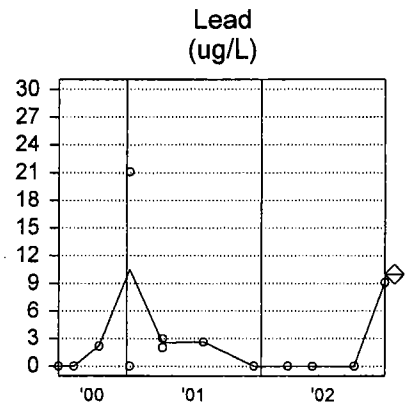
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

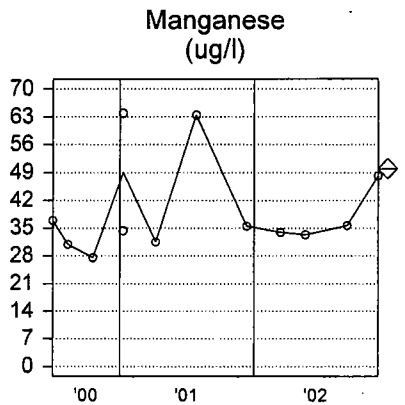


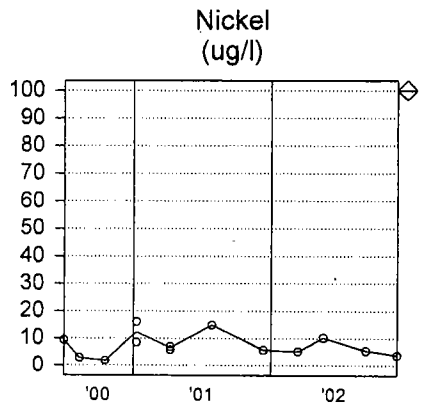


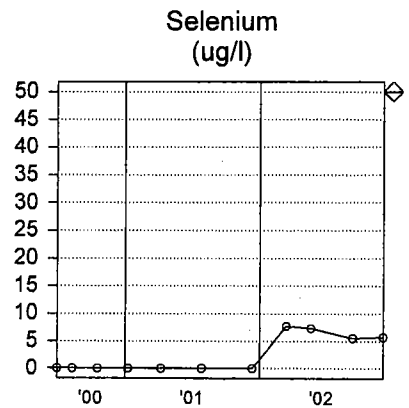


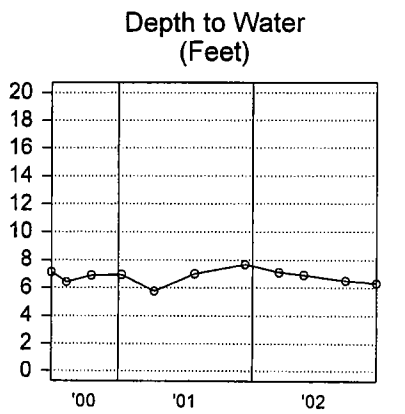












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 12/03/2002

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

02-06-2003 X:\MtechData\283\283.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. 283 #15

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3008604	0283MW01	29-40367	02/27/03
3008605	0283MW02	29-40887	02/27/03
3008606	0283MW03	29-41650	02/27/03

NJDEP Laboratory Certification # 13461

4-18-03

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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. FALLON
Phone #: X126223
(X)DERA ( )OMA ( )Other:_____
Project No:
Location: 283 wells 1st Qrtr '03
Samplers Name / Company: Corey McCormack, TUS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL MHs	Pest/PCB	BN/A+25				Haw Acid	Comments: HCL/HNO3/4°C Remarks / Preservation Method
300,860 01	Trip	2/27/03	0752	AQ	2	✓							—	
02	Field Blank		0900		5	✓	✓	✓	✓				—	
03	Dupe		—		5	✓	✓	✓	✓				—	
04	283 mw01		1044		5	✓	✓	✓	✓				0.0	29-40367
05	283 mw02		1028			✓	✓	✓	✓				0.0	29-40687
06	283 mw03 *		1121			✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	2/27/03 1340	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
Shows T/FB/D w/ 290 same date. con

print legibly

Coc1/10/03

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02/27/03
WEATHER: Overcast and cold.
TIDE: NA

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.12 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 19.63 ft
(19.63) X 0.65 X 3 = 28.52
GALLONS OF H_2O TO BE PURGED: 29 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: 08:37
pH 4.31 su — TEMP 12.71 °C
DISSOLVED O_2 4.11 mg/L — SPECIFIC CONDUCTIVITY 500.7 ms/cm

PURGE END TIME: 10:43
pH 4.70 su — TEMP 12.11 °C
DISSOLVED O_2 3.07 mg/L — SPECIFIC CONDUCTIVITY 476.3 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 5.47 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 29 gal

SAMPLE START TIME: 10:44
pH 4.71 su — TEMP 12.12 °C
DISSOLVED O_2 2.98 mg/L — SPECIFIC CONDUCTIVITY 476.3 ms/cm

SAMPLE END TIME: 10:49

COMMENTS: Low draw down.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02/27/03
WEATHER: Overcast and cold.
TIDE: NA

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 4.70 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.99 ft
(14.99) X 0.65 X 3 = 29.33
GALLONS OF H_2O TO BE PURGED: 29 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: 08:21
pH 4.81 su — TEMP 12.01 °C
DISSOLVED O_2 3.79 mg/L — SPECIFIC CONDUCTIVITY 270.3 ms/cm

PURGE END TIME: 10:27
pH 4.73 su — TEMP 11.76 °C
DISSOLVED O_2 2.17 mg/L — SPECIFIC CONDUCTIVITY 213.9 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.85 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 29 gal

SAMPLE START TIME: 10:28
pH 4.74 su — TEMP 11.77 °C
DISSOLVED O_2 2.18 mg/L — SPECIFIC CONDUCTIVITY 214.1 ms/cm

SAMPLE END TIME: 10:33

COMMENTS: Strong odor. No Hnu hits.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02/27/03
WEATHER: Overcast and cold.
TIDE: NA

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.94 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 18.11 ft
(18.11) X 0.65 X 3 = 35.31
GALLONS OF H_2O TO BE PURGED: 35 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: 08:48
pH 5.27 su — TEMP 12.11 °C
DISSOLVED O_2 3.52 mg/L — SPECIFIC CONDUCTIVITY 271.9 ms/cm

PURGE END TIME: 11:20
pH 5.20 su — TEMP 11.70 °C
DISSOLVED O_2 2.38 mg/L — SPECIFIC CONDUCTIVITY 249.7 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.66 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 35 gal

SAMPLE START TIME: 11:21
pH 5.20 su — TEMP 11.70 °C
DISSOLVED O_2 2.37 mg/L — SPECIFIC CONDUCTIVITY 249.9 ms/cm

SAMPLE END TIME: 11:27

COMMENTS: DUP. Here. Cloudy.

VOLATILE ORGANICS

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 #13461

Data File	**VB013092.D**	Sample Name	**MB 12Mar03**
Operator	**Skelton**	Field ID	**MB 12Mar03**
Date Acquired	**12 Mar 2003 2:10 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

MB 12Mar03

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 12Mar03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013092.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. Date Analyzed: 3/12/2003

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	**VB013116.D**	Sample Name	**3008601**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**13 Mar 2003 6:26 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.60	293780	2.45 ug/L	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Trip Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3008601

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013116.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. Date Analyzed: 3/13/2003

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	**VB013117.D**	Sample Name	**3008602**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**13 Mar 2003 7:06 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.60	267365	2.24 ug/L	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3008602

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013117.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. Date Analyzed: 3/13/2003

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	**VB013118.D**	Sample Name	**3008603**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**13 Mar 2003 7:47 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	18.05	2016153	7.81 ug/L	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Dupe

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3008603

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013118.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. Date Analyzed: 3/13/2003

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	**VB013119.D**	Sample Name	**3008604**
Operator	**Skelton**	Field ID	**283MW01**
Date Acquired	**13 Mar 2003 8:27 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3008604

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013119.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. _____ Date Analyzed: 3/13/2003

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	**VB013120.D**	Sample Name	**3008605**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Mar 2003 9:07 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone	9.33	172210	5.23 ug/L	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.39	423666	3.46 ug/L	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	18.05	28970734	106.77 ug/L	1	0.23 ug/L	2.00 ug/L	E
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene	23.10	29953003	100.95 ug/L	1000	0.37 ug/L	2.00 ug/L	E
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	26.84	48120254	159.79 ug/L	700	0.65 ug/L	2.00 ug/L	E
1330-20-7	m+p-Xylenes	27.13	49821501	455.66 ug/L	nle	1.14 ug/L	4.00 ug/L	E
95-47-6	o-Xylene	28.12	52134708	232.76 ug/L	nle	0.62 ug/L	2.00 ug/L	E
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB013123.D**	Sample Name	**3008605**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Mar 2003 11:10 am**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	18.50 ug/L	200.00 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	200.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	200.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	20.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	20.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	20.00 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	20.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	20.00 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	20.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	20.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	20.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	20.00 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	20.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	20.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	20.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	20.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	20.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	20.00 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	20.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	20.00 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	20.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	20.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	20.00 ug/L	
71-43-2	Benzene	18.06	3280347	123.79 ug/L	1	2.30 ug/L	20.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	20.00 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	20.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	20.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	5.50 ug/L	20.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	20.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	20.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	20.00 ug/L	
108-88-3	Toluene	23.11	3561977	122.91 ug/L	1000	3.70 ug/L	20.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	20.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	20.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	20.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	20.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	20.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	20.00 ug/L	
100-41-4	Ethylbenzene	26.86	14210126	520.56 ug/L	700	6.50 ug/L	20.00 ug/L	E D
1330-20-7	m+p-Xylenes	27.14	15944343	1608.74 ug/L	nle	11.40 ug/L	40.00 ug/L	E D
95-47-6	o-Xylene	28.15	22019889	1084.57 ug/L	nle	6.20 ug/L	20.00 ug/L	E D
100-42-5	Styrene			not detected	100	5.60 ug/L	20.00 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	20.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	20.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	20.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	20.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 ug/L	20.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB013124.D**	Sample Name	**3008605**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Mar 2003 11:50 am**	Sample Multiplier	**50**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	92.50 ug/L	1000.00 ug/L	
107131	Acrylonitrile			not detected	50	139.00 ug/L	1000.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	426.00 ug/L	1000.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	8.00 ug/L	100.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	12.50 ug/L	100.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	84.00 ug/L	100.00 ug/L	
74-87-3	Chloromethane			not detected	30	58.00 ug/L	100.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	53.00 ug/L	100.00 ug/L	
74-83-9	Bromomethane			not detected	10	55.00 ug/L	100.00 ug/L	
75-00-3	Chloroethane			not detected	nle	50.50 ug/L	100.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	25.00 ug/L	100.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	12.00 ug/L	100.00 ug/L	
67-64-1	Acetone			not detected	700	68.00 ug/L	100.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	23.00 ug/L	100.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	12.00 ug/L	100.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	8.00 ug/L	100.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	6.00 ug/L	100.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	39.00 ug/L	100.00 ug/L	
78-93-3	2-Butanone			not detected	300	31.00 ug/L	100.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	8.50 ug/L	100.00 ug/L	
67-66-3	Chloroform			not detected	6	15.00 ug/L	100.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	11.50 ug/L	100.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	23.50 ug/L	100.00 ug/L	
71-43-2	Benzene	18.06	693029	135.25 ug/L	1	11.50 ug/L	100.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	9.00 ug/L	100.00 ug/L	
79-01-6	Trichloroethene			not detected	1	11.50 ug/L	100.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	20.00 ug/L	100.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	27.50 ug/L	100.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	32.50 ug/L	100.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	34.50 ug/L	100.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	29.50 ug/L	100.00 ug/L	
108-88-3	Toluene	23.10	770307	137.47 ug/L	1000	18.50 ug/L	100.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	43.50 ug/L	100.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	24.00 ug/L	100.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	16.00 ug/L	100.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	35.50 ug/L	100.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	43.00 ug/L	100.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	19.50 ug/L	100.00 ug/L	
100-41-4	Ethylbenzene	26.86	3095471	560.90 ug/L	700	32.50 ug/L	100.00 ug/L	D
1330-20-7	m+p-Xylenes	27.14	3566412	1779.90 ug/L	nle	57.00 ug/L	200.00 ug/L	D
95-47-6	o-Xylene	28.14	5286731	1287.99 ug/L	nle	31.00 ug/L	100.00 ug/L	D
100-42-5	Styrene			not detected	100	28.00 ug/L	100.00 ug/L	
75-25-2	Bromoform			not detected	4	35.00 ug/L	100.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	23.50 ug/L	100.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	27.50 ug/L	100.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	28.50 ug/L	100.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	32.00 ug/L	100.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW02**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3008605

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013120.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. Date Analyzed: 3/13/2003

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.	unknown hydrocarbon	6.35	690	J
2.	unknown hydrocarbon	7.22	500	J
3. 000563-46-2	1-Butene, 2-methyl-	7.74	190	JN
4. 000107-83-5	Pentane, 2-methyl-	10.91	240	JN
5. 000287-92-3	Cyclopentane	11.10	390	JN
6. 000096-14-0	Pentane, 3-methyl-	11.88	190	JN
7.	unknown hydrocarbon	15.00	760	J
8. 000592-41-6	1-Hexene	17.03	820	JN
9. 000108-87-2	Cyclohexane, methyl-	20.21	200	JN
10.	unknown	31.37	290	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB013121.D**	Sample Name	**3008606**
Operator	**Skelton**	Field ID	**283MW03**
Date Acquired	**13 Mar 2003 9:48 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	18.06	2087546	8.24 ug/L	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes	27.15	190317	1.82 ug/L	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene	28.14	283734	1.32 ug/L	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30086 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3008606

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB013121.D

Level: (low/med) LOW Date Received: 2/27/2003

% Moisture: not dec. Date Analyzed: 3/13/2003

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.		unknown hydrocarbon	6.36	4	J
2.	000096-37-7	Cyclopentane, methyl-	15.01	5	JN
3.	000110-82-7	Cyclohexane	17.04	4	JN
4.	000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	21.26	13	JN
5.	017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	24.03	5	JN
6.	004175-53-5	1H-Indene, 2,3-dihydro-1,3-dimet	24.82	9	JN
7.	017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimet	26.14	8	JN
8.	000091-20-3	Naphthalene	27.82	64	JN
9.	006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimet	30.96	5	JN
10.	000090-12-0	Naphthalene, 1-methyl-	34.84	6	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA07614.D**	Sample Name	**MB-030503**
Operator	**BPatel**	Misc Info	**MB-030503**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA07614.D**	Sample Name	**MB-030503**
Operator	**BPatel**	Misc Info	**MB-030503**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
D= Value from dilution
NLE= No Limit Established
B= Compound in Related Blank
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **MB-030503**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30086 Location: 283 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: MB-030503

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA07614.D

Level: (low/med) LOW Date Received: 2/27/03

% Moisture: _____ decanted: (Y/N) N Date Extracted: 3/5/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/7/03

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	7.20	12	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06282.D**	Sample Name	**3008602**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06282.D**	Sample Name	**3008602**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30086 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3008602

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06282.D

Level: (low/med) LOW Date Received: 2/27/03

% Moisture: decanted: (Y/N) N Date Extracted: 3/5/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/7/03

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	7.62	12	J
2.	unknown	36.06	74	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06283.D**	Sample Name	**3008603**
Operator	**B.Patel**	Misc Info	**Dupe**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06283.D**	Sample Name	**3008603**
Operator	**B.Patel**	Misc Info	**Dupe**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30086 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3008603

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06283.D

Level: (low/med) LOW Date Received: 2/27/03

% Moisture: decanted: (Y/N) N Date Extracted: 3/5/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/7/03

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	7.63	9	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06284.D**	Sample Name	**3008604**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06284.D**	Sample Name	**3008604**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30086 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 3008604

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06284.D

Level: (low/med) LOW Date Received: 2/27/03

% Moisture: _____ decanted: (Y/N) N Date Extracted: 3/5/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/7/03

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	7.66	10	J
2.	unknown	8.40	8	J
3.	unknown	36.05	81	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06285.D**	Sample Name	**3008605**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol	13.30	75024	7.37 ug/L	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene	14.08	674001	21.97 ug/L	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06285.D**	Sample Name	**3008605**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
D= Value from dilution
NLE= No Limit Established
B= Compound in Related Blank
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30086 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3008605

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06285.D

Level: (low/med) LOW Date Received: 2/27/03

% Moisture: decanted: (Y/N) N Date Extracted: 3/5/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/7/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		unknown	5.03	37	J
2.	000590-36-3	2-Pentanol, 2-methyl-	5.30	190	JN
3.	000077-74-7	3-Pentanol, 3-methyl-	5.75	140	JN
4.	000625-23-0	2-Hexanol, 2-methyl-	7.44	140	JN
5.		unknown	7.69	200	J
6.		unknown	7.73	110	J
7.		unknown	8.08	71	J
8.	000590-67-0	Cyclohexanol, 1-methyl-	8.86	86	JN
9.		unknown	8.93	48	J
10.		unknown	9.44	80	J
11.		unknown	9.63	47	J
12.		unknown	9.84	50	J
13.	000622-96-8	Benzene, 1-ethyl-4-methyl-	10.08	170	JN
14.	000611-14-3	Benzene, 1-ethyl-2-methyl-	10.13	86	JN
15.	000526-73-8	Benzene, 1,2,3-trimethyl-	10.23	150	JN
16.	000098-82-8	Benzene, (1-methylethyl)-	10.42	100	JN
17.	000526-73-8	Benzene, 1,2,3-trimethyl-	10.72	280	JN
18.	000095-36-3	1,2,4-Trimethylbenzene	11.23	120	JN
19.	000496-11-7	Indane	11.50	89	JN
20.	000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	11.80	53	JN
21.	000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	12.29	55	JN
22.	002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	13.43	37	JN
23.		unknown	36.06	71	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06286.D**	Sample Name	**3008606**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06286.D**	Sample Name	**3008606**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**7-Mar-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30086 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3008606

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06286.D

Level: (low/med) LOW Date Received: 2/27/03

% Moisture: decanted: (Y/N) N Date Extracted: 3/5/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/7/03

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	7.66	11	J
2.	unknown	36.05	56	J

PEST/PCB's

TABULATED ANALYTICAL REPORT
SW 846 8081

mb 030603

Matrix: Aqueous
Date Extracted: 3/6/03
Ext. Batch: 030603
Filename: 00703.D
Date Analysed: 3/24/03
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	alpha-BHC	U	0.0011
319-85-7	beta-BHC	U	0.0050
58-89-9	gamma-BHC	U	0.0013
319-86-8	delta-BHC	U	0.0016
76-44-8	Heptachlor	U	0.0035
309-00-2	Aldrin	U	0.0026
1024-57-3	Heptachlor epoxide	U	0.0020
5103-71-9	gamma-Chlordane	U	0.0007
5103-74-2	alpha-Chlordane	U	0.0036
959-98-8	Endosulfan I	U	0.0016
72-55-9	4,4'-DDE	U	0.0021
60-57-1	Dieldrin	U	0.0020
72-20-8	Endrin	U	0.0032
33213-65-9	Endosulfan II	U	0.0022
72-54-8	4,4'-DDD	U	0.0020
7421-93-4	Endrin aldehyde	U	0.0100
50-29-3	4,4'-DDT	U	0.0052
1031-07-8	Endosulfan sulfate	U	0.0026
53494-70-5	Endrin ketone	U	0.0026
72-43-5	Methoxychlor	U	0.0100
8001-35-2	Toxaphene	U	0.0157
12674-11-2	Arochlor 1016	U	0.0683
11104-28-2	Arochlor 1221	U	0.0666
11141-16-5	Arochlor 1232	U	0.0648
53469-21-9	Arochlor 1242	U	0.0485
12672-29-6	Arochlor 1248	U	0.0544
11097-69-1	Arochlor 1254	U	0.0608
11096-82-5	Arochlor 1260	U	0.0732

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL

Initial vol. (ml): 1000.00
Final vol. (ml): 10

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells
Field ID: FIELDBLANK
Lab ID: 3008602
Filename: 00705.D
Lab Project : 30086

Location: 283 Wells 1st Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 030603
Date Extracted: 3/6/03
Date Analyzed: 24-Mar-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	**U.S. Army, DPW, SELFM-PW-EV**	**Location:**	**283 Wells 1st Qrtr. '03**
Project Name:	**283 Wells**	**MATRIX:**	**Aqueous**
Field ID:	**Dupe**	**Ext. Batch:**	**030603**
Lab ID:	**3008603**	**Date Extracted:**	**3/6/03**
Filename:	**00706.D**	**Date Analyzed:**	**24-Mar-03**
Lab Project :	**30086**	**Dilution:**	**1**
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	**U.S. Army, DPW, SELFM-PW-EV**	**Location:**	**283 Wells 1st Qrtr. '03**
Project Name:	**283 Wells**	**MATRIX:**	**Aqueous**
Field ID:	**283 MW01**	**Ext. Batch:**	**030603**
Lab ID:	**3008604**	**Date Extracted:**	**3/6/03**
Filename:	**00707.D**	**Date Analyzed:**	**24-Mar-03**
Lab Project :	**30086**	**Dilution:**	**1**
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	**U.S. Army, DPW, SELFM-PW-EV**	**Location:**	**283 Wells 1st Qrtr. '03**
Project Name:	**283 Wells**	**MATRIX:**	**Aqueous**
Field ID:	**283 MW02**	**Ext. Batch:**	**030603**
Lab ID:	**3008605**	**Date Extracted:**	**3/6/03**
Filename:	**00708.D**	**Date Analyzed:**	**24-Mar-03**
Lab Project :	**30086**	**Dilution:**	**1**
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	**U.S. Army, DPW, SELFM-PW-EV**	**Location:**	**283 Wells 1st Qrtr. '03**
Project Name:	**283 Wells**	**MATRIX:**	**Aqueous**
Field ID:	**283 MW03**	**Ext. Batch:**	**030603**
Lab ID:	**3008606**	**Date Extracted:**	**3/6/03**
Filename:	**00709.D**	**Date Analyzed:**	**24-Mar-03**
Lab Project :	**30086**	**Dilution:**	**1**
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

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 #: 30086
Sample Prepared: 03/04/03

Site: 283
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/05/03	63.5	200	10.0
Antimony	03/05/03	ND	20	2.0
Arsenic	03/05/03	ND	8	2.0
Barium	03/05/03	1.11	2000	0.5
Beryllium	03/05/03	ND	20	0.5
Cadmium	03/05/03	1.26	4	0.5
Calcium	03/05/03	133	NLE	20.0
Chromium	03/05/03	1.33	100	0.5
Cobalt	03/05/03	ND	NLE	0.5
Copper	03/05/03	4.58	1000	2.0
Iron	03/05/03	ND	300	10.0
Lead	03/05/03	2.46	10	1.0
Magnesium	03/05/03	30.5	NLE	10.0
Manganese	03/05/03	2.82	50	0.5
Mercury	03/07/03	ND	2	0.1
Nickel	03/05/03	ND	100	1.0
Potassium	03/05/03	467	NLE	40.0
Selenium	03/05/03	3.90	50	3.0
Silver	03/05/03	ND	20	1.0
Sodium	03/05/03	368	50000	20.0
Thallium	03/05/03	ND	10	2.0
Vanadium	03/05/03	ND	NLE	0.5
Zinc	03/05/03	8.60	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 #: 3008602
Sample Received: 02/27/03
Sample Matrix: Aqueous

Site: 283

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/05/03	13.0	200	10.0
Antimony	03/05/03	ND	20	2.0
Arsenic	03/05/03	ND	8	2.0
Barium	03/05/03	ND	2000	0.5
Beryllium	03/05/03	ND	20	0.5
Cadmium	03/05/03	ND	4	0.5
Calcium	03/05/03	66.2	NLE	20.0
Chromium	03/05/03	1.32	100	0.5
Cobalt	03/05/03	ND	NLE	0.5
Copper	03/05/03	2.58	1000	2.0
Iron	03/05/03	78.6	300	2.0
Lead	03/05/03	ND	10	2.0
Magnesium	03/05/03	ND	NLE	10.0
Manganese	03/05/03	ND	50	0.5
Mercury	03/07/03	ND	2	0.1
Nickel	03/05/03	ND	100	1.0
Potassium	03/05/03	87.7	NLE	40.0
Selenium	03/05/03	ND	50	3.0
Silver	03/05/03	ND	20	1.0
Sodium	03/05/03	933	50000	20.0
Thallium	03/05/03	ND	10	2.0
Vanadium	03/05/03	ND	NLE	0.5
Zinc	03/05/03	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 #: 3008603
Sample Received: 02/27/03
Sample Matrix: Aqueous

Site: 283

Field ID#: Dupe

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/05/03	92.3	200	10.0
Antimony	03/05/03	ND	20	2.0
Arsenic	03/05/03	ND	8	2.0
Barium	03/05/03	59.6	2000	0.5
Beryllium	03/05/03	ND	20	0.5
Cadmium	03/05/03	0.870	4	0.5
Calcium	03/05/03	10500	NLE	20.0
Chromium	03/05/03	2.59	100	0.5
Cobalt	03/05/03	0.682	NLE	0.5
Copper	03/05/03	10.5	1000	2.0
Iron	03/05/03	5560	300	2.0
Lead	03/05/03	ND	10	2.0
Magnesium	03/05/03	1980	NLE	10.0
Manganese	03/05/03	33.7	50	0.5
Mercury	03/07/03	ND	2	0.1
Nickel	03/05/03	4.54	100	1.0
Potassium	03/05/03	7210	NLE	40.0
Selenium	03/05/03	ND	50	3.0
Silver	03/05/03	2.82	20	1.0
Sodium	03/05/03	7710	50000	20.0
Thallium	03/05/03	ND	10	2.0
Vanadium	03/05/03	ND	NLE	0.5
Zinc	03/05/03	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 #: 3008604
Sample Received: 02/27/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/05/03	3130	200	10.0
Antimony	03/05/03	ND	20	2.0
Arsenic	03/05/03	ND	8	2.0
Barium	03/05/03	87.9	2000	0.5
Beryllium	03/05/03	0.699	20	0.5
Cadmium	03/05/03	0.836	4	0.5
Calcium	03/05/03	8590	NLE	20.0
Chromium	03/05/03	1.62	100	0.5
Cobalt	03/05/03	4.65	NLE	0.5
Copper	03/05/03	7.22	1000	2.0
Iron	03/05/03	ND	300	2.0
Lead	03/05/03	ND	10	2.0
Magnesium	03/05/03	17900	NLE	10.0
Manganese	03/05/03	40.6	50	0.5
Mercury	03/07/03	ND	2	0.1
Nickel	03/05/03	11.2	100	1.0
Potassium	03/05/03	4810	NLE	40.0
Selenium	03/05/03	ND	50	3.0
Silver	03/05/03	ND	20	1.0
Sodium	03/05/03	49000	50000	20.0
Thallium	03/05/03	ND	10	2.0
Vanadium	03/05/03	ND	NLE	0.5
Zinc	03/05/03	76.7	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 #: 3008605
Sample Received: 02/27/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/05/03	235	200	10.0
Antimony	03/05/03	ND	20	2.0
Arsenic	03/05/03	2.59	8	2.0
Barium	03/05/03	54.8	2000	0.5
Beryllium	03/05/03	ND	20	0.5
Cadmium	03/05/03	ND	4	0.5
Calcium	03/05/03	1720	NLE	20.0
Chromium	03/05/03	3.15	100	0.5
Cobalt	03/05/03	ND	NLE	0.5
Copper	03/05/03	7.25	1000	2.0
Iron	03/05/03	1230	300	2.0
Lead	03/05/03	17.1	10	2.0
Magnesium	03/05/03	917	NLE	10.0
Manganese	03/05/03	6.39	50	0.5
Mercury	03/07/03	ND	2	0.1
Nickel	03/05/03	3.06	100	1.0
Potassium	03/05/03	1120	NLE	40.0
Selenium	03/05/03	6.98	50	3.0
Silver	03/05/03	ND	20	1.0
Sodium	03/05/03	13300	50000	20.0
Thallium	03/05/03	ND	10	2.0
Vanadium	03/05/03	0.654	NLE	0.5
Zinc	03/05/03	18.8	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 #: 3008606
Sample Received: 02/27/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	03/05/03	64.0	200	10.0
Antimony	03/05/03	ND	20	2.0
Arsenic	03/05/03	2.74	8	2.0
Barium	03/05/03	76.7	2000	0.5
Beryllium	03/05/03	ND	20	0.5
Cadmium	03/05/03	ND	4	0.5
Calcium	03/05/03	10700	NLE	20.0
Chromium	03/05/03	0.911	100	0.5
Cobalt	03/05/03	0.831	NLE	0.5
Copper	03/05/03	3.33	1000	2.0
Iron	03/05/03	6360	300	2.0
Lead	03/05/03	ND	10	2.0
Magnesium	03/05/03	2030	NLE	10.0
Manganese	03/05/03	33.5	50	0.5
Mercury	03/07/03	ND	2	0.1
Nickel	03/05/03	4.68	100	1.0
Potassium	03/05/03	7530	NLE	40.0
Selenium	03/05/03	ND	50	3.0
Silver	03/05/03	ND	20	1.0
Sodium	03/05/03	7950	50000	20.0
Thallium	03/05/03	ND	10	2.0
Vanadium	03/05/03	ND	NLE	0.5
Zinc	03/05/03	14.4	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

LTM

	Lab	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Silver	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	200	8	300	10	50	100	50	20	NLE	-
06/28/2000	FMETL	2070	ND	1450	ND	22.2	10.4	ND	ND	6.31	V,S,P,M
08/10/2000	FMETL	1930	ND	739	2.38	23.8	5.91	ND	ND	5.54	V,S,P,M
10/17/2000	FMETL	2120	ND	306	1.85	21.8	5.56	ND	ND	6.07	V,S,P,M
01/05/2001	FMETL	2460	ND	868	ND	26.0	4.89	ND	ND	6.11	V,S,P,M
04/04/2001	FMETL	2350	ND	410	3.00	34.7	12.0	ND	2.00	4.62	V,S,P,M
07/24/2001	FMETL	3150	ND	575	3.03	55.2	20.4	7.93	ND	6.25	V,S,P,M
07/24/2001D	FMETL	3160	ND	576	1.18	34.3	10.4	12.5	ND	6.25	V,S,P,M
12/11/2001	FMETL	3600	ND	4490	7.83	29.3	12.5	ND	ND	7.15	V,S,P,M
03/08/2002	FMETL	3520	ND	897	1.36	36.1	11.9	10.4	ND	6.43	V,S,P,M
05/16/2002	FMETL	3330	27.7	577	ND	33.9	10.9	13.7	ND	6.14	V,S,P,M
09/10/2002	FMETL	3350	3.16	692	ND	33.1	11.9	8.98	ND	5.91	V,S,P,M
12/03/2002	FMETL	3190	ND	281	ND	43.2	13.4	10.6	4.44	5.37	V,S,P,M
02/27/2003	FMETL	3130	ND	ND	ND	40.6	11.2	ND	ND	5.12	V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 02/27/2003

NOTES:

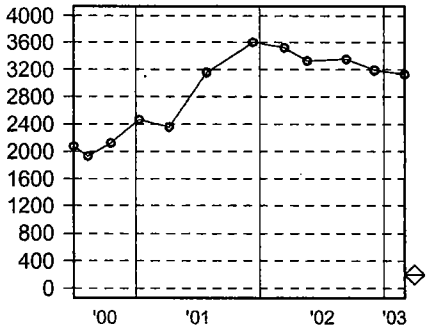
FORT MONMOUTH

GW MONITORING
BLDG. 283

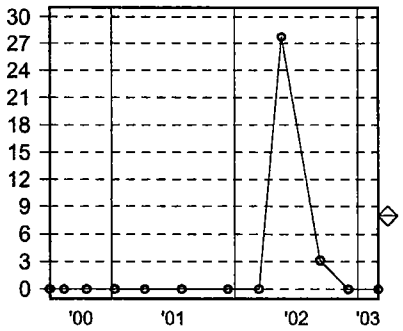
Source 2 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

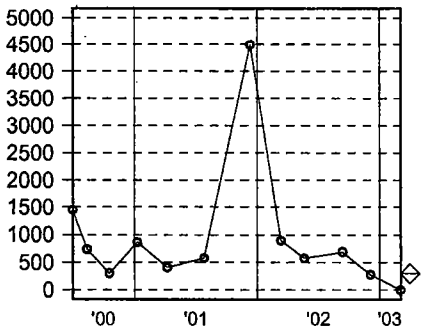
Aluminum (ug/L)



Arsenic (ug/L)



Iron (ug/L)



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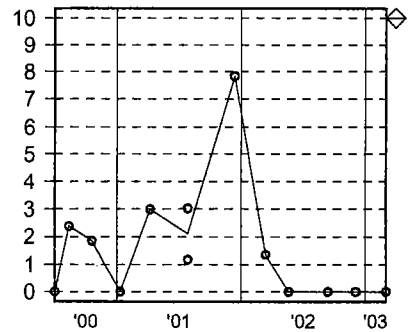
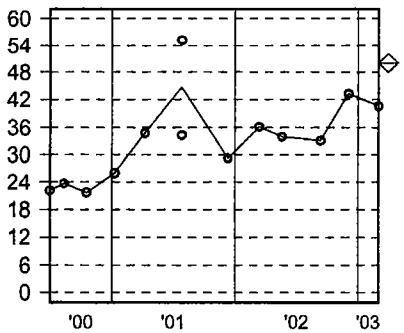
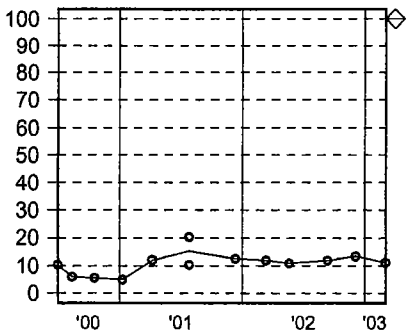


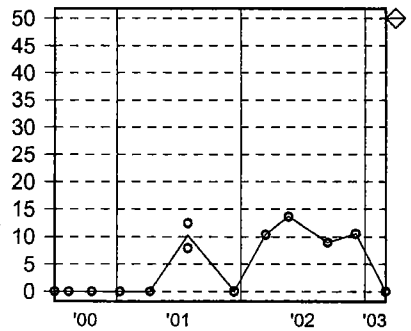
Manganese (ug/l)



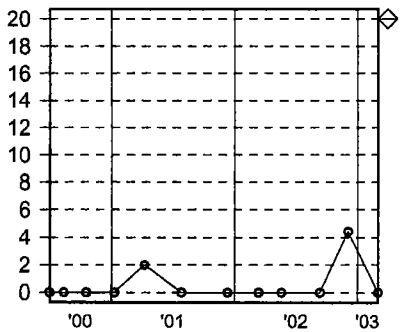
Nickel (ug/l)



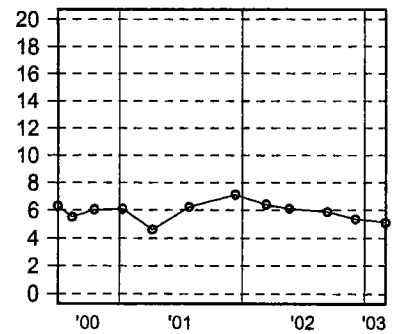
Selenium (ug/l)



Silver (ug/l)



Depth to Water (Feet)



SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 02/27/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-18-2003 X:\MtechData\283\283.WSF

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	Naphtha lene	2-Methyl naphtha lene	Aluminum	Arsenic	Iron	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	1	1000	700	40	NLE	NLE	200	8	300	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	119.2	25.25	309	4.74	2330	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	183.38	26.28	123	ND	2060	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	82.44	7.43	241	ND	2010	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	174.92	25.10	81.4	ND	2130	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	101.97	25.13	812	3.40	2060	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	152.89	24.87	917	2.38	3340	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	126.93	20.73	973	4.89	3210	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	223.45	28.12	360	3.72	3220	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	65.12	6.10	2200	3.00	4360	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	ND	ND	1780	6.78	4050	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	89.93	13.36	1470	3.09	7120	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	80.67	13.24	249	ND	3220	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	101.90	16.78	996	24.2	4040	V,S,P,M
09/10/2002	FMETL	223.80	94.08	476.21	1910.78	135.69	30.03	267	7.95	2490	V,S,P,M
12/03/2002	FMETL	119.4	39.32	349.99	970.72	76.68	11.88	157	6.04	1720	V,S,P,M
02/27/2003	FMETL	123.79	122.91	560.9	3067.89	21.97	ND	235	2.59	1230	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 02/27/2003

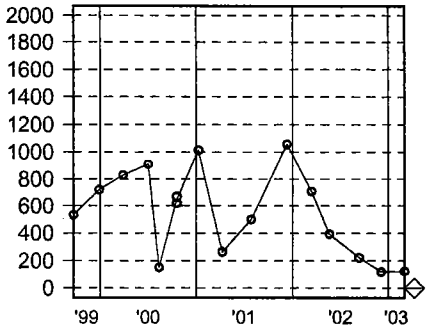
NOTES:

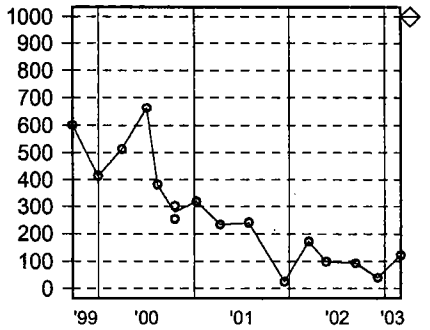
FORT MONMOUTH

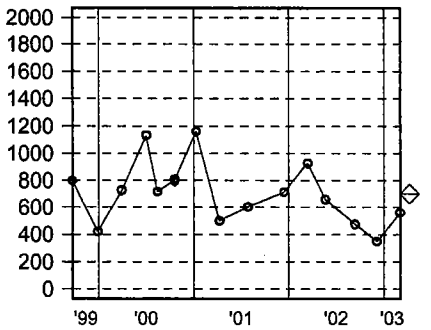
GW MONITORING
BLDG. 283

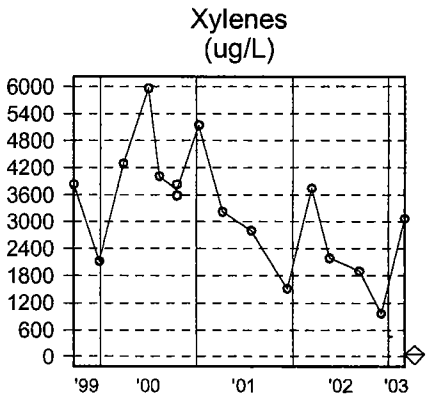
Source 1 of 3

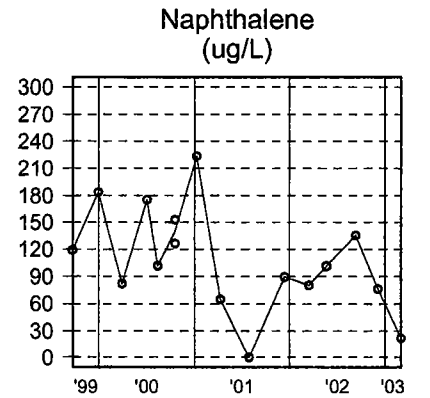
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

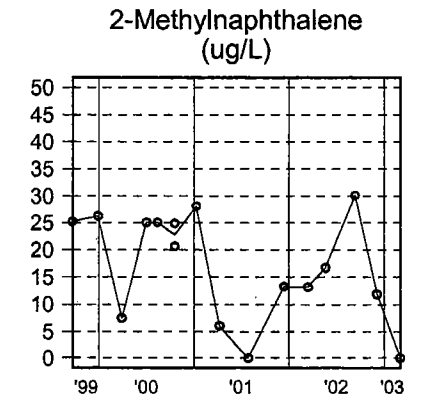


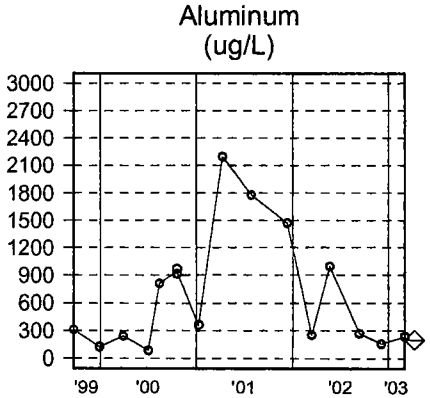


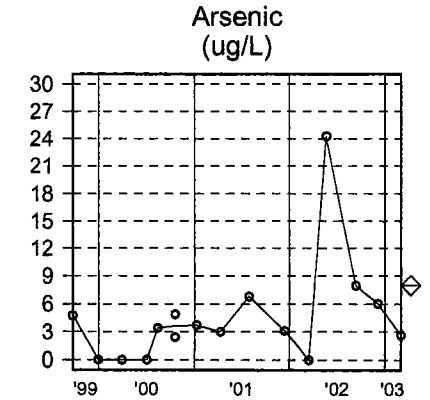


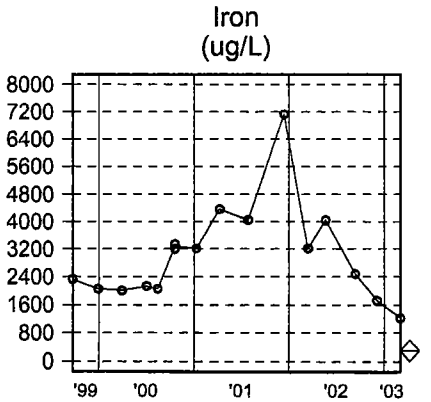












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 02/27/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

04-18-2003 X:\MtechData\283\283.WSF

	Lab	Lead	Manganese	Nickel	Selenium	Depth to Water					Notes
Units:	-	ug/L	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	10	50	100	50	NLE					-
09/20/1999	FMETL	22.0	14.5	4.11	6.49	7.20					V,S,P,M
12/27/1999	FMETL	6.92	44.0	3.62	4.73	6.81					V,S,P,M
03/23/2000	FMETL	15.3	11.9	6.43	7.29	6.38					V,S,P,M
06/28/2000	FMETL	11.5	8.31	6.01	4.36	7.83					V,S,P,M
08/10/2000	FMETL	31.9	5.97	ND	8.40	6.28					V,S,P,M
10/17/2000	FMETL	14.5	4.68	ND	6.69	7.09					V,S,P,M
10/17/2000D	FMETL	15.9	5.06	ND	6.23	7.09					V,S,P,M
01/05/2001	FMETL	25.3	6.47	2.85	6.22	7.32					V,S,P,M
04/04/2001	FMETL	23.0	8.10	5.00	5.00	4.81					V,S,P,M
07/24/2001	FMETL	12.3	36.0	12.2	30.0	6.75					V,S,P,M
12/11/2001	FMETL	11.8	15.0	8.52	ND	8.54					V,S,P,M
03/08/2002	FMETL	9.02	14.3	4.99	13.4	7.47					V,S,P,M
05/16/2002	FMETL	7.47	11.2	3.70	15.7	6.90					V,S,P,M
09/10/2002	FMETL	9.58	6.62	2.12	11.1	5.93					V,S,P,M
12/03/2002	FMETL	5.84	29.8	1.56	6.81	5.28					V,S,P,M
02/27/2003	FMETL	17.1	6.39	3.06	6.98	4.70					V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 02/27/2003

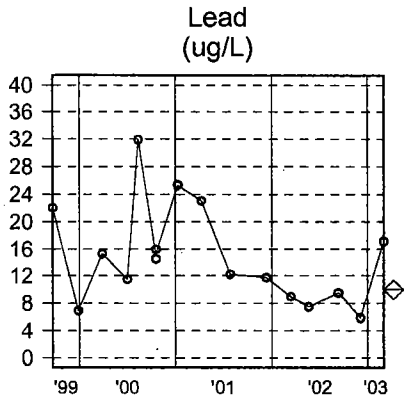
NOTES:

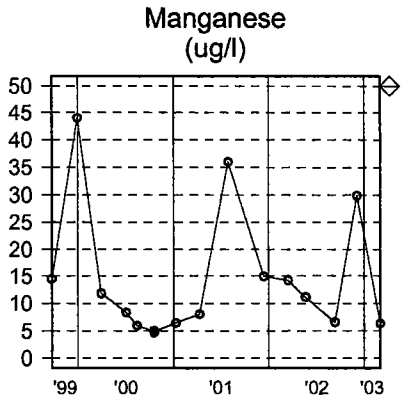
FORT MONMOUTH

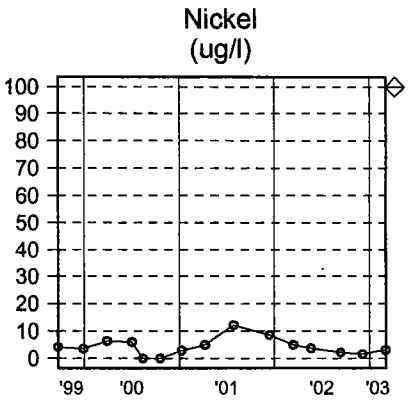
GW MONITORING
BLDG. 283

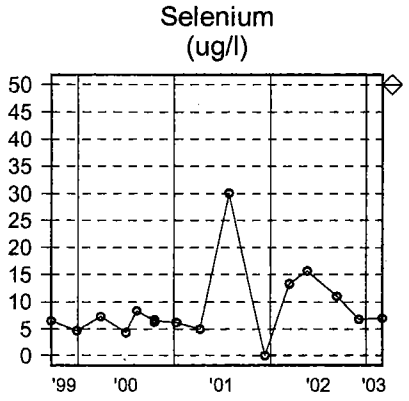
Source 1 of 3

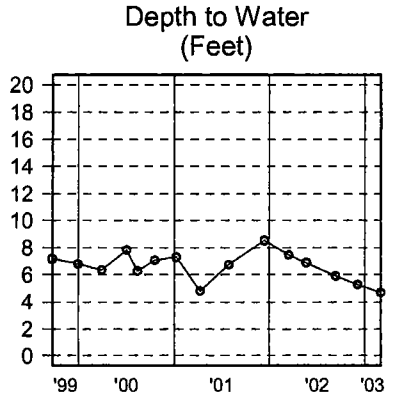
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 02/27/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	200	8	300	10	50	100	50	NLE	-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	ND	7.12	V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	ND	6.41	V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	ND	6.88	V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	ND	6.94	V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	ND	6.94	V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	ND	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	ND	5.75	V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	ND	7.00	V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	ND	7.67	V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	5.30	7.75	7.10	V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	10.2	7.31	6.90	V,S,P,M
09/10/2002	FMETL	ND	393	6.61	10700	ND	35.7	5.55	5.54	6.51	V,S,P,M
12/03/2002	FMETL	3.45	48.3	4.18	1230	9.11	48.2	3.96	5.69	6.31	V,S,P,M
02/27/2003	FMETL	8.24	64.0	2.74	6360	ND	33.5	4.68	ND	5.94	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 02/27/2003

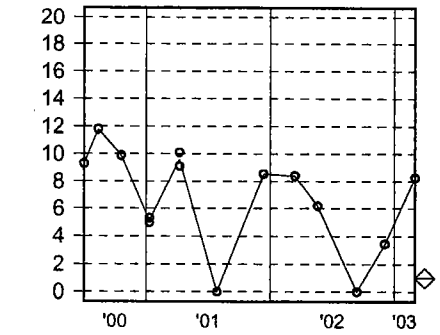
NOTES:

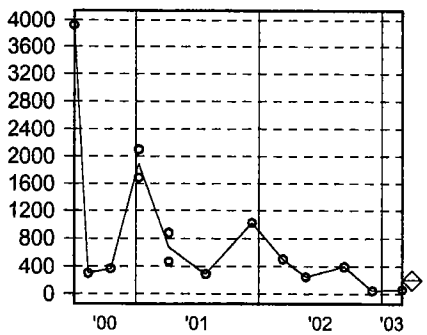
FORT MONMOUTH

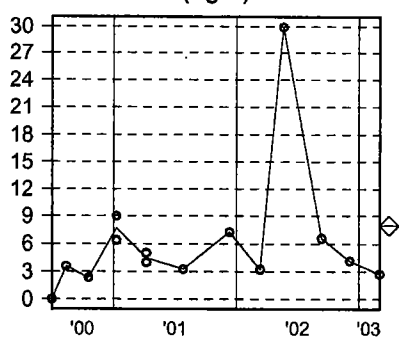
GW MONITORING
BLDG. 283

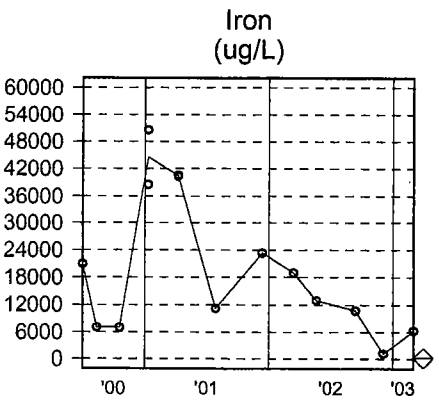
Source 3 of 3

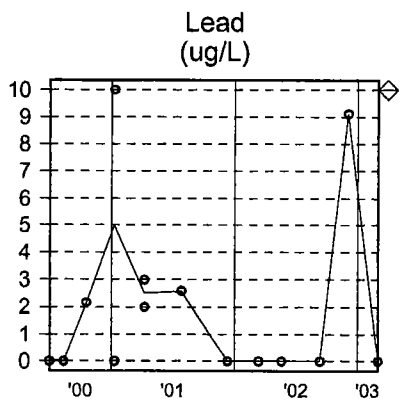
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

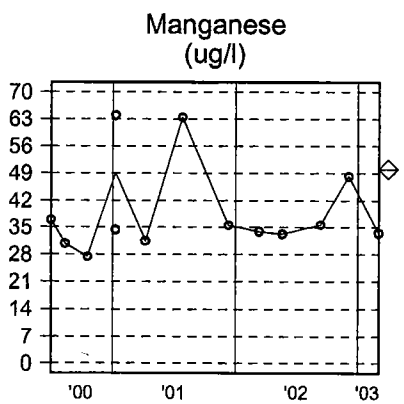


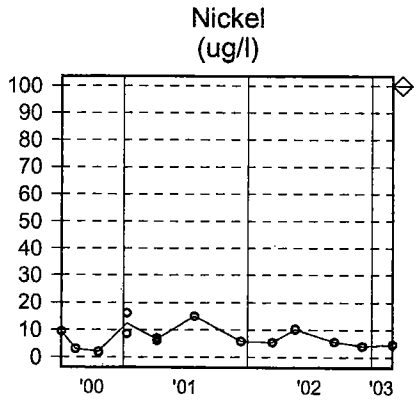


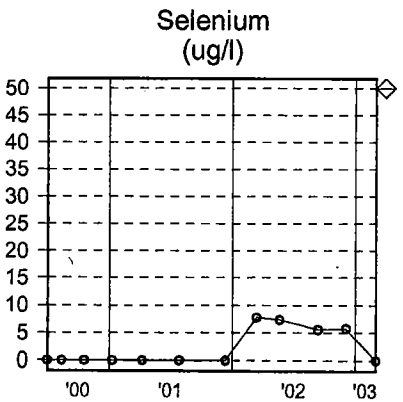


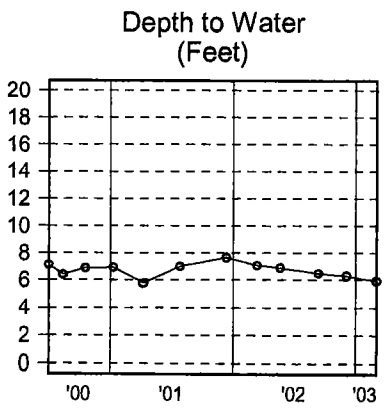












04-18-2003 X:\MtechData\283\283.WSF

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 02/27/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #16

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3023601	0283MW01	29-40367	05/19/03
3023601	0283MW02	29-40887	05/19/03
3023601	0283MW03	29-41650	05/19/03

NJDEP Laboratory Certification # 13461

6-19-03

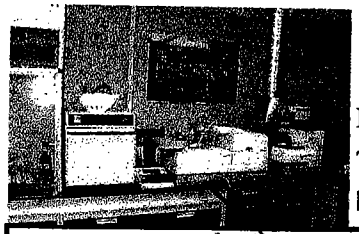
Daniel Wright/Date:
Laboratory Director

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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: D. Deasi
Phone #: 12 1475
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells
2nd Qtr '03

Samplers Name / Company: Corey McCormach, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	Analysis Parameters: 1,0 HS	TAL MHs	Pest / PCB	BNA+25				Hexavalent Cr	Comments: Remarks / Preservation Method
302360 01	283 mw01	5/19/03	1007	AQ	5	✓	✓	✓	✓				0.0	HCL/HNO3 /4°C 29-40367
02	283 mw02		1000			✓	✓	✓	✓				0.0	29-40887
03	283 mw03		1034			✓	✓	✓	✓				0.0	29-41650

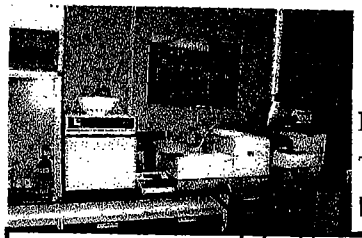
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McComb	5/19/03 1430				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (_)Reduced, (X)Standard, (_)Screen / non-certified, (_)EDD
Turnaround time: (X)Standard 3 wks, (_)Rush ____ Days, (_)ASAP Verbal ____ Hrs.

Remarks: Tide: L
Shares T/FB/D from 296 same date. CPM

print legibly

COC.XLS4/22/2003



Fort Monmouth Environmental Testing Laboratory

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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 #: X24223
(X)DERA ( )OMA ( )Other:_____
Project No:
Location: 296 wells
2nd Qtr '03
Samplers Name / Company: Corey McCormach, TVS

LIMS/Work Order #		Sample Location	Date	Time	Sample Type	# bottles	110+15	TAL Mtls	Pest / PCB	BNA+25				Hw Head	Comments: HCL/HNO3/4°C Remarks / Preservation Method
30234	01	Trip	5/19/03	0720	AQ	2	✓							1	
	02	Field Blank		0845		5	✓	✓	✓	✓				1	
	03	Dupe		—		5	✓	✓	✓	✓				1	
	04	296 mw 01		0930		5	✓	✓	✓	✓				0.0	29 - 30979
	05	296 mw 02		0925			✓	✓	✓	✓				0.0	29 - 30980
	06	296 mw 03		1330			✓	✓	✓	✓				0.0	29 - 30975
	07	296 mw 04		1345			✓	✓	✓	✓				0.0	29 - 30989
	08	296 mw 05 *		1338			✓	✓	✓	✓				0.0	29 - 30978
	09	296 mw 07		0944			✓	✓	✓	✓				0.0	29 - 30973
	10	296 mw 08		0938			✓	✓	✓	✓				0.0	29 - 30974

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormach	5/19/03 1430	J. Wright			
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: Shows T/FB/D w/ MW, 290, 283 same date CPM
Tide: L

print legibly

COC XLS 4/22/2003

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/19/03
WEATHER: Sunny and cool.
TIDE: Low.

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.02 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 13.73 ft
(13.73) X 0.65 X 3 = 26.77
GALLONS OF H_2O TO BE PURGED: 27 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: 07:59
pH 4.76 su — TEMP 12.63 °C
DISSOLVED O_2 3.61 mg/L — SPECIFIC CONDUCTIVITY 421.7 ms/cm

PURGE END TIME: 09:56
pH 4.50 su — TEMP 12.51 °C
DISSOLVED O_2 3.17 mg/L — SPECIFIC CONDUCTIVITY 387.6 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.43 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 10:07
pH 4.50 su — TEMP 12.50 °C
DISSOLVED O_2 2.16 mg/L — SPECIFIC CONDUCTIVITY 386.7 ms/cm

SAMPLE END TIME: 10:13

COMMENTS: Low draw down.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/19/03
WEATHER: Sunny and cool.
TIDE: Low.

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.46 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 13.23 ft
(13.23) X 0.65 X 3 = 25.79
GALLONS OF H_2O TO BE PURGED: 26 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: 07:55
pH 4.76 su — TEMP 12.32 °C
DISSOLVED O_2 2.91 mg/L — SPECIFIC CONDUCTIVITY 310.4 ms/cm

PURGE END TIME: 09:48
pH 4.68 su — TEMP 12.20 °C
DISSOLVED O_2 1.09 mg/L — SPECIFIC CONDUCTIVITY 476.1 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 11.40 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 26 gal

SAMPLE START TIME: 10:00
pH 4.69 su — TEMP 12.19 °C
DISSOLVED O_2 1.11 mg/L — SPECIFIC CONDUCTIVITY 475.8 ms/cm

SAMPLE END TIME: 10:05

COMMENTS: Strong odor after purge.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/19/03
WEATHER: Sunny and cool.
TIDE: Low.

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.77 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 17.28 ft
(17.28) X 0.65 X 3 = 33.69
GALLONS OF H_2O TO BE PURGED: 34 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: 08:05
pH 5.55 su — TEMP 12.21 °C
DISSOLVED O_2 3.71 mg/L — SPECIFIC CONDUCTIVITY 280.7 ms/cm

PURGE END TIME: 10:33
pH 5.27 su — TEMP 12.10 °C
DISSOLVED O_2 2.57 mg/L — SPECIFIC CONDUCTIVITY 257.6 ms/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.21 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 34 gal

SAMPLE START TIME: 10:34
pH 5.26 su — TEMP 12.11 °C
DISSOLVED O_2 2.58 mg/L — SPECIFIC CONDUCTIVITY 258.4 ms/cm

SAMPLE END TIME: 10:39

COMMENTS: Cloudy, white while bailing.

VOLATILE ORGANICS

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	**VC009471.D**	Sample Name	**MB 28May03**
Operator	**Skelton**	Field ID	**MB 28May03**
Date Aquired	**28-May-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values
*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
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 28May03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30236 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 28May03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC009471.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: not dec. Date Analyzed: 5/28/2003

GC Column: ZB-624 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	VC009483.D	Sample Name	3023401
Operator	Skelton	Field ID	Trip Blank
Date Aquired	28-May-03	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30234 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3023401

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC009483.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: not dec. Date Analyzed: 5/28/2003

GC Column: ZB-624 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	VC009484.D	Sample Name	3023402
Operator	Skelton	Field ID	Field Blank
Date Aquired	28-May-03	Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values
*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30234 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3023402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC009484.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: not dec. _____ Date Analyzed: 5/28/2003

GC Column: ZB-624 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	**VC009497.D**	Sample Name	**3023601**
Operator	**Skelton**	Field ID	**283MW01**
Date Aquired	**29-May-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30236 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3023601

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC009497.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: not dec. Date Analyzed: 5/29/2003

GC Column: ZB-624 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	**VC009498.D**	Sample Name	**3023602**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**29-May-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	16.92	16498106	110.40 ug/L	1	0.23 ug/L	2.00 ug/L	E
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene	21.59	4177997	27.19 ug/L	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.18	33631257	175.74 ug/L	700	0.65 ug/L	2.00 ug/L	E
1330-20-7	m+p-Xylenes	25.48	29562574	1663.60 ug/L	nle	1.14 ug/L	2.00 ug/L	E
1330-20-7	o-Xylene	26.45	28537567	940.14 ug/L	nle	0.62 ug/L	2.00 ug/L	E
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values
*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
R.L. = Reporting Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC009506.D**	Sample Name	**3023602**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**29-May-03**	Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	2.00 ug/L	
71-43-2	Benzene	16.91	753479	112.54 ug/L	1	4.60 ug/L	2.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	2.00 ug/L	
108-88-3	Toluene	21.58	168302	24.44 ug/L	1000	7.40 ug/L	2.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.20	1671953	215.60 ug/L	700	13.00 ug/L	2.00 ug/L	D
1330-20-7	m+p-Xylenes	25.47	1125310	1562.72 ug/L	nle	22.80 ug/L	2.00 ug/L	D
1330-20-7	o-Xylene	26.46	1152230	936.73 ug/L	nle	12.40 ug/L	2.00 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values
*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
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30236 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3023602

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC009498.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: not dec. Date Analyzed: 5/29/2003

GC Column: ZB-624 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. 000106-97-8	Butane	5.12	250	JN
2. 000078-78-4	Butane, 2-methyl-	6.76	830	JN
3. 000109-66-0	Pentane	7.66	390	JN
4.	unknown	10.72	180	J
5. 000107-83-5	Pentane, 2-methyl-	10.88	220	JN
6. 000287-92-3	Cyclopentane	11.05	380	JN
7. 000096-14-0	Pentane, 3-methyl-	11.66	160	JN
8. 000110-54-3	Hexane	12.50	91	JN
9. 001120-62-3	Cyclopentene, 3-methyl-	13.54	100	JN
10. 000096-37-7	Cyclopentane, methyl-	14.25	800	JN
11. 000110-82-7	Cyclohexane	16.03	820	JN
12. 000108-87-2	Cyclohexane, methyl-	18.89	220	JN
13. 000611-14-3	Benzene, 1-ethyl-2-methyl-	29.21	89	JN
14. 000526-73-8	Benzene, 1,2,3-trimethyl-	29.60	310	JN
15. 000526-73-8	Benzene, 1,2,3-trimethyl-	30.60	92	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC009499.D**	Sample Name	**3023603**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**29-May-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	16.91	251731	1.47 ug/L	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes	25.48	190435	10.14 ug/L	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene	26.48	186022	5.80 ug/L	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values
*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
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30236 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3023603

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC009499.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: not dec. Date Analyzed: 5/29/2003

GC Column: ZB-624 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. 000091-20-3	Naphthalene	26.61	9	JN

SEMI-VOLATILES

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06442.D**	Sample Name	**MB1-052103**
Operator	**B.Patel**	Misc Info	**MB1-052103**
Date Acquired	**23-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06442.D**	Sample Name	**MB1-052103**
Operator	**B.Patel**	Misc Info	**MB1-052103**
Date Acquired	**23-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **MB1-052103**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30236 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: MB1-052103

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06442.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: decanted: (Y/N) N Date Extracted: 5/21/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/2003

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	7.60	8	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06444.D**	Sample Name	**3023402**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**23-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

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Data File Name	**BN06444.D**	Sample Name	**3023402**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**23-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30234 Location: 296 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3023402

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06444.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: decanted: (Y/N) N Date Extracted: 5/21/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/2003

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	7.60	8	J
2.	unknown	25.30	4	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06453.D**	Sample Name	**3023601**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**24-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06453.D**	Sample Name	**3023601**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**24-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30236 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3023601

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06453.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: decanted: (Y/N) N Date Extracted: 5/21/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/24/2003

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	7.60	12	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06454.D**	Sample Name	**3023602**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**24-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene	14.01	3786663	51.41 ug/L	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene	15.66	299653	6.73 ug/L	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06454.D**	Sample Name	**3023602**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**24-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30236 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3023602

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06454.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: decanted: (Y/N) N Date Extracted: 5/21/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/24/2003

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		unknown	5.24	93	J
2.		unknown	5.69	110	J
3.	001462-03-9	Cyclopentanol, 1-methyl-	6.54	64	JN
4.		unknown	7.38	120	J
5.		unknown	7.63	120	J
6.		unknown	8.44	29	J
7.	000590-67-0	Cyclohexanol, 1-methyl-	8.79	87	JN
8.		unknown	8.86	50	J
9.		unknown	9.38	76	J
10.	005582-82-1	3-Heptanol, 3-methyl-	9.57	49	JN
11.		unknown	9.70	35	J
12.		unknown	9.78	49	J
13.	000611-14-3	Benzene, 1-ethyl-2-methyl-	10.01	65	JN
14.	000611-14-3	Benzene, 1-ethyl-2-methyl-	10.06	51	JN
15.	000095-36-3	1,2,4-Trimethylbenzene	10.15	75	JN
16.	000611-14-3	Benzene, 1-ethyl-2-methyl-	10.35	68	JN
17.		unknown	10.52	30	J
18.	000095-36-3	1,2,4-Trimethylbenzene	10.64	190	JN
19.	000095-36-3	1,2,4-Trimethylbenzene	11.16	68	JN
20.	000496-11-7	Indane	11.43	63	JN
21.	000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	12.22	32	JN
22.	000767-58-8	Indan, 1-methyl-	13.35	31	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06455.D**	Sample Name	**3023603**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**24-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06455.D**	Sample Name	**3023603**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**24-May-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30236 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 3023603

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06455.D

Level: (low/med) LOW Date Received: 5/19/2003

% Moisture: _____ decanted: (Y/N) N Date Extracted: 5/21/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/24/2003

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	7.60	12	J

PEST/PCB's

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 296 Wells, 2nd Qrtr. '03
Field ID: FIELDBLANK
Lab ID: 3023402
Filename: 01263.D
Lab Project : 30234

Location: 296 Wells, 2nd Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 052203
Date Extracted: 5/22/2003
Date Analyzed: 27-May-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U.S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

TABULATED ANALYTICAL REPORT
SW 846 608
Pesticides/PCB

mb 052303

Matrix: Aqueous
Date Extracted: 5/23/2003
Ext. Batch: 052303
Filename: 01341.D
Date Analysed: 5/30/2003

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.0011
319-85-7	beta-BHC	ND	0.0050
58-89-9	gamma-BHC	ND	0.0013
319-86-8	delta-BHC	ND	0.0016
76-44-8	Heptachlor	ND	0.0035
309-00-2	Aldrin	ND	0.0026
1024-57-3	Heptachlor epoxide	ND	0.0020
5103-71-9	gamma-Chlordane	ND	0.0007
5103-74-2	alpha-Chlordane	ND	0.0036
959-98-8	Endosulfan I	ND	0.0016
72-55-9	4,4'-DDE	ND	0.0021
60-57-1	Dieldrin	ND	0.0020
72-20-8	Endrin	ND	0.0032
33213-65-9	Endosulfan II	ND	0.0022
72-54-8	4,4'-DDD	ND	0.0020
7421-93-4	Endrin aldehyde	ND	0.0100
50-29-3	4,4'-DDT	ND	0.0052
1031-07-8	Endosulfan sulfate	ND	0.0026
53494-70-5	Endrin ketone	ND	0.0026
72-43-5	Methoxychlor	ND	0.0100
8001-35-2	Toxaphene	ND	0.0157
12674-11-2	Arochlor 1016	ND	0.0683
11104-28-2	Arochlor 1221	ND	0.0666
11141-16-5	Arochlor 1232	ND	0.0648
53469-21-9	Arochlor 1242	ND	0.0485
12672-29-6	Arochlor 1248	ND	0.0544
11097-69-1	Arochlor 1254	ND	0.0608
11096-82-5	Arochlor 1260	ND	0.0732

MDL = METHOD DETECTION LIMIT
ND =NOT DETECTED, BELOW MDL

Initial vol. (ml): 1000.00
Final vol. (ml): 10

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 296 Wells, 2nd Qrtr. '03
Field ID: FIELDBLANK
Lab ID: 3023402
Filename: 01263.D
Lab Project : 30234

Location: 296 Wells, 2nd Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 052203
Date Extracted: 5/22/2003
Date Analyzed: 27-May-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 2nd Qrtr. '03
Field ID: 283MW01
Lab ID: 3023601
Filename: 01346.D
Lab Project : 30236

Location: 283 Wells, 2nd Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 052303
Date Extracted: 5/23/2003
Date Analyzed: 30-May-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 2nd Qrtr. '03
Field ID: 283MW02
Lab ID: 3023602
Filename: 01347.D
Lab Project : 30236

Location: 283 Wells, 2nd Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 052303
Date Extracted: 5/23/2003
Date Analyzed: 30-May-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 2nd Qrtr. '03
Field ID: 283MW03
Lab ID: 3023603
Filename: 01348.D
Lab Project : 30236

Location: 283 Wells, 2nd Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 052303
Date Extracted: 5/23/2003
Date Analyzed: 30-May-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

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 #: 30236
Sample Prepared: 06/04/03

Site: 283

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	06/04/03	ND	200	100	10.0
Antimony	06/04/03	ND	20	10	2.0
Arsenic	06/04/03	ND	8	5.0	2.0
Barium	06/04/03	ND	2000	10	0.5
Beryllium	06/04/03	ND	20	0.25	0.5
Cadmium	06/04/03	ND	4	1.0	0.5
Calcium	06/04/03	ND	NLE	100	20.0
Chromium	06/04/03	0.514	100	10	0.5
Cobalt	06/04/03	ND	NLE	5.0	0.5
Copper	06/04/03	ND	1000	10	2.0
Iron	06/04/03	ND	300	200	2.0
Lead	06/04/03	ND	10	5.0	2.0
Magnesium	06/04/03	ND	NLE	100	10.0
Manganese	06/04/03	ND	50	5.0	0.5
Mercury	06/11/03	ND	2	0.20	0.15
Nickel	06/04/03	ND	100	5.0	1.0
Potassium	06/04/03	324	NLE	200	40.0
Selenium	06/04/03	ND	50	10	3.0
Silver	06/04/03	ND	20	5.0	1.0
Sodium	06/04/03	1200	50000	200	20.0
Thallium	06/04/03	ND	10	10	2.0
Vanadium	06/04/03	ND	NLE	5.0	0.5
Zinc	06/04/03	ND	5000	500	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
R.L.= Reporting limit. Note: The results reported between MDL and RL are estimated.

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 #: 3023402
Sample Received: 05/19/03
Sample Matrix: Aqueous

Site: 296 Wells
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)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	06/18/03	34.1	200	200	21.8
Antimony	06/18/03	ND	20	20.00	3.70
Arsenic	06/18/03	ND	8	5.00	2.30
Barium	06/18/03	0.685	2000	5.00	0.500
Beryllium	06/18/03	0.090	20	0.500	0.020
Cadmium	06/18/03	ND	4	2.00	0.400
Calcium	06/18/03	85.8	NLE	1000	65.00
Chromium	06/18/03	ND	100	5.00	1.00
Cobalt	06/18/03	ND	NLE	2.00	0.300
Copper	06/18/03	0.604	1000	5.00	0.300
Iron	06/18/03	ND	300	500	78.00
Lead	06/18/03	ND	10	5.00	0.800
Magnesium	06/18/03	ND	NLE	1000	11.00
Manganese	06/18/03	ND	50	5.00	0.900
Mercury	05/21/03	ND	2	0.500	0.150
Nickel	06/18/03	ND	100	5.00	0.700
Potassium	06/18/03	113	NLE	1000	25.00
Selenium	06/18/03	ND	50	20.00	4.80
Silver	06/18/03	ND	20	5.00	0.600
Sodium	06/18/03	ND	50000	5000	1160
Thallium	06/18/03	2.22	10	10.00	1.90
Vanadium	06/18/03	ND	NLE	5.00	0.200
Zinc	06/18/03	ND	5000	50.00	1.60

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
R.L.= Reporting limit. Note: The results reported between MDL and RL are estimated.
E = Estimated result. Over high standard

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 #: 3023601
Sample Received: 05/19/03
Sample Matrix: Aqueous

Site: 283
Ft. Monmouth, New Jersey

Field ID#: 283MW01

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	06/04/03	3140	200	100	10.0
Antimony	06/04/03	ND	20	10	2.0
Arsenic	06/04/03	ND	8	5.0	2.0
Barium	06/04/03	95.6	2000	10	0.5
Beryllium	06/04/03	0.815	20	0.25	0.5
Cadmium	06/04/03	ND	4	1.0	0.5
Calcium	06/04/03	9370	NLE	100	20.0
Chromium	06/04/03	1.77	100	10	0.5
Cobalt	06/04/03	4.48	NLE	5.0	0.5
Copper	06/04/03	3.24	1000	10	2.0
Iron	06/04/03	275	300	200	10.0
Lead	06/04/03	ND	10	5.0	1.0
Magnesium	06/04/03	18400	NLE	100	10.0
Manganese	06/04/03	36.3	50	5.0	0.5
Mercury	06/11/03	ND	2	0.20	0.15
Nickel	06/04/03	11.1	100	5.0	1.0
Potassium	06/04/03	5690	NLE	200	40.0
Selenium	06/04/03	3.78	50	10	3.0
Silver	06/04/03	ND	20	5.0	1.0
Sodium	06/04/03	54300	50000	200	20.0
Thallium	06/04/03	ND	10	10	2.0
Vanadium	06/04/03	0.537	NLE	5.0	0.5
Zinc	06/04/03	66.5	5000	500	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
R.L.= Reporting limit. Note: The results reported between MDL and RL are estimated.

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 #: 3023602
Sample Received: 05/19/03
Sample Matrix: Aqueous

Site: 283
Ft. Monmouth, New Jersey

Field ID#: 283MW02

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	06/04/03	2690	200	100	10.0
Antimony	06/04/03	ND	20	10	2.0
Arsenic	06/04/03	6.64	8	5.0	2.0
Barium	06/04/03	39.0	2000	10	0.5
Beryllium	06/04/03	ND	20	0.25	0.5
Cadmium	06/04/03	ND	4	1.0	0.5
Calcium	06/04/03	1810	NLE	100	20.0
Chromium	06/04/03	33.3	100	10	0.5
Cobalt	06/04/03	1.41	NLE	5.0	0.5
Copper	06/04/03	7.46	1000	10	2.0
Iron	06/04/03	8350	300	200	10.0
Lead	06/04/03	11.8	10	5.0	1.0
Magnesium	06/04/03	2020	NLE	100	10.0
Manganese	06/04/03	8.97	50	5.0	0.5
Mercury	06/11/03	ND	2	0.20	0.15
Nickel	06/04/03	5.59	100	5.0	1.0
Potassium	06/04/03	3310	NLE	200	40.0
Selenium	06/04/03	6.97	50	10	3.0
Silver	06/04/03	ND	20	5.0	1.0
Sodium	06/04/03	16700	50000	200	20.0
Thallium	06/04/03	ND	10	10	2.0
Vanadium	06/04/03	12.2	NLE	5.0	0.5
Zinc	06/04/03	15.2	5000	500	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
R.L.= Reporting limit. Note: The results reported between MDL and RL are estimated.

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 #: 3023603
Sample Received: 05/19/03
Sample Matrix: Aqueous

Site: 283
Ft. Monmouth, New Jersey

Field ID#: 283MW03

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	06/04/03	336	200	100	10.0
Antimony	06/04/03	ND	20	10	2.0
Arsenic	06/04/03	7.68	8	5.0	2.0
Barium	06/04/03	336	2000	10	0.5
Beryllium	06/04/03	ND	20	0.25	0.5
Cadmium	06/04/03	0.899	4	1.0	0.5
Calcium	06/04/03	12300	NLE	100	20.0
Chromium	06/04/03	3.55	100	10	0.5
Cobalt	06/04/03	ND	NLE	5.0	0.5
Copper	06/04/03	ND	1000	10	2.0
Iron	06/04/03	26500	300	200	10.0
Lead	06/04/03	1.16	10	5.0	1.0
Magnesium	06/04/03	2390	NLE	100	10.0
Manganese	06/04/03	40.8	50	5.0	0.5
Mercury	06/11/03	ND	2	0.20	0.15
Nickel	06/04/03	5.78	100	5.0	1.0
Potassium	06/04/03	8670	NLE	200	40.0
Selenium	06/04/03	ND	50	10	3.0
Silver	06/04/03	ND	20	5.0	1.0
Sodium	06/04/03	9050	50000	200	20.0
Thallium	06/04/03	ND	10	10	2.0
Vanadium	06/04/03	1.37	NLE	5.0	0.5
Zinc	06/04/03	47.4	5000	500	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
R.L.= Reporting limit. Note: The results reported between MDL and RL are estimated.

LTM

	Lab	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Selenium	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	200	8	300	10	50	100	50	NLE		-
06/28/2000	FMETL	2070	ND	1450	ND	22.2	10.4	ND	6.31		V,S,P,M
08/10/2000	FMETL	1930	ND	739	2.38	23.8	5.91	ND	5.54		V,S,P,M
10/17/2000	FMETL	2120	ND	306	1.85	21.8	5.56	ND	6.07		V,S,P,M
01/05/2001	FMETL	2460	ND	868	ND	26.0	4.89	ND	6.11		V,S,P,M
04/04/2001	FMETL	2350	ND	410	3.00	34.7	12.0	ND	4.62		V,S,P,M
07/24/2001	FMETL	3150	ND	575	3.03	55.2	20.4	7.93	6.25		V,S,P,M
07/24/2001D	FMETL	3160	ND	576	1.18	34.3	10.4	12.5	6.25		V,S,P,M
12/11/2001	FMETL	3600	ND	4490	7.83	29.3	12.5	ND	7.15		V,S,P,M
03/08/2002	FMETL	3520	ND	897	1.36	36.1	11.9	10.4	6.43		V,S,P,M
05/16/2002	FMETL	3330	27.7	577	ND	33.9	10.9	13.7	6.14		V,S,P,M
09/10/2002	FMETL	3350	3.16	692	ND	33.1	11.9	8.98	5.91		V,S,P,M
12/03/2002	FMETL	3190	ND	281	ND	43.2	13.4	10.6	5.37		V,S,P,M
02/27/2003	FMETL	3130	ND	ND	ND	40.6	11.2	ND	5.12		V,S,P,M
05/19/2003	FMETL	3140	ND	275	ND	36.3	11.1	3.78	6.02		V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 05/19/2003

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FORT MONMOUTH

GW MONITORING
BLDG. 283

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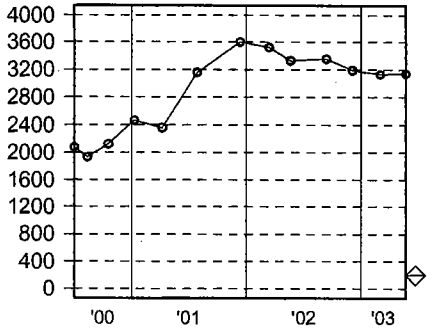
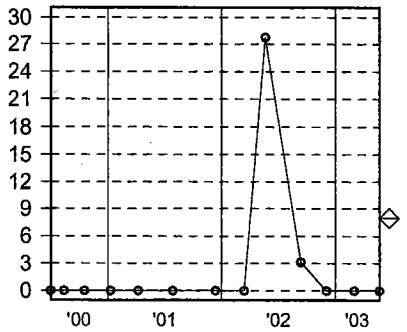
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

Aluminum
(ug/L)



Arsenic
(ug/L)



Iron
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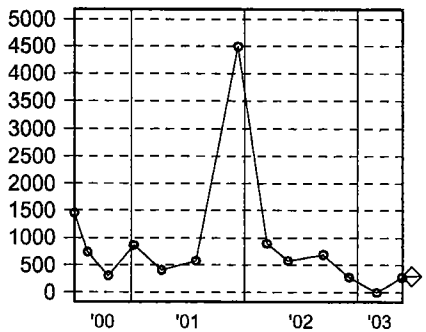

Lead
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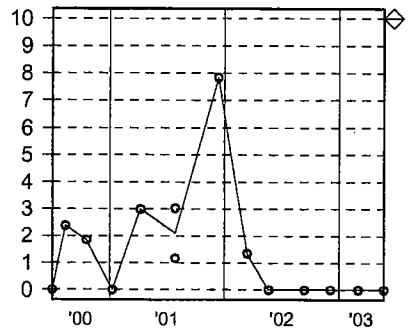
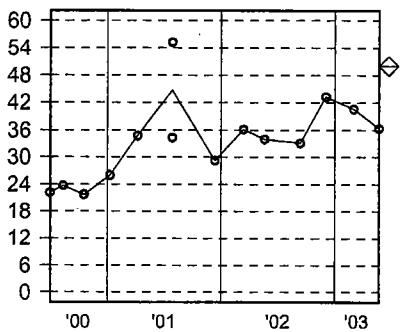
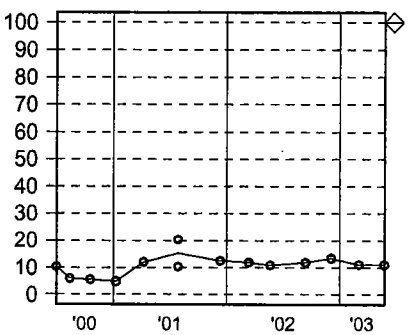


Manganese
(ug/l)



Nickel
(ug/l)



Selenium
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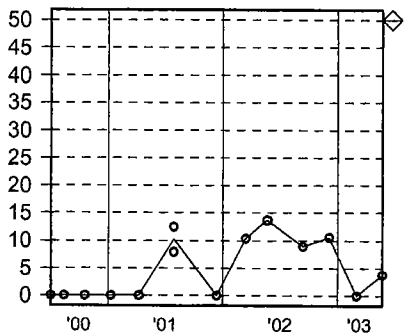
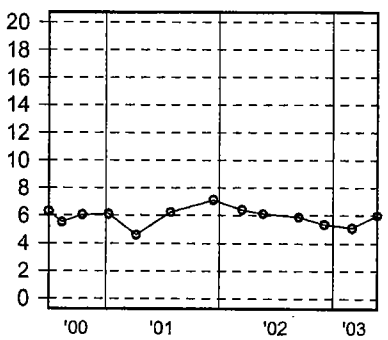


Depth to Water
(Feet)



SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 05/19/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
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Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-13-2003 X:\MtechData\283\283.WSF

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	Naphtha lene	2-Methyl naphtha lene	Aluminum	Arsenic	Iron	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	1	1000	700	40	NLE	NLE	200	8	300	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	119.2	25.25	309	4.74	2330	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	183.38	26.28	123	ND	2060	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	82.44	7.43	241	ND	2010	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	174.92	25.10	81.4	ND	2130	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	101.97	25.13	812	3.40	2060	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	152.89	24.87	917	2.38	3340	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	126.93	20.73	973	4.89	3210	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	223.45	28.12	360	3.72	3220	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	65.12	6.10	2200	3.00	4360	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	ND	ND	1780	6.78	4050	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	89.93	13.36	1470	3.09	7120	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	80.67	13.24	249	ND	3220	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	101.90	16.78	996	24.2	4040	V,S,P,M
09/10/2002	FMETL	223.80	94.08	476.21	1910.78	135.69	30.03	267	7.95	2490	V,S,P,M
12/03/2002	FMETL	119.4	39.32	349.99	970.72	76.68	11.88	157	6.04	1720	V,S,P,M
02/27/2003	FMETL	123.79	122.91	560.9	3067.89	21.97	ND	235	2.59	1230	V,S,P,M
05/19/2003	FMETL	112.54	27.19	215.60	2499.45	51.41	6.73	2690	6.64	8350	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/19/2003

NOTES:

FORT MONMOUTH

GW MONITORING
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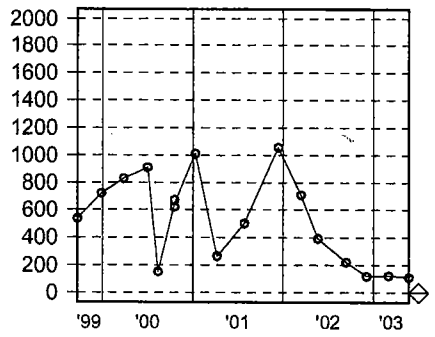
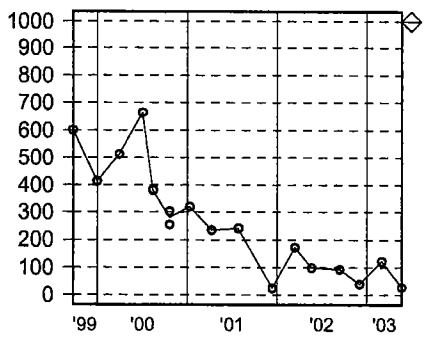
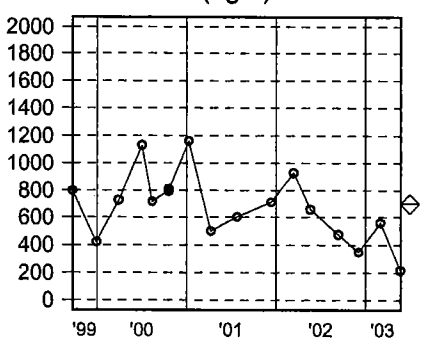
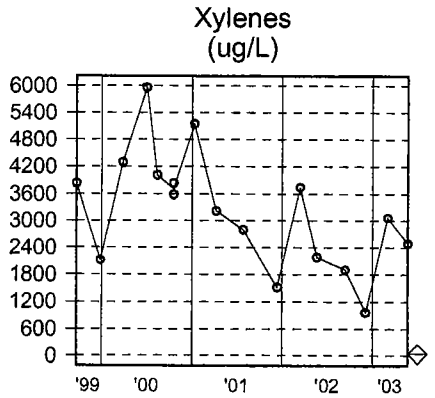
Source 1 of 3

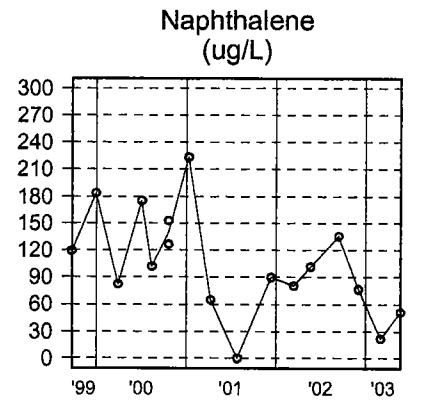
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

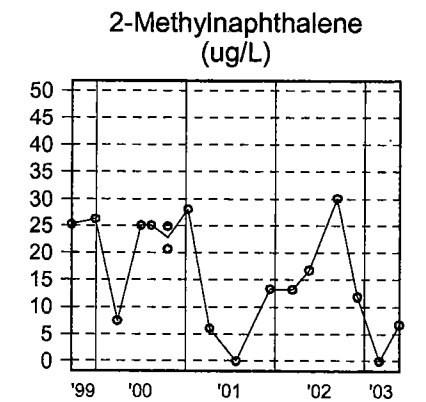


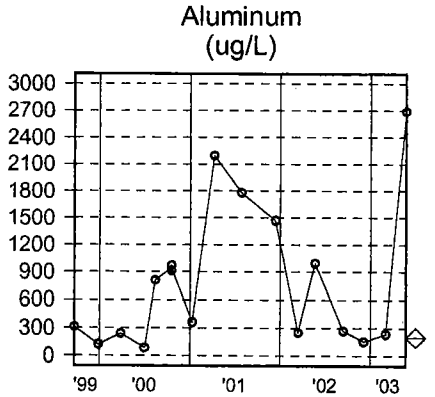


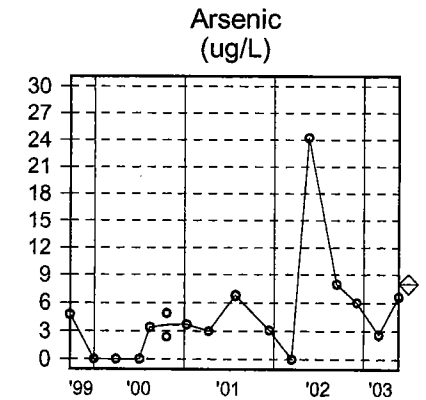


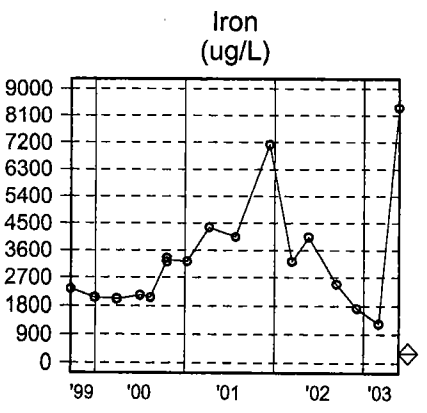












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/19/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-13-2003 X:\MtechData\283\283.WSF

	Lab	Lead	Manganese	Nickel	Selenium	Depth to Water					Notes
Units:	-	ug/L	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:	-	10	50	100	50	NLE					-
09/20/1999	FMETL	22.0	14.5	4.11	6.49	7.20					V,S,P,M
12/27/1999	FMETL	6.92	44.0	3.62	4.73	6.81					V,S,P,M
03/23/2000	FMETL	15.3	11.9	6.43	7.29	6.38					V,S,P,M
06/28/2000	FMETL	11.5	8.31	6.01	4.36	7.83					V,S,P,M
08/10/2000	FMETL	31.9	5.97	ND	8.40	6.28					V,S,P,M
10/17/2000	FMETL	14.5	4.68	ND	6.69	7.09					V,S,P,M
10/17/2000D	FMETL	15.9	5.06	ND	6.23	7.09					V,S,P,M
01/05/2001	FMETL	25.3	6.47	2.85	6.22	7.32					V,S,P,M
04/04/2001	FMETL	23.0	8.10	5.00	5.00	4.81					V,S,P,M
07/24/2001	FMETL	12.3	36.0	12.2	30.0	6.75					V,S,P,M
12/11/2001	FMETL	11.8	15.0	8.52	ND	8.54					V,S,P,M
03/08/2002	FMETL	9.02	14.3	4.99	13.4	7.47					V,S,P,M
05/16/2002	FMETL	7.47	11.2	3.70	15.7	6.90					V,S,P,M
09/10/2002	FMETL	9.58	6.62	2.12	11.1	5.93					V,S,P,M
12/03/2002	FMETL	5.84	29.8	1.56	6.81	5.28					V,S,P,M
02/27/2003	FMETL	17.1	6.39	3.06	6.98	4.70					V,S,P,M
05/19/2003	FMETL	11.8	8.97	5.59	6.97	6.46					V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/19/2003

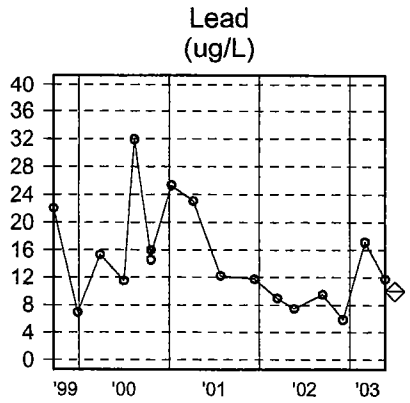
NOTES:

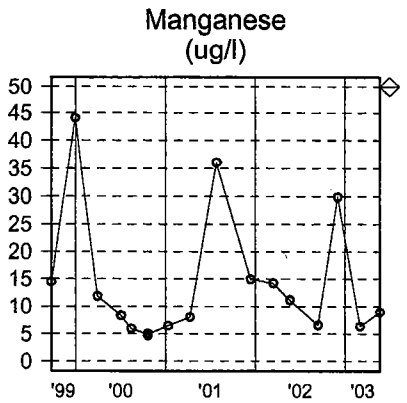
FORT MONMOUTH

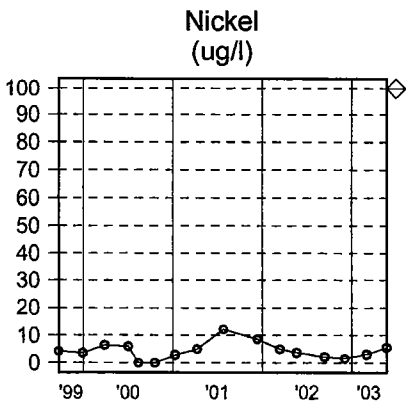
GW MONITORING
BLDG. 283

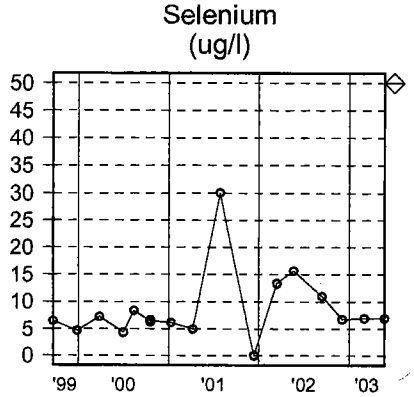
Source 1 of 3

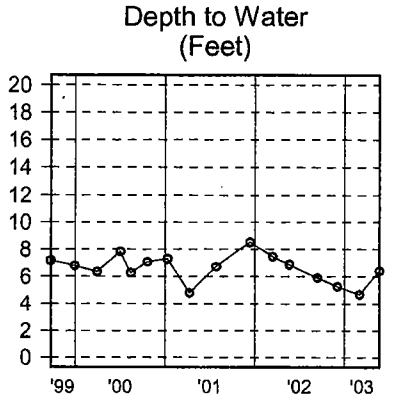
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 05/19/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
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Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Benzene	Xylenes	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Depth to Water	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	Feet	-
NJDEP Criteria:	-	1	40	200	8	300	10	50	100	NLE	-
06/28/2000	FMETL	9.25	ND	3920	ND	21000	ND	36.9	9.39	7.12	V,S,P,M
08/10/2000	FMETL	11.76	ND	302	3.56	7090	ND	30.8	2.93	6.41	V,S,P,M
10/17/2000	FMETL	9.86	ND	365	2.32	7030	2.17	27.5	1.96	6.88	V,S,P,M
01/05/2001	FMETL	5.30	ND	1680	6.40	38500	21.1	34.3	8.53	6.94	V,S,P,M
01/05/2001	FMETL	4.97	ND	2090	9.03	50500	ND	63.9	16.1	6.94	V,S,P,M
04/04/2001	FMETL	10.06	ND	880	5.00	40500	2.00	31.5	6.00	5.75	V,S,P,M
04/04/2001D	FMETL	9.08	ND	470	4.00	40300	3.00	31.5	7.00	5.75	V,S,P,M
07/24/2001	FMETL	ND	ND	289	3.3	11200	2.60	63.4	14.9	7.00	V,S,P,M
12/11/2001	FMETL	8.53	ND	1030	7.27	23400	ND	35.5	5.80	7.67	V,S,P,M
03/08/2002	FMETL	8.38	ND	503	3.25	19100	ND	33.9	5.30	7.10	V,S,P,M
05/16/2002	FMETL	6.21	ND	246	29.9	13000	ND	33.3	10.2	6.90	V,S,P,M
09/10/2002	FMETL	ND	ND	393	6.61	10700	ND	35.7	5.55	6.51	V,S,P,M
12/03/2002	FMETL	3.45	ND	48.3	4.18	1230	9.11	48.2	3.96	6.31	V,S,P,M
02/27/2003	FMETL	8.24	3.14	64.0	2.74	6360	ND	33.5	4.68	5.94	V,S,P,M
05/19/2003	FMETL	1.47	15.94	336	7.68	26500	1.16	40.8	5.78	6.77	V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
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FORT MONMOUTH

GW MONITORING
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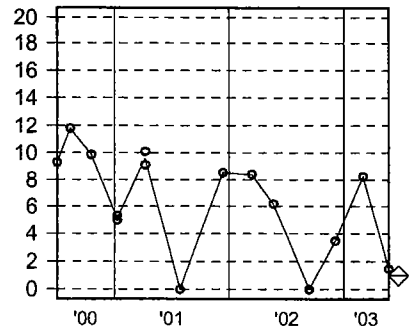
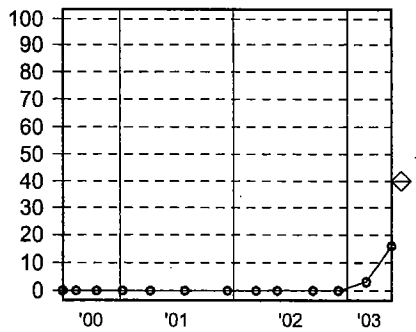
FORT MONMOUTH
SELFM-PW-EV

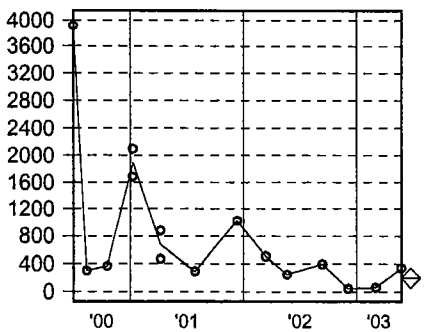
Benzene
(ug/L)



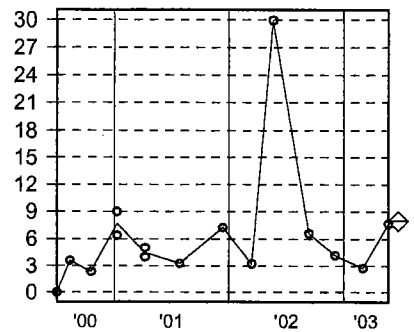
Xylenes
(ug/L)



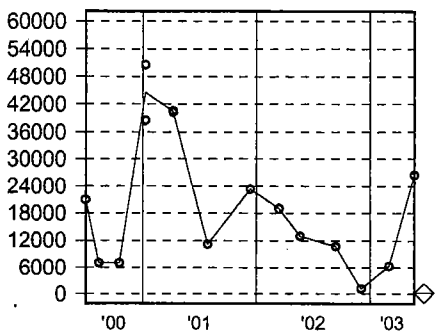
Aluminum
(ug/L)



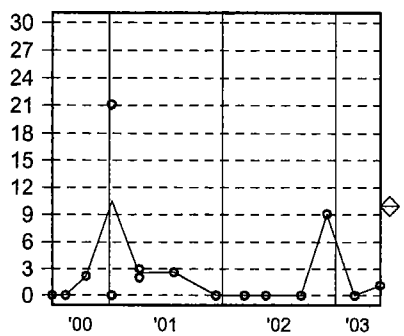
Arsenic
(ug/L)



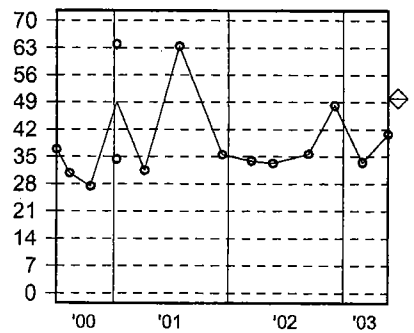
Iron
(ug/L)



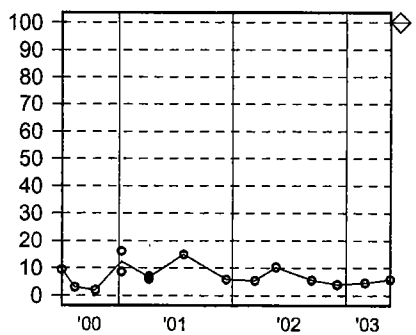
Lead
(ug/L)



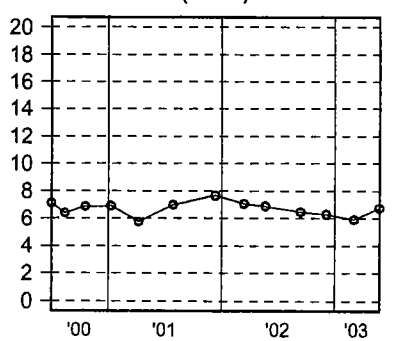
Manganese
(ug/l)



Nickel
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 05/19/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

06-13-2003 X:\MtechData\283\283.WSF

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #17

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3046901	0283MW01	29-40367	08/04/03
3046902	0283MW02	29-40887	08/04/03
3046903	0283MW03	29-41650	08/04/03

NJDEP Laboratory Certification # 13461

9-3-03
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:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: J. Fallon
Phone #: 732 532 4423
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 296 Wells
3rd Qtr '03

Samplers Name / Company: Corey McGovnach, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VO+15	TAL mtls	Pest / PCB	BNA+25				Flow Head	Comments: Remarks / Preservation Method
														HCL/HNO_3/4°C
304 06 01	Trip	8/4/03	0721	AQ	2	✓							—	
02	Field Blank		0730		5	✓	✓	✓	✓				—	
03	Dupe		—		5	✓	✓	✓	✓				—	
04	296 MW01		1225		5	✓	✓	✓	✓				0.0	29 - 30979
05	296 MW02		0946			✓	✓	✓	✓				0.0	29 - 30980
06	296 MW03		1238			✓	✓	✓	✓				0.0	29 - 30975
07	296 MW04		1258			✓	✓	✓	✓				0.0	29 - 33989
08	296 MW06 *		1249			✓	✓	✓	✓				0.0	29 - 30978
09	296 MW07		0906			✓	✓	✓	✓				0.0	29 - 30973
10	296 MW08		0931			✓	✓	✓	✓				0.0	29 - 30974

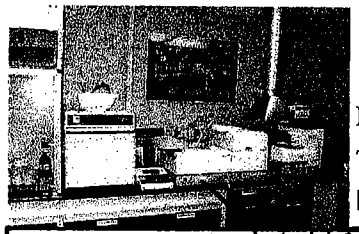
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McGovnach	8/4/03 1515				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ____ Days, ( )ASAP Verbal ____ Hrs.

Remarks: Shares T/FB/D w/ MW8, 290, 283 same date. com
Tide: ~~N/A~~ L->H

print legibly

COC.XLS6/17/2003



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

208604

Chain of Custody Record

Customer: J. Follow
Phone #: 126223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 Wells
3rd Qrt '03

Samplers Name / Company: Corey McCormack, TUS

Analysis Parameters: VO+15 | TAL Mtls | Pest + PCB | BNA +25 | | | | Haw Read

Comments: HCL/HNO_3/4°C

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VO+15	TAL Mtls	Pest + PCB	BNA +25				Haw Read	Remarks / Preservation Method
304169 01	283 MW01	8/4/03	0949	AQ	5	✓	✓	✓	✓				0.0	29-40367
02	283 MW02	"	0940	"	"	✓	✓	✓	✓				1.7	29-40887
03	283 MW03	"	1024	"	"	✓	✓	✓	✓				0.0	29-41650

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	8/4/03 1515				
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
Shows T/F B/D from 296 Sam date. com

print legibly

COC.XLS6/17/2003

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/04/03
WEATHER: Overcast and humid.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.74 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.01 ft
(14.01) X 0.65 X 3 = 27.31
GALLONS OF H_2O TO BE PURGED: 27 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: 07:51
pH 5.67 su — TEMP 18.31 °C
DISSOLVED O_2 4.20 mg/L — SPECIFIC CONDUCTIVITY 571 µs/cm

PURGE END TIME: 09:48
pH 5.31 su — TEMP 17.80 °C
DISSOLVED O_2 2.70 mg/L — SPECIFIC CONDUCTIVITY 590 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.83 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 09:49
pH 5.30 su — TEMP 17.79 °C
DISSOLVED O_2 2.66 mg/L — SPECIFIC CONDUCTIVITY 591 µs/cm

SAMPLE END TIME: 09:54

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/04/03
WEATHER: Overcast and humid.
TIDE: N/A

LNAPLs: N
DNAPLs N
ELEV. OF INNER CASING SURVEY MARK: N/A ft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.11 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: 5.0 ft
HEIGHT OF WATER: 13.58 ft
(13.58) X .65 X 3 =26.44
GALLONS OF H2O TO BE PURGED: 26 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: 07:46
pH 5.00 su TEMP 18.76 °C
DISSOLVED O_2 3.41 mg/L SPECIFIC CONDUCTIVITY 291 µs/cm

PURGE END TIME: 09:39
pH 4.80 su TEMP 17.69 °C
DISSOLVED O_2 2.07 mg/L SPECIFIC CONDUCTIVITY 321 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 10.46 ft
(SAMPLING METHOD: DEDICATED (LAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 26 gal

SAMPLE START TIME: 09:40
pH 4.81 su TEMP 17.71 °C
DISSOLVED O_2 2.06 mg/L SPECIFIC CONDUCTIVITY 320 µs/cm

SAMPLE END TIME: 09:45

COMMENTS: Odor from purge.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 08/04/03
WEATHER: Overcast and humid.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.56 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 17.49 ft
(17.49) X 0.65 X 3 = 34.10
GALLONS OF H_2O TO BE PURGED: 34 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: 07:56
pH 5.63 su — TEMP 18.76 °C
DISSOLVED O_2 3.90 mg/L — SPECIFIC CONDUCTIVITY 300 µs/cm

PURGE END TIME: 10:23
pH 5.35 su — TEMP 18.23 °C
DISSOLVED O_2 2.21 mg/L — SPECIFIC CONDUCTIVITY 268 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 8.71 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 34 gal

SAMPLE START TIME: 10:24
pH 5.36 su — TEMP 18.24 °C
DISSOLVED O_2 2.17 mg/L — SPECIFIC CONDUCTIVITY 265 µs/cm

SAMPLE END TIME: 10:29

COMMENTS:

VOLATILE ORGANICS

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 #13461

Data File	**VB014075.D**	Sample Name	**MB 12Aug03**
Operator	**Skelton**	Field ID	**MB 12Aug03**
Date Acquired	**12 Aug 2003 8:20 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **MB 12Aug03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30469 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 12Aug03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014075.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. Date Analyzed: 8/12/2003

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	**VB014100.D**	Sample Name	**MB 13Aug03**
Operator	**Skelton**	Field ID	**MB 13Aug03**
Date Acquired	**13 Aug 2003 3:58 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

MB 13Aug03

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30466 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 13Aug03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014100.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. Date Analyzed: 8/13/2003

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	**VB014106.D**	Sample Name	**3046601**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**13 Aug 2003 7:40 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.16	106273	1.37 ug/L	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Trip Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30466 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3046601

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014106.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. Date Analyzed: 8/13/2003

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	**VB014107.D**	Sample Name	**3046602**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**13 Aug 2003 8:16 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.16	97669	1.29 ug/L	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

Field Blank

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30466 Location: 296 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3046602

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014107.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. Date Analyzed: 8/13/2003

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	**VB014092.D**	Sample Name	**3046901**
Operator	**Skelton**	Field ID	**283MW01**
Date Acquired	**13 Aug 2003 6:31 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW01**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30469 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3046901

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014092.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. _____ Date Analyzed: 8/13/2003

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	**VB014093.D**	Sample Name	**3046902**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Aug 2003 7:07 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	17.46	28595397	213.07 ug/L	1	0.23 ug/L	2.00 ug/L	E
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene	21.51	15795564	116.46 ug/L	1000	0.37 ug/L	2.00 ug/L	E
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	24.35	38384539	287.49 ug/L	700	0.65 ug/L	2.00 ug/L	E
1330-20-7	m+p-Xylenes	24.62	30699948	669.59 ug/L	nle	1.14 ug/L	4.00 ug/L	E
95-47-6	o-Xylene	25.41	39015898	419.41 ug/L	nle	0.62 ug/L	2.00 ug/L	E
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB014096.D**	Sample Name	**3046902**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Aug 2003 9:20 am**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	18.50 ug/L	200.00 ug/L	
107131	Acrylonitrile			not detected	50	27.80 ug/L	200.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	85.20 ug/L	200.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	1.60 ug/L	20.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	2.50 ug/L	20.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	16.80 ug/L	20.00 ug/L	
74-87-3	Chloromethane			not detected	30	11.60 ug/L	20.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	10.60 ug/L	20.00 ug/L	
74-83-9	Bromomethane			not detected	10	11.00 ug/L	20.00 ug/L	
75-00-3	Chloroethane			not detected	nle	10.10 ug/L	20.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	5.00 ug/L	20.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	2.40 ug/L	20.00 ug/L	
67-64-1	Acetone			not detected	700	13.60 ug/L	20.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	4.60 ug/L	20.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	2.40 ug/L	20.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	1.60 ug/L	20.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	1.20 ug/L	20.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	7.80 ug/L	20.00 ug/L	
78-93-3	2-Butanone			not detected	300	6.20 ug/L	20.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	1.70 ug/L	20.00 ug/L	
67-66-3	Chloroform			not detected	6	3.00 ug/L	20.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	2.30 ug/L	20.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	4.70 ug/L	20.00 ug/L	
71-43-2	Benzene	17.47	3415711	239.49 ug/L	1	2.30 ug/L	20.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	1.80 ug/L	20.00 ug/L	
79-01-6	Trichloroethene			not detected	1	2.30 ug/L	20.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	4.00 ug/L	20.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	5.50 ug/L	20.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	6.50 ug/L	20.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	6.90 ug/L	20.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.90 ug/L	20.00 ug/L	
108-88-3	Toluene	21.51	1566266	108.66 ug/L	1000	3.70 ug/L	20.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	8.70 ug/L	20.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	4.80 ug/L	20.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	20.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	7.10 ug/L	20.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	8.60 ug/L	20.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.90 ug/L	20.00 ug/L	
100-41-4	Ethylbenzene	24:34	6021631	485.84 ug/L	700	6.50 ug/L	20.00 ug/L	D
1330-20-7	m+p-Xylenes	24.61	4590638	1078.60 ug/L	nle	11.40 ug/L	40.00 ug/L	E D
95-47-6	o-Xylene	25.41	7715540	893.47 ug/L	nle	6.20 ug/L	20.00 ug/L	E D
100-42-5	Styrene			not detected	100	5.60 ug/L	20.00 ug/L	
75-25-2	Bromoform			not detected	4	7.00 ug/L	20.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	4.70 ug/L	20.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	5.50 ug/L	20.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	5.70 ug/L	20.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.40 ug/L	20.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB014097.D**	Sample Name	**3046902**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Aug 2003 10:10 am**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	37.00 ug/L	400.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	400.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	400.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	40.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	40.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	40.00 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	40.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	40.00 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	40.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	40.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	40.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	40.00 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	40.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	40.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	40.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	40.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	40.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	40.00 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	40.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	40.00 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	40.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	40.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	40.00 ug/L	
71-43-2	Benzene	17.47	1469693	223.58 ug/L	1	4.60 ug/L	40.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	40.00 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	40.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	40.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	11.00 ug/L	40.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	40.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	40.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	40.00 ug/L	
108-88-3	Toluene	21.51	580475	87.38 ug/L	1000	7.40 ug/L	40.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	40.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	40.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	40.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	40.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	40.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	40.00 ug/L	
100-41-4	Ethylbenzene	24.34	2592764	475.58 ug/L	700	13.00 ug/L	40.00 ug/L	D
1330-20-7	m+p-Xylenes	24.61	2017804	1077.82 ug/L	nle	22.80 ug/L	80.00 ug/L	D
95-47-6	o-Xylene	25.41	3447167	907.52 ug/L	nle	12.40 ug/L	40.00 ug/L	D
100-42-5	Styrene			not detected	100	11.20 ug/L	40.00 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	40.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	40.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	40.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	40.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 ug/L	40.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID.

283MW02

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30469 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3046902

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014093.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. Date Analyzed: 8/13/2003

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.	unknown	6.83	31	J
2.	unknown	7.58	22	J
3.	unknown	10.93	26	J
4. 000763-29-1	1-Pentene, 2-methyl-	14.33	31	JN
5. 000108-87-2	Cyclohexane, methyl-	18.69	30	JN
6. 000620-14-4	Benzene, 1-ethyl-3-methyl-	26.91	20	JN
7. 000108-67-8	Benzene, 1,3,5-trimethyl-	27.10	12	JN
8. 000526-73-8	Benzene, 1,2,3-trimethyl-	27.84	32	JN
9. 000095-36-3	1,2,4-Trimethylbenzene	28.69	14	JN
10. 000496-11-7	Indane	28.98	14	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB014095.D**	Sample Name	**3046903**
Operator	**Skelton**	Field ID	**283MW03**
Date Acquired	**13 Aug 2003 8:44 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
124-48-1	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
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D = Value from dilution
PQL = Practical Quantitation Limit
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab ID. **283MW03**

Lab Name: FMETL Project: LTM

NJDEP#: 13461 Case No.: 30469 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3046903

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB014095.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: not dec. Date Analyzed: 8/13/2003

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	**BN06671.D**	Sample Name	**MB-080703**
Operator	**B.Patel**	Misc Info	**MB-080703**
Date Acquired	**11-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06671.D**	Sample Name	**MB-080703**
Operator	**B.Patel**	Misc Info	**MB-080703**
Date Acquired	**11-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **MB-080703**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30469 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: MB-080703

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06671.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: decanted: (Y/N) N Date Extracted: 8/7/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/11/2003

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	7.47	12	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA08347.D**	Sample Name	**MB-081103**
Operator	**BPatel**	Misc Info	**MB-081103**
Date Acquired	**12-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA08347.D**	Sample Name	**MB-081103**
Operator	**BPatel**	Misc Info	**MB-081103**
Date Acquired	**12-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **MB-081103**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30466 Location: 296 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-081103

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA08347.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: decanted: (Y/N) N Date Extracted: 8/11/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/12/2003

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	7.19	14	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA08349.D**	Sample Name	**3046602**
Operator	**BPatel**	Misc Info	**Field Blank**
Date Acquired	**12-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA08349.D**	Sample Name	**3046602**
Operator	**BPatel**	Misc Info	**Field Blank**
Date Acquired	**12-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30466 Location: 296 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3046602

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA08349.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: decanted: (Y/N) N Date Extracted: 8/11/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/12/2003

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	7.19	13	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA08367.D**	Sample Name	**3046901**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**13-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BNA08367.D**	Sample Name	**3046901**
Operator	**BPatel**	Misc Info	**283MW01**
Date Acquired	**13-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30469 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3046901

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA08367.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: decanted: (Y/N) N Date Extracted: 8/7/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/13/2003

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	7.19	20	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06685.D**	Sample Name	**3046902**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**12-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol	13.15	19647	4.34 ug/L	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene	13.91	984183	80.88 ug/L	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene	15.56	66652	9.03 ug/L	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06685.D**	Sample Name	**3046902**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**12-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30469 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3046902

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06685.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: decanted: (Y/N) N Date Extracted: 8/7/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/12/2003

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	000590-36-3	2-Pentanol, 2-methyl-	5.07	230	JN
2.	000077-74-7	3-Pentanol, 3-methyl-	5.54	200	JN
3.		unknown	6.40	56	J
4.	000625-23-0	2-Hexanol, 2-methyl-	7.26	160	JN
5.		unknown	7.51	270	J
6.		unknown	7.55	170	J
7.		unknown	8.32	36	J
8.		unknown	8.68	110	J
9.		unknown	8.75	62	J
10.	000625-25-2	2-Heptanol, 2-methyl-	9.27	100	JN
11.	005582-82-1	3-Heptanol, 3-methyl-	9.46	59	JN
12.		unknown	9.59	38	J
13.		unknown	9.67	59	J
14.	000611-14-3	Benzene, 1-ethyl-2-methyl-	9.90	120	JN
15.	000622-96-8	Benzene, 1-ethyl-4-methyl-	9.96	71	JN
16.	000095-36-3	1,2,4-Trimethylbenzene	10.05	140	JN
17.	000526-73-8	Benzene, 1,2,3-trimethyl-	10.53	140	JN
18.	000095-36-3	1,2,4-Trimethylbenzene	11.06	140	JN
19.	000496-11-7	Indane	11.33	88	JN
20.	000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	11.63	41	JN
21.	002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	12.12	47	JN
22.	002039-90-9	Benzene, 2-ethenyl-1,3-dimethyl-	13.26	42	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BNA08368.D**	Sample Name	**3046903**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**13-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BNA08368.D**	Sample Name	**3046903**
Operator	**BPatel**	Misc Info	**283MW03**
Date Acquired	**13-Aug-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Id: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30469 Location: 283 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3046903

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA08368.D

Level: (low/med) LOW Date Received: 8/4/2003

% Moisture: decanted: (Y/N) N Date Extracted: 8/7/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/13/2003

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	7.19	17	J

PEST/PCB's

U.S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

TABULATED ANALYTICAL REPORT
SW 846 608
Pesticides/PCB

mb 080803

Matrix: Aqueous
Date Extracted: 8/8/2003
Ext. Batch: 080803
Filename: 01079.D
Date Analysed: 8/18/2003

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.0011
319-85-7	beta-BHC	ND	0.0050
58-89-9	gamma-BHC	ND	0.0013
319-86-8	delta-BHC	ND	0.0016
76-44-8	Heptachlor	ND	0.0035
309-00-2	Aldrin	ND	0.0026
1024-57-3	Heptachlor epoxide	ND	0.0020
5103-71-9	gamma-Chlordane	ND	0.0007
5103-74-2	alpha-Chlordane	ND	0.0036
959-98-8	Endosulfan I	ND	0.0016
72-55-9	4,4'-DDE	ND	0.0021
60-57-1	Dieldrin	ND	0.0020
72-20-8	Endrin	ND	0.0032
33213-65-9	Endosulfan II	ND	0.0022
72-54-8	4,4'-DDD	ND	0.0020
7421-93-4	Endrin aldehyde	ND	0.0100
50-29-3	4,4'-DDT	ND	0.0052
1031-07-8	Endosulfan sulfate	ND	0.0026
53494-70-5	Endrin ketone	ND	0.0026
72-43-5	Methoxychlor	ND	0.0100
8001-35-2	Toxaphene	ND	0.0157
12674-11-2	Arochlor 1016	ND	0.0683
11104-28-2	Arochlor 1221	ND	0.0666
11141-16-5	Arochlor 1232	ND	0.0648
53469-21-9	Arochlor 1242	ND	0.0485
12672-29-6	Arochlor 1248	ND	0.0544
11097-69-1	Arochlor 1254	ND	0.0608
11096-82-5	Arochlor 1260	ND	0.0732

MDL = METHOD DETECTION LIMIT
ND =NOT DETECTED, BELOW MDL

Initial vol. (ml): 1000.00
Final vol. (ml): 10

U.S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

TABULATED ANALYTICAL REPORT
SW 846 608
Pesticides/PCB

mb 080803-01

Matrix: Aqueous
Date Extracted: 8/8/2003
Ext. Batch: 080803
Filename: 01052.D
Date Analysed: 8/11/2003

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.0011
319-85-7	beta-BHC	ND	0.0050
58-89-9	gamma-BHC	ND	0.0013
319-86-8	delta-BHC	ND	0.0016
76-44-8	Heptachlor	ND	0.0035
309-00-2	Aldrin	ND	0.0026
1024-57-3	Heptachlor epoxide	ND	0.0020
5103-71-9	gamma-Chlordane	ND	0.0007
5103-74-2	alpha-Chlordane	ND	0.0036
959-98-8	Endosulfan I	ND	0.0016
72-55-9	4,4'-DDE	ND	0.0021
60-57-1	Dieldrin	ND	0.0020
72-20-8	Endrin	ND	0.0032
33213-65-9	Endosulfan II	ND	0.0022
72-54-8	4,4'-DDD	ND	0.0020
7421-93-4	Endrin aldehyde	ND	0.0100
50-29-3	4,4'-DDT	ND	0.0052
1031-07-8	Endosulfan sulfate	ND	0.0026
53494-70-5	Endrin ketone	ND	0.0026
72-43-5	Methoxychlor	ND	0.0100
8001-35-2	Toxaphene	ND	0.0157
12674-11-2	Arochlor 1016	ND	0.0683
11104-28-2	Arochlor 1221	ND	0.0666
11141-16-5	Arochlor 1232	ND	0.0648
53469-21-9	Arochlor 1242	ND	0.0485
12672-29-6	Arochlor 1248	ND	0.0544
11097-69-1	Arochlor 1254	ND	0.0608
11096-82-5	Arochlor 1260	ND	0.0732

MDL = METHOD DETECTION LIMIT
ND =NOT DETECTED, BELOW MDL

Initial vol. (ml): 1000.00
Final vol. (ml): 10

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 296 Wells, 3rd Qrtr '03
Field ID: FIELDBLANK
Lab ID: 3046602
Filename: 01054.D
Lab Project : 30466

Location: 296 Wells, 3rd Qrtr '03
MATRIX: Aqueous
Ext. Batch: 080803
Date Extracted: 8/8/2003
Date Analyzed: 11-Aug-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.

173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	**U.S. Army, DPW, SELFM-PW-EV**	**Location:**	**283 Wells 3rd. Qrtr. '03**
Project Name:	**283 Wells 3rd. Qrtr. '03**	**MATRIX:**	**Aqueous**
Field ID:	**283 MW 01**	**Ext. Batch:**	**080803**
Lab ID:	**3046901**	**Date Extracted:**	**8/8/2003**
Filename:	**01081.D**	**Date Analyzed:**	**18-Aug-03**
Lab Project :	**30469**	**Dilution:**	**1**
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	**alpha-BHC**	ND	0.01	0.02		0.0011
319-85-7	**beta-BHC**	ND	0.01	0.20		0.0050
58-89-9	**gamma-BHC**	ND	0.01	0.20		0.0013
319-86-8	**delta-BHC**	ND	0.01	NLE		0.0016
76-44-8	**Heptachlor**	ND	0.01	0.40		0.0035
309-00-2	**Aldrin**	ND	0.01	0.04		0.0026
1024-57-3	**Heptachlor epoxide**	ND	0.01	0.20		0.0020
5103-71-9	**gamma-Chlordane**	ND	0.01	0.50		0.0007
5103-74-2	**alpha-Chlordane**	ND	0.01	0.50		0.0036
959-98-8	**Endosulfan I**	ND	0.01	0.40		0.0016
72-55-9	**4,4'-DDE**	ND	0.01	0.10		0.0021
60-57-1	**Dieldrin**	ND	0.01	0.03		0.0020
72-20-8	**Endrin**	ND	0.01	2.00		0.0032
33213-65-9	**Endosulfan II**	ND	0.01	0.40		0.0022
72-54-8	**4,4'-DDD**	ND	0.01	0.10		0.0020
7421-93-4	**Endrin aldehyde**	ND	0.01	NLE		0.0100
50-29-3	**4,4'-DDT**	ND	0.01	0.10		0.0052
1031-07-8	**Endosulfan sulfate**	ND	0.50	0.40		0.0026
53494-70-5	**Endrin ketone**	ND	0.50	0.01		0.0026
72-43-5	**Methoxychlor**	ND	0.50	40.00		0.0100
8001-35-2	**Toxaphene**	ND	0.50	3.00		0.0157
12674-11-2	**Arochlor 1016**	ND	0.50	0.50		0.0683
11104-28-2	**Arochlor 1221**	ND	0.50	0.5		0.0666
11141-16-5	**Arochlor 1232**	ND	0.50	0.50		0.0648
53469-21-9	**Arochlor 1242**	ND	0.50	0.50		0.0485
12672-29-6	**Arochlor 1248**	ND	0.50	0.50		0.0544
11097-69-1	**Arochlor 1254**	ND	0.50	0.50		0.0608
11096-82-5	**Arochlor 1260**	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) **1000.0**
Final Vol.(ml) **10.0**

***Higher of PQL's and ground water criteria as per NJAC 7:9-6**
***Results between MDL and RL are estimated.**
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells 3rd. Qrtr. '03
Field ID: 283 MW 02
Lab ID: 3046902
Filename: 01082.D
Lab Project : 30469

Location: 283 Wells 3rd. Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 080803
Date Extracted: 8/8/2003
Date Analyzed: 18-Aug-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.

173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells 3rd. Qrtr. '03
Field ID: 283 MW 03
Lab ID: 3046903
Filename: 01083.D
Lab Project : 30469

Location: 283 Wells 3rd. Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 080803
Date Extracted: 8/8/2003
Date Analyzed: 18-Aug-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-71-9	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-74-2	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	0.01		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

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 #: 30469
Sample Prepared:

Site: M-12
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	08/19/03	112	200	200	21.8
Antimony	08/19/03	ND	20	20.00	3.70
Arsenic	08/19/03	ND	8	5.00	2.30
Barium	08/19/03	ND	2000	5.00	0.500
Beryllium	08/19/03	0.0330	20	0.500	0.020
Cadmium	08/19/03	ND	4	2.00	0.400
Calcium	08/19/03	124	NLE	1000	65.00
Chromium	08/19/03	ND	100	5.00	1.00
Cobalt	08/19/03	ND	NLE	2.00	0.300
Copper	08/19/03	1.09	1000	5.00	0.300
Iron	08/19/03	ND	300	500	78.00
Lead	08/19/03	1.46	10	5.00	0.800
Magnesium	08/19/03	ND	NLE	1000	11.00
Manganese	08/19/03	ND	50	5.00	0.900
Mercury	08/15/03	ND	2	0.500	0.150
Nickel	08/19/03	ND	100	5.00	0.700
Potassium	08/19/03	197	NLE	1000	25.00
Selenium	08/19/03	ND	50	20.00	4.80
Silver	08/19/03	ND	20	5.00	0.600
Sodium	08/19/03	ND	50000	5000	1160
Thallium	08/19/03	ND	10	10.00	1.90
Vanadium	08/19/03	ND	NLE	5.00	0.200
Zinc	08/19/03	ND	5000	50.00	1.60

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 0770

Lab ID #: 30466
Sample Prepared: 08/15/03

Site: 296
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	08/19/03	ND	200	200	21.8
Antimony	08/19/03	ND	20	20.00	3.70
Arsenic	08/19/03	ND	8	5.00	2.30
Barium	08/19/03	ND	2000	5.00	0.500
Beryllium	08/19/03	0.0279	20	0.500	0.020
Cadmium	08/19/03	ND	4	2.00	0.400
Calcium	08/19/03	ND	NLE	1000	65.00
Chromium	08/19/03	ND	100	5.00	1.00
Cobalt	08/19/03	ND	NLE	2.00	0.300
Copper	08/19/03	ND	1000	5.00	0.300
Iron	08/19/03	ND	300	500	78.00
Lead	08/19/03	ND	10	5.00	0.800
Magnesium	08/19/03	ND	NLE	1000	11.00
Manganese	08/19/03	ND	50	5.00	0.900
Mercury	08/15/03	ND	2	0.500	0.150
Nickel	08/19/03	ND	100	5.00	0.700
Potassium	08/19/03	361	NLE	1000	25.00
Selenium	08/19/03	ND	50	20.00	4.80
Silver	08/19/03	ND	20	5.00	0.600
Sodium	08/19/03	ND	50000	5000	1160
Thallium	08/19/03	ND	10	10.00	1.90
Vanadium	08/19/03	ND	NLE	5.00	0.200
Zinc	08/19/03	ND	5000	50.00	1.60

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.C7:9
R.L.=Reporting limit. Note: The results reported between MDL and RL are estimated.

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 #: 3046602
Sample Received: 08/04/03
Sample Matrix: Aqueous

Site: 296
Ft. Monmouth, New Jersey

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	08/19/03	198	200	200	21.8
Antimony	08/19/03	ND	20	20.00	3.70
Arsenic	08/19/03	ND	8	5.00	2.30
Barium	08/19/03	ND	2000	5.00	0.500
Beryllium	08/19/03	0.0203	20	0.500	0.020
Cadmium	08/19/03	ND	4	2.00	0.400
Calcium	08/19/03	213	NLE	1000	65.00
Chromium	08/19/03	ND	100	5.00	1.00
Cobalt	08/19/03	ND	NLE	2.00	0.300
Copper	08/19/03	ND	1000	5.00	0.300
Iron	08/19/03	117	300	500	78.00
Lead	08/19/03	ND	10	5.00	0.800
Magnesium	08/19/03	97.1	NLE	1000	11.00
Manganese	08/19/03	ND	50	5.00	0.900
Mercury	08/15/03	ND	2	0.500	0.150
Nickel	08/19/03	ND	100	5.00	0.700
Potassium	08/19/03	262	NLE	1000	25.00
Selenium	08/19/03	ND	50	20.00	4.80
Silver	08/19/03	ND	20	5.00	0.600
Sodium	08/19/03	ND	50000	5000	1160
Thallium	08/19/03	ND	10	10.00	1.90
Vanadium	08/19/03	ND	NLE	5.00	0.200
Zinc	08/19/03	ND	5000	50.00	1.60

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
R.L.= Reporting limit. Note: The results reported between MDL and RL are estimated.

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 #: 3046901
Sample Received: 08/04/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	08/19/03	2960	200	200	21.8
Antimony	08/19/03	83.6	20	20.00	3.70
Arsenic	08/19/03	ND	8	5.00	2.30
Barium	08/19/03	96.0	2000	5.00	0.500
Beryllium	08/19/03	0.900	20	0.500	0.020
Cadmium	08/19/03	0.719	4	2.00	0.400
Calcium	08/19/03	9170	NLE	1000	65.00
Chromium	08/19/03	ND	100	5.00	1.00
Cobalt	08/19/03	4.36	NLE	2.00	0.300
Copper	08/19/03	3.45	1000	5.00	0.300
Iron	08/19/03	194	300	500	78.00
Lead	08/19/03	ND	10	5.00	0.800
Magnesium	08/19/03	16900	NLE	1000	11.00
Manganese	08/19/03	33.0	50	5.00	0.900
Mercury	08/15/03	ND	2	0.500	0.150
Nickel	08/19/03	10.4	100	5.00	0.700
Potassium	08/19/03	6670	NLE	1000	25.00
Selenium	08/19/03	ND	50	20.00	4.80
Silver	08/19/03	ND	20	5.00	0.600
Sodium	08/19/03	51400	50000	5000	1160
Thallium	08/19/03	ND	10	10.00	1.90
Vanadium	08/19/03	0.362	NLE	5.00	0.200
Zinc	08/19/03	79.1	5000	50.00	1.60

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 #: 3046902
Sample Received: 08/04/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	08/19/03	984	200	200	21.8
Antimony	08/19/03	ND	20	20.00	3.70
Arsenic	08/19/03	4.95	8	5.00	2.30
Barium	08/19/03	34.5	2000	5.00	0.500
Beryllium	08/19/03	0.136	20	0.500	0.020
Cadmium	08/19/03	ND	4	2.00	0.400
Calcium	08/19/03	1240	NLE	1000	65.00
Chromium	08/19/03	11.3	100	5.00	1.00
Cobalt	08/19/03	ND	NLE	2.00	0.300
Copper	08/19/03	3.22	1000	5.00	0.300
Iron	08/19/03	4420	300	500	78.00
Lead	08/19/03	9.71	10	5.00	0.800
Magnesium	08/19/03	1210	NLE	1000	11.00
Manganese	08/19/03	5.08	50	5.00	0.900
Mercury	08/15/03	ND	2	0.500	0.150
Nickel	08/19/03	2.76	100	5.00	0.700
Potassium	08/19/03	2140	NLE	1000	25.00
Selenium	08/19/03	ND	50	20.00	4.80
Silver	08/19/03	ND	20	5.00	0.600
Sodium	08/19/03	13600	50000	5000	1160
Thallium	08/19/03	ND	10	10.00	1.90
Vanadium	08/19/03	4.38	NLE	5.00	0.200
Zinc	08/19/03	15.8	5000	50.00	1.60

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 #: 3046903
Sample Received: 08/04/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	08/19/03	109	200	200	21.8
Antimony	08/19/03	ND	20	20.00	3.70
Arsenic	08/19/03	3.10	8	5.00	2.30
Barium	08/19/03	173	2000	5.00	0.500
Beryllium	08/19/03	0.0682	20	0.500	0.020
Cadmium	08/19/03	0.660	4	2.00	0.400
Calcium	08/19/03	11600	NLE	1000	65.00
Chromium	08/19/03	ND	100	5.00	1.00
Cobalt	08/19/03	ND	NLE	2.00	0.300
Copper	08/19/03	ND	1000	5.00	0.300
Iron	08/19/03	12300	300	500	78.00
Lead	08/19/03	ND	10	5.00	0.800
Magnesium	08/19/03	2200	NLE	1000	11.00
Manganese	08/19/03	34.4	50	5.00	0.900
Mercury	08/15/03	ND	2	0.500	0.150
Nickel	08/19/03	5.13	100	5.00	0.700
Potassium	08/19/03	7900	NLE	1000	25.00
Selenium	08/19/03	ND	50	20.00	4.80
Silver	08/19/03	ND	20	5.00	0.600
Sodium	08/19/03	7600	50000	5000	1160
Thallium	08/19/03	ND	10	10.00	1.90
Vanadium	08/19/03	0.497	NLE	5.00	0.200
Zinc	08/19/03	10.4	5000	50.00	1.60

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	Aluminum	Arsenic	Iron	Manganese	Depth to Water					Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	Feet					-
NJDEP Criteria:	-	200	8	300	50	NLE					-
06/28/2000	FMETL	2070	ND	1450	22.2	6.31					V,S,P,M
08/10/2000	FMETL	1930	ND	739	23.8	5.54					V,S,P,M
10/17/2000	FMETL	2120	ND	306	21.8	6.07					V,S,P,M
01/05/2001	FMETL	2460	ND	868	26.0	6.11					V,S,P,M
04/04/2001	FMETL	2350	ND	410	34.7	4.62					V,S,P,M
07/24/2001	FMETL	3150	ND	575	55.2	6.25					V,S,P,M
07/24/2001D	FMETL	3160	ND	576	34.3	6.25					V,S,P,M
12/11/2001	FMETL	3600	ND	4490	29.3	7.15					V,S,P,M
03/08/2002	FMETL	3520	ND	897	36.1	6.43					V,S,P,M
05/16/2002	FMETL	3330	27.7	577	33.9	6.14					V,S,P,M
09/10/2002	FMETL	3350	3.16	692	33.1	5.91					V,S,P,M
12/03/2002	FMETL	3190	ND	281	43.2	5.37					V,S,P,M
02/27/2003	FMETL	3130	ND	ND	40.6	5.12					V,S,P,M
05/19/2003	FMETL	3140	ND	275	36.3	6.02					V,S,P,M
08/04/2003	FMETL	2960	ND	194	33.0	5.74					V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 08/04/2003

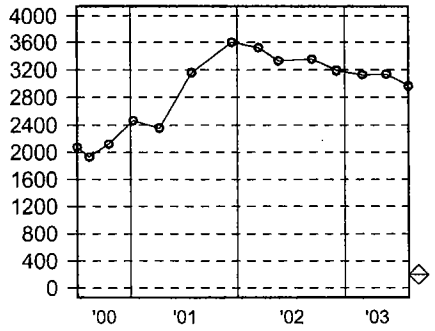
NOTES:

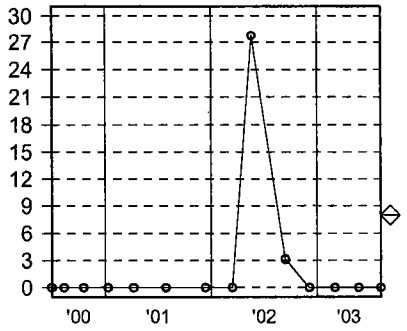
FORT MONMOUTH

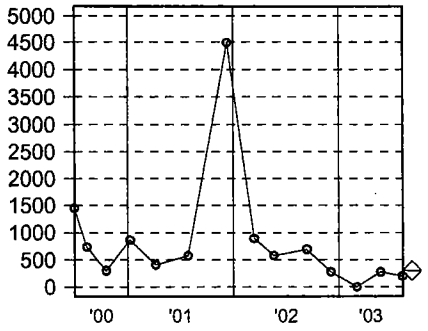
GW MONITORING
BLDG. 283

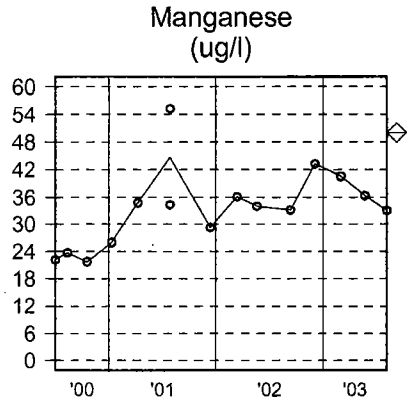
Source 2 of 3

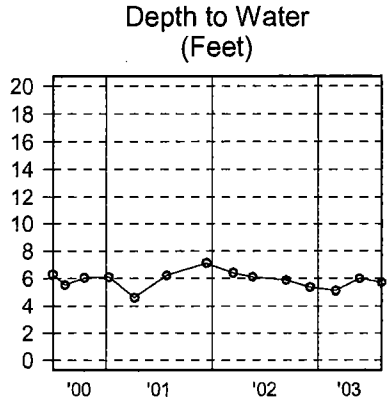
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 08/04/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	Aluminum	Arsenic	Iron	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:	-	1	1000	700	40	200	8	300	10	NLE	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	309	4.74	2330	22.0	7.20	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	123	ND	2060	6.92	6.81	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	241	ND	2010	15.3	6.38	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	81.4	ND	2130	11.5	7.83	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	812	3.40	2060	31.9	6.28	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	917	2.38	3340	14.5	7.09	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	973	4.89	3210	15.9	7.09	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	360	3.72	3220	25.3	7.32	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	2200	3.00	4360	23.0	4.81	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	1780	6.78	4050	12.3	6.75	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	1470	3.09	7120	11.8	8.54	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	249	ND	3220	9.02	7.47	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	996	24.2	4040	7.47.	6.90	V,S,P,M
09/10/2002	FMETL	223.80	94.08	476.21	1910.78	267	7.95	2490	9.58	5.93	V,S,P,M
12/03/2002	FMETL	119.4	39.32	349.99	970.72	157	6.04	1720	5.84	5.28	V,S,P,M
02/27/2003	FMETL	123.79	122.91	560.9	3067.89	235	2.59	1230	17.1	4.70	V,S,P,M
05/19/2003	FMETL	112.54	27.19	215.60	2499.45	2690	6.64	8350	11.8	6.46	V,S,P,M
08/04/2003	FMETL	239.49	108.66	485.84	1985.34	984	4.95	4420	9.71	6.11	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/04/2003

NOTES:

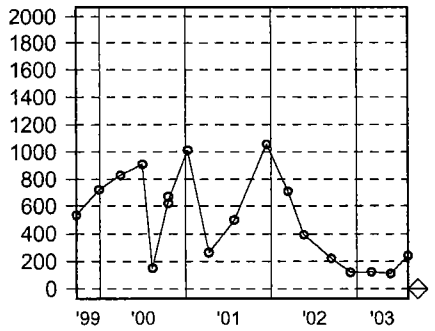
FORT MONMOUTH

GW MONITORING
BLDG. 283

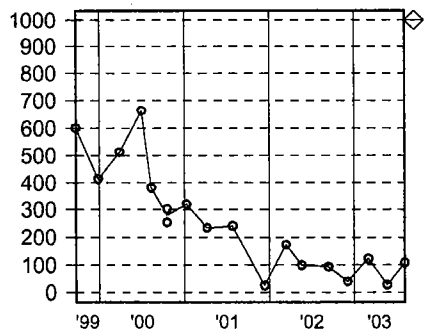
Source 1 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

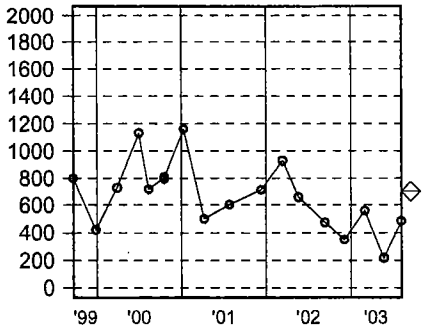
Benzene
(ug/L)



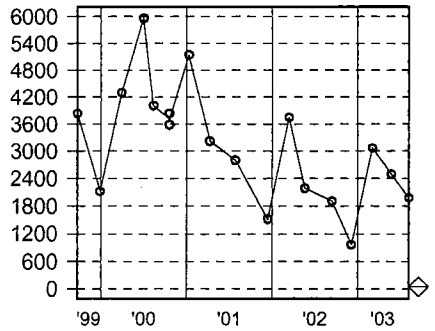
Toluene
(ug/L)



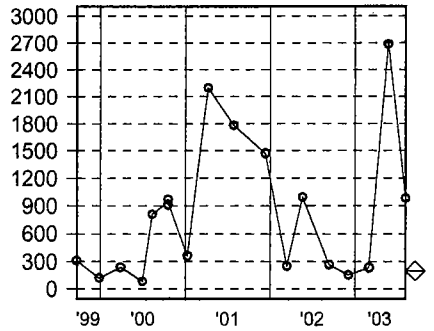
Ethylbenzene
(ug/L)



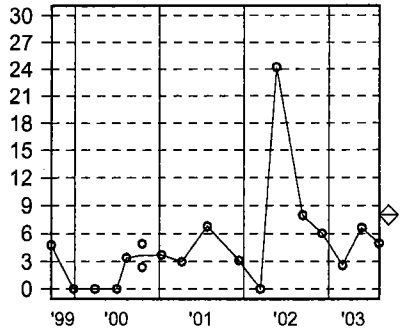
Xylenes
(ug/L)



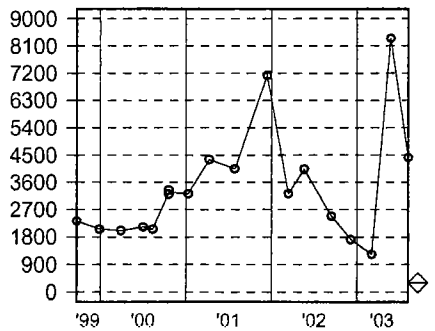
Aluminum
(ug/L)



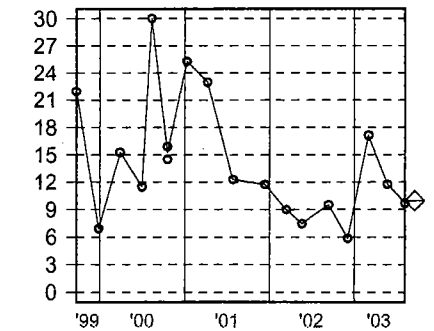
Arsenic
(ug/L)



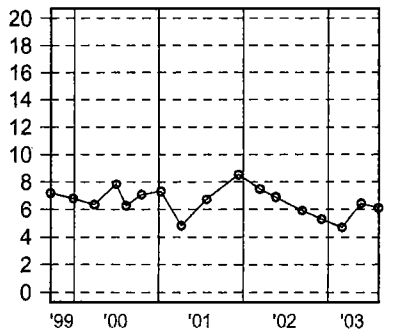
Iron
(ug/L)



Lead
(ug/L)



Depth to Water
(Feet)



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/04/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

08-26-2003 X:\MtechData\283\283.WSF

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Depth to Water			Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	Feet			-
NJDEP Criteria:	-	1	200	8	300	10	50	NLE			-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	7.12			V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	6.41			V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	6.88			V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	6.94			V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	6.94			V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	5.75			V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	5.75			V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	7.00			V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	7.67			V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	7.10			V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	6.90			V,S,P,M
09/10/2002	FMETL	ND	393	6.61	10700	ND	35.7	6.51			V,S,P,M
12/03/2002	FMETL	3.45	48.3	4.18	1230	9.11	48.2	6.31			V,S,P,M
02/27/2003	FMETL	8.24	64.0	2.74	6360	ND	33.5	5.94			V,S,P,M
05/19/2003	FMETL	1.47	336	7.68	26500	1.16	40.8	6.77			V,S,P,M
08/04/2003	FMETL	ND	109	3.10	12300	ND	34.4	6.56			V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 08/04/2003

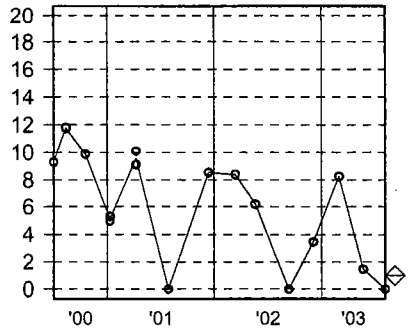
NOTES:

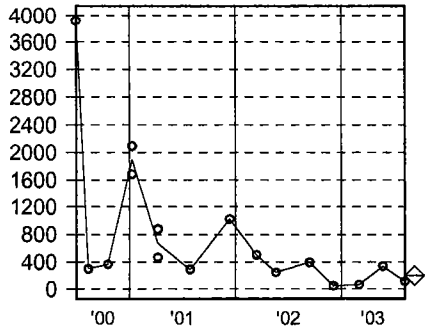
FORT MONMOUTH

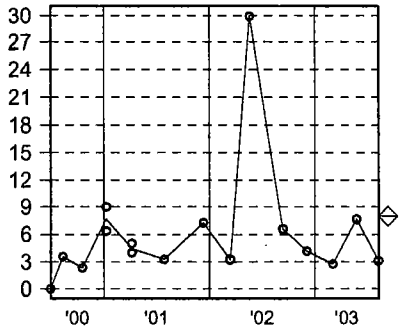
GW MONITORING
BLDG. 283

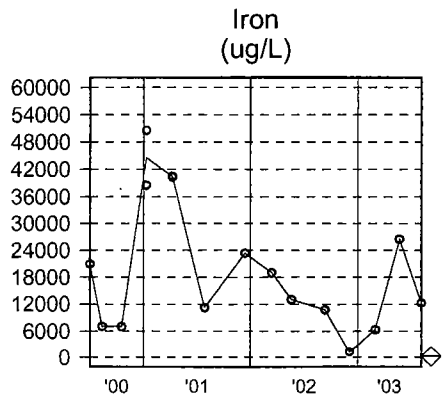
Source 3 of 3

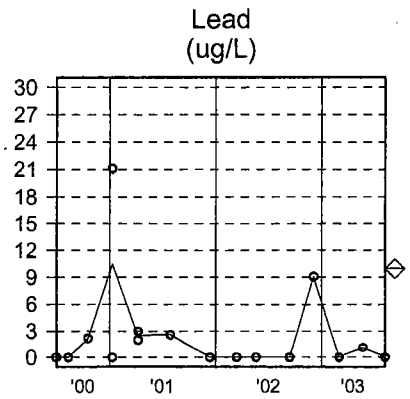
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

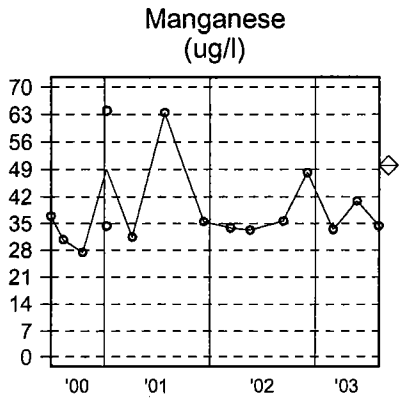


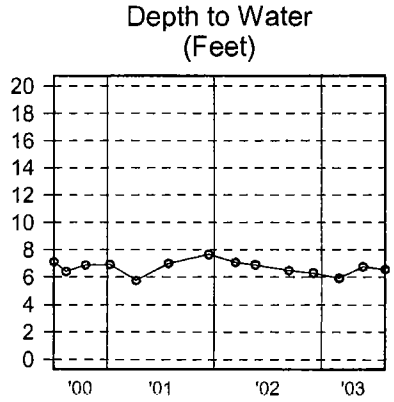












SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 08/04/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

08-26-2003 X:\MtechData\283\283.WSF

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #18

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
3073104	0283MW01	29-40367	11/13/03
3073105	0283MW02	29-40887	11/13/03
3073106	0283MW03	29-41650	11/13/03

NJDEP Laboratory Certification # 13461

12-23-03

Daniel Wright/Date:
Laboratory Director

The enclosed report relates only to the items tested. The report may not be reproduced, except in full, without written approval of the U.S. Army Fort Monmouth Directorate of Public Works.

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 #: 532-6223
( )DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells
4th Qtr '03

Samplers Name / Company: Corey McCormack, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VO +15	TAL MHs	Pest / PCB	BNA +25				Hex Red	Comments: µL/HNO3/<4°C Remarks / Preservation Method
30781 01	Trip	11/13/03	0710	AQ	2	✓							—	
02	Field Blank		1130		5	✓	✓	✓	✓				—	
03	Dupe		—		5	✓	✓	✓	✓				—	
04	283 MW01		1317		5	✓	✓	✓	✓				0.0	29-40367 Y
05	283 MW02		1309			✓	✓	✓	✓				1.0	29-40587 CY
06	283 MW03 *		1328			✓	✓	✓	✓				0.0	29-41650 B

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	11/12/03 1500				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: (_)Full, (X)Reduced, (_)Standard, (_)Screen / non-certified, (_)EDD
Turnaround time: (_)Standard 3 wks, (X)Rush ____ Days, (_)ASAP Verbal ____ Hrs.

Remarks: Shows T/FB/D w/ 290 sample com
Tide: H

print legibly

COC.XLS10/20/2003

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 11/13/03
WEATHER: Overcast and windy.
TIDE: High

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.72 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.03 ft
(14.03) X 0.65 X 3 = 27.35
GALLONS OF H_2O TO BE PURGED: 27 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: 11:19
pH 5.70 su — TEMP 17.77 °C
DISSOLVED O_2 3.97 mg/L — SPECIFIC CONDUCTIVITY 563 µs/cm

PURGE END TIME: 13:16
pH 5.51 su — TEMP 17.61 °C
DISSOLVED O_2 2.61 mg/L — SPECIFIC CONDUCTIVITY 581 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 5.83 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 13:17
pH 5.49 su — TEMP 17.62 °C
DISSOLVED O_2 2.58 mg/L — SPECIFIC CONDUCTIVITY 582 µs/cm

SAMPLE END TIME: 13:22

COMMENTS: Low draw down.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 11/13/03
WEATHER: Overcast and windy.
TIDE: High

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.03 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 13.66 ft
(13.66) X 0.65 X 3 = 26.63
GALLONS OF H_2O TO BE PURGED: 27 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: 11:11
pH 5.11 su — TEMP 17.69 °C
DISSOLVED O_2 3.57 mg/L — SPECIFIC CONDUCTIVITY 311 µs/cm

PURGE END TIME: 13:08
pH 5.00 su — TEMP 17.79 °C
DISSOLVED O_2 2.17 mg/L — SPECIFIC CONDUCTIVITY 339 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 9.97 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 13:09
pH 4.99 su — TEMP 17.22 °C
DISSOLVED O_2 2.16 mg/L — SPECIFIC CONDUCTIVITY 340 µs/cm

SAMPLE END TIME: 13:13

COMMENTS: Odor.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 11/13/03
WEATHER: Overcast and windy.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.45 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 17.60 ft
(17.60) X 0.65 X 3 = 34.32
GALLONS OF H_2O TO BE PURGED: 34 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: 11:00
pH 5.60 su — TEMP 17.87 °C
DISSOLVED O_2 3.63 mg/L — SPECIFIC CONDUCTIVITY 276 µs/cm

PURGE END TIME: 13:27
pH 5.41 su — TEMP 17.63 °C
DISSOLVED O_2 2.30 mg/L — SPECIFIC CONDUCTIVITY 271 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.96 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 34 gal

SAMPLE START TIME: 13:28
pH 5.40 su — TEMP 17.64 °C
DISSOLVED O_2 2.27 mg/L — SPECIFIC CONDUCTIVITY 271 µs/cm

SAMPLE END TIME: 13:33

COMMENTS: DUP. Here. Low draw down, cloudy.

VOLATILE ORGANICS

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

U: The compound was analyzed for but not detected.

B: Indicates that the compound was found in the associated method blank as well as in the sample.

J: Indicates an estimated value. This flag is used:

(1) When the mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.

(2) When estimating the concentration of a tentatively identified compound (TIC), where a 1:1 response is assumed.

D: This flag is used to identify all compounds (target or TIC) that required a dilution.

E: Indicates the compound's concentration exceeds the calibration range of the instrument for that specific analysis.

N: This flag is only used for TICs. It indicates the presumptive evidence of a compound. For a generic characterization of a TIC, such as unknown hydrocarbon, the flag is not used.

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC010674.D**	Sample Name	**MB 19Nov03**
Operator	**Skelton**	Field ID	**MB 19Nov03**
Date Aquired	**19-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone	9.65	101432	3.31 ug/L	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 19Nov03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 19Nov03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010674.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/19/2003

GC Column: ZB-624 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	**VC010708.D**	Sample Name	**MB 20Nov03**
Operator	**Skelton**	Field ID	**MB 20Nov03**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone	9.64	402709	2.94 ug/L	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 20Nov03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 20Nov03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010708.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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	**VC010690.D**	Sample Name	**3073101**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	15.58	89323	1.02 ug/L	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3073101

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010690.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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	**VC010691.D**	Sample Name	**3073102**
Operator	**Skelton**	Field ID	**Field Blank**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	15.58	88874	1.01 ug/L	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3073102

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010691.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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	**VC010692.D**	Sample Name	**3073103**
Operator	**Skelton**	Field ID	**Dupe**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3073103

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010692.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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	**VC010693.D**	Sample Name	**3073104**
Operator	**Skelton**	Field ID	**283MW01**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3073104

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010693.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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	**VC010694.D**	Sample Name	**3073105**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform	15.39	319986	2.59 ug/L	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene	16.91	45579404	169.43 ug/L	1	0.23 ug/L	2.00 ug/L	E
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene	21.58	34222601	129.78 ug/L	1000	0.37 ug/L	2.00 ug/L	E
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.17	54998084	178.53 ug/L	700	0.65 ug/L	2.00 ug/L	E
1330-20-7	m+p-Xylenes	25.45	56153289	408.62 ug/L	nle	1.14 ug/L	2.00 ug/L	E
1330-20-7	o-Xylene	26.42	58127785	228.24 ug/L	nle	0.62 ug/L	2.00 ug/L	E
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC010699.D**	Sample Name	**3073105**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**20-Nov-03**	Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	37.00 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	55.60 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	170.40 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	3.20 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	5.00 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	33.60 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	23.20 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	21.20 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	22.00 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	20.20 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	10.00 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	4.80 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	27.20 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	9.20 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	4.80 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.20 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	2.40 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	15.60 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	12.40 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	3.40 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	6.00 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	4.60 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	9.40 ug/L	2.00 ug/L	
71-43-2	Benzene	16.90	3230227	290.54 ug/L	1	4.60 ug/L	2.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	3.60 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	4.60 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	8.00 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	11.00 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	13.00 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	13.80 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	11.80 ug/L	2.00 ug/L	
108-88-3	Toluene	21.58	1912577	175.50 ug/L	1000	7.40 ug/L	2.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	17.40 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	9.60 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	14.20 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	17.20 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	7.80 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.20	10423352	899.91 ug/L	700	13.00 ug/L	2.00 ug/L	D
1330-20-7	m+p-Xylenes	25.47	8369242	1619.80 ug/L	nle	22.80 ug/L	2.00 ug/L	D
1330-20-7	o-Xylene	26.45	13184783	1376.95 ug/L	nle	12.40 ug/L	2.00 ug/L	E D
100-42-5	Styrene			not detected	100	11.20 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	14.00 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	9.40 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	11.00 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	11.40 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	12.80 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC010726.D**	Sample Name	**3073105**
Operator	**Skelton**	Field ID	**283MW02**
Date Aquired	**21-Nov-03**	Multiplier	**50**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	92.50 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	139.00 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	426.00 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	8.00 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	12.50 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	84.00 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	58.00 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	53.00 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	55.00 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	50.50 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	25.00 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	12.00 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	68.00 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	23.00 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	12.00 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	8.00 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	6.00 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	39.00 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	31.00 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	8.50 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	15.00 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	11.50 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	23.50 ug/L	2.00 ug/L	
71-43-2	Benzene	16.90	2537004	262.27 ug/L	1	11.50 ug/L	2.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	9.00 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	11.50 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	20.00 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	27.50 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	32.50 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	34.50 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	29.50 ug/L	2.00 ug/L	
108-88-3	Toluene	21.58	1304778	139.08 ug/L	1000	18.50 ug/L	2.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	43.50 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	24.00 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	16.00 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	35.50 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	43.00 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	19.50 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.20	6402261	644.36 ug/L	700	32.50 ug/L	2.00 ug/L	D
1330-20-7	m+p-Xylenes	25.47	5492428	1235.41 ug/L	nle	57.00 ug/L	2.00 ug/L	D
1330-20-7	o-Xylene	26.46	8538361	1029.04 ug/L	nle	31.00 ug/L	2.00 ug/L	D
100-42-5	Styrene			not detected	100	28.00 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	35.00 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	23.50 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	27.50 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	28.50 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	32.00 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3073105

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010694.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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.	unknown hydrocarbon	5.08	250	J
2.	unknown hydrocarbon	6.73	670	J
3.	unknown hydrocarbon	7.64	480	J
4. 000109-67-1	1-Pentene	8.16	210	JN
5.	unknown	10.70	230	J
6. 000107-83-5	Pentane, 2-methyl-	10.87	270	JN
7.	unknown hydrocarbon	11.03	450	J
8. 000096-14-0	Pentane, 3-methyl-	11.65	210	JN
9. 000110-54-3	Hexane	12.49	190	JN
10. 001759-81-5	Cyclopentene, 4-methyl-	13.53	160	JN
11.	unknown	14.25	720	J
12.	unknown	16.02	760	J
13.	unknown	18.89	260	J
14. 000620-14-4	Benzene, 1-ethyl-3-methyl-	28.51	140	JN
15.	unknown hydrocarbon	29.60	280	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File	**VC010698.D**	Sample Name	**3073106**
Operator	**Skelton**	Field ID	**283MW03**
Date Aquired	**20-Nov-03**	Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	2.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	2.00 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	2.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	2.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 30731 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 3073106

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC010698.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: not dec. Date Analyzed: 11/20/2003

GC Column: ZB-624 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

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06870.D**	Sample Name	**MB-111803**
Operator	**B.Patel**	Misc Info	**MB-111803-Aq.**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06870.D**	Sample Name	**MB-111803**
Operator	**B.Patel**	Misc Info	**MB-111803-Aq.**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **MB-111803**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30731 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: MB-111803

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06870.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: decanted: (Y/N) N Date Extracted: 11/18/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/2003

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	24.64	10	J
2. 000123-95-5	Octadecanoic acid, butyl ester	26.35	8	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06872.D**	Sample Name	**3073102**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06872.D**	Sample Name	**3073102**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30731 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3073102

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06872.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: decanted: (Y/N) N Date Extracted: 11/18/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/2003

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	24.64	7	J
2. 000123-95-5	Octadecanoic acid, butyl ester	26.35	6	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06873.D**	Sample Name	**3073103**
Operator	**B.Patel**	Misc Info	**Dupe**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN06873.D**	Sample Name	**3073103**
Operator	**B.Patel**	Misc Info	**Dupe**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30731 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 3073103

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06873.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: _____ decanted: (Y/N) N Date Extracted: 11/18/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/2003

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	24.64	6	J
2. 000123-95-5	Octadecanoic acid, butyl ester	26.35	5	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06874.D**	Sample Name	**3073104**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name **BN06874.D**
Operator **B.Patel**
Date Acquired **18-Nov-03**

Sample Name **3073104**
Misc Info **283MW01**
Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30731 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 3073104

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06874.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: decanted: (Y/N) N Date Extracted: 11/18/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/2003

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	24.64	6	J
2. 000123-95-5	Octadecanoic acid, butyl ester	26.35	5	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06875.D**	Sample Name	**3073105**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol	12.50	37910	1.80 ug/L	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene	13.36	5853185	108.81 ug/L	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene	14.98	653727	20.23 ug/L	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06875.D**	Sample Name	**3073105**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30731 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 3073105

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06875.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: _____ decanted: (Y/N) N Date Extracted: 11/18/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/2003

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000594-60-5	2-Butanol, 2,3-dimethyl-	4.75	32	JN
2. 000590-36-3	2-Pentanol, 2-methyl-	4.82	210	JN
3.	unknown	5.22	230	J
4.	unknown	6.03	88	J
5. 000625-23-0	2-Hexanol, 2-methyl-	6.91	130	JN
6. 000595-41-5	3-Pentanol, 2,3-dimethyl-	7.03	37	JN
7.	unknown	7.12	370	J
8.	unknown	7.46	76	J
9.	unknown	8.29	63	J
10. 000098-82-8	Benzene, (1-methylethyl)-	8.81	44	JN
11.	unknown	8.90	95	J
12.	unknown	9.08	98	J
13. 000103-65-1	Benzene, propyl-	9.37	33	JN
14. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.52	150	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	9.66	130	JN
16.	unknown	10.04	47	J
17. 000526-73-8	Benzene, 1,2,3-trimethyl-	10.13	360	JN
18. 000095-36-3	1,2,4-Trimethylbenzene	10.65	160	JN
19. 000496-11-7	Indane	10.89	130	JN
20. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.24	31	JN
21. 027133-93-3	2,3-Dihydro-1-methylindene	12.79	55	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN06876.D**	Sample Name	**3073106**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN06876.D**	Sample Name	**3073106**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**18-Nov-03**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
D= Value from dilution
NLE= No Limit Established
B= Compound in Related Blank
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 30731 Location: 283 SDG No: _____

Matrix: (soil/water) WATER Lab Sample ID: 3073106

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN06876.D

Level: (low/med) LOW Date Received: 11/13/2003

% Moisture: _____ decanted: (Y/N) N Date Extracted: 11/18/2003

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/2003

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

PEST/PCB's

U.S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

TABULATED ANALYTICAL REPORT
SW 846 608
Pesticides/PCB

mb 111403

Matrix: Aqueous
Date Extracted: 11/14/2003
Ext. Batch: 111403
Filename: 01740.D
Date Analysed: 11/14/2003

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.0011
319-85-7	beta-BHC	ND	0.0050
58-89-9	gamma-BHC	ND	0.0013
319-86-8	delta-BHC	ND	0.0016
76-44-8	Heptachlor	ND	0.0035
309-00-2	Aldrin	ND	0.0026
1024-57-3	Heptachlor epoxide	ND	0.0020
5103-74-2	gamma-Chlordane	ND	0.0007
5103-71-9	alpha-Chlordane	ND	0.0036
959-98-8	Endosulfan I	ND	0.0016
72-55-9	4,4'-DDE	ND	0.0021
60-57-1	Dieldrin	ND	0.0020
72-20-8	Endrin	ND	0.0032
33213-65-9	Endosulfan II	ND	0.0022
72-54-8	4,4'-DDD	ND	0.0020
7421-93-4	Endrin aldehyde	ND	0.0100
50-29-3	4,4'-DDT	ND	0.0052
1031-07-8	Endosulfan sulfate	ND	0.0026
53494-70-5	Endrin ketone	ND	0.0026
72-43-5	Methoxychlor	ND	0.0100
8001-35-2	Toxaphene	ND	0.0157
12674-11-2	Arochlor 1016	ND	0.0683
11104-28-2	Arochlor 1221	ND	0.0666
11141-16-5	Arochlor 1232	ND	0.0648
53469-21-9	Arochlor 1242	ND	0.0485
12672-29-6	Arochlor 1248	ND	0.0544
11097-69-1	Arochlor 1254	ND	0.0608
11096-82-5	Arochlor 1260	ND	0.0732

MDL = METHOD DETECTION LIMIT
ND =NOT DETECTED, BELOW MDL

Initial vol. (ml): 1000
Final vol. (ml): 10

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 4th Qrtr. '03
Field ID: FIELDBLANK
Lab ID: 3073102
Filename: 01742.D
Lab Project : 30731

Location: 283 Wells, 4th Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 111403
Date Extracted: 11/14/2003
Date Analyzed: 14-Nov-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	NLE		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 4th Qrtr. '03
Field ID: Dupe
Lab ID: 3073103
Filename: 01743.D
Lab Project : 30731

Location: 283 Wells, 4th Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 111403
Date Extracted: 11/14/2003
Date Analyzed: 14-Nov-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	NLE		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 4th Qrtr. '03
Field ID: 283MW01
Lab ID: 3073104
Filename: 01744.D
Lab Project : 30731

Location: 283 Wells, 4th Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 111403
Date Extracted: 11/14/2003
Date Analyzed: 14-Nov-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	NLE		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 4th Qrtr. '03
Field ID: 283MW02
Lab ID: 3073105
Filename: 01745.D
Lab Project : 30731

Location: 283 Wells, 4th Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 111403
Date Extracted: 11/14/2003
Date Analyzed: 14-Nov-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	NLE		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 4th Qrtr. '03
Field ID: 283MW03
Lab ID: 3073106 fb 111103
Filename: 01746.D
Lab Project : 30731

Location: 283 Wells, 4th Qrtr. '03
MATRIX: Aqueous
Ext. Batch: 111403
Date Extracted: 11/14/2003
Date Analyzed: 14-Nov-03
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.01	0.02		0.0011
319-85-7	beta-BHC	ND	0.01	0.20		0.0050
58-89-9	gamma-BHC	ND	0.01	0.20		0.0013
319-86-8	delta-BHC	ND	0.01	NLE		0.0016
76-44-8	Heptachlor	ND	0.01	0.40		0.0035
309-00-2	Aldrin	ND	0.01	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.01	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.01	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.01	0.50		0.0036
959-98-8	Endosulfan I	ND	0.01	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.01	0.10		0.0021
60-57-1	Dieldrin	ND	0.01	0.03		0.0020
72-20-8	Endrin	ND	0.01	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.01	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.01	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.01	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.01	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.50	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.50	NLE		0.0026
72-43-5	Methoxychlor	ND	0.50	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.5		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

TAL 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 #: 30731
Sample Prepared:

Site: M-12
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	11/25/03	27.8	200	200	21.8
Antimony	11/25/03	ND	20	20.00	3.70
Arsenic	11/25/03	4.70	8	5.00	2.30
Barium	11/25/03	ND	2000	5.00	0.500
Beryllium	11/25/03	0.030	20	0.500	0.020
Cadmium	11/25/03	ND	4	2.00	0.400
Calcium	11/25/03	124	NLE	1000	65.00
Chromium	11/25/03	ND	100	5.00	1.00
Cobalt	11/25/03	ND	NLE	2.00	0.300
Copper	11/25/03	0.498	1000	5.00	0.300
Iron	11/25/03	ND	300	500	78.00
Lead	11/25/03	ND	10	5.00	0.800
Magnesium	11/25/03	ND	NLE	1000	11.00
Manganese	11/25/03	ND	50	5.00	0.900
Mercury	12/01/03	ND	2	0.500	0.100
Nickel	11/25/03	ND	100	5.00	0.700
Potassium	11/25/03	632	NLE	1000	25.00
Selenium	11/25/03	ND	50	20.00	4.80
Silver	11/25/03	ND	20	5.00	0.600
Sodium	11/25/03	ND	50000	5000	1160
Thallium	11/25/03	ND	10	10.00	1.90
Vanadium	11/25/03	ND	NLE	5.00	0.200
Zinc	11/25/03	ND	5000	50.00	1.60

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 #: 3073102
Sample Received: 11/13/03
Sample Matrix: Aqueous

Site: 283

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	11/25/03	ND	200	200	21.8
Antimony	11/25/03	ND	20	20.00	3.70
Arsenic	11/25/03	ND	8	5.00	2.30
Barium	11/25/03	ND	2000	5.00	0.500
Beryllium	11/25/03	0.059	20	0.500	0.020
Cadmium	11/25/03	ND	4	2.00	0.400
Calcium	11/25/03	70.6	NLE	1000	65.00
Chromium	11/25/03	ND	100	5.00	1.00
Cobalt	11/25/03	ND	NLE	2.00	0.300
Copper	11/25/03	ND	1000	5.00	0.300
Iron	11/25/03	ND	300	500	78.00
Lead	11/25/03	ND	10	5.00	0.800
Magnesium	11/25/03	ND	NLE	1000	11.00
Manganese	11/25/03	ND	50	5.00	0.900
Mercury	12/01/03	ND	2	0.500	0.100
Nickel	11/25/03	ND	100	5.00	0.700
Potassium	11/25/03	121	NLE	1000	25.00
Selenium	11/25/03	ND	50	20.00	4.80
Silver	11/25/03	ND	20	5.00	0.600
Sodium	11/25/03	ND	50000	5000	1160
Thallium	11/25/03	ND	10	10.00	1.90
Vanadium	11/25/03	ND	NLE	5.00	0.200
Zinc	11/25/03	ND	5000	50.00	1.60

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 #: 3073103
Sample Received: 11/13/03
Sample Matrix: Aqueous

Site: 283

Field ID#: Dupe

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	11/25/03	291	200	200	21.8
Antimony	11/25/03	ND	20	20.00	3.70
Arsenic	11/25/03	9.41	8	5.00	2.30
Barium	11/25/03	208	2000	5.00	0.500
Beryllium	11/25/03	0.194	20	0.500	0.020
Cadmium	11/25/03	0.679	4	2.00	0.400
Calcium	11/25/03	13000	NLE	1000	65.00
Chromium	11/25/03	2.38	100	5.00	1.00
Cobalt	11/25/03	0.306	NLE	2.00	0.300
Copper	11/25/03	ND	1000	5.00	0.300
Iron	11/25/03	18100	300	500	78.00
Lead	11/25/03	ND	10	5.00	0.800
Magnesium	11/25/03	2450	NLE	1000	11.00
Manganese	11/25/03	41.6	50	5.00	0.900
Mercury	12/01/03	ND	2	0.500	0.100
Nickel	11/25/03	5.66	100	5.00	0.700
Potassium	11/25/03	8200	NLE	1000	25.00
Selenium	11/25/03	ND	50	20.00	4.80
Silver	11/25/03	ND	20	5.00	0.600
Sodium	11/25/03	7450	50000	5000	1160
Thallium	11/25/03	ND	10	10.00	1.90
Vanadium	11/25/03	0.616	NLE	5.00	0.200
Zinc	11/25/03	11.6	5000	50.00	1.60

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 #: 3073104
Sample Received: 11/13/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	11/25/03	4010	200	200	21.8
Antimony	11/25/03	ND	20	20.00	3.70
Arsenic	11/25/03	ND	8	5.00	2.30
Barium	11/25/03	118	2000	5.00	0.500
Beryllium	11/25/03	1.19	20	0.500	0.020
Cadmium	11/25/03	0.436	4	2.00	0.400
Calcium	11/25/03	11200	NLE	1000	65.00
Chromium	11/25/03	2.73	100	5.00	1.00
Cobalt	11/25/03	5.48	NLE	2.00	0.300
Copper	11/25/03	3.76	1000	5.00	0.300
Iron	11/25/03	515	300	500	78.00
Lead	11/25/03	ND	10	5.00	0.800
Magnesium	11/25/03	20100	NLE	1000	11.00
Manganese	11/25/03	42.9	50	5.00	0.900
Mercury	12/01/03	ND	2	0.500	0.100
Nickel	11/25/03	13.9	100	5.00	0.700
Potassium	11/25/03	7080	NLE	1000	25.00
Selenium	11/25/03	ND	50	20.00	4.80
Silver	11/25/03	ND	20	5.00	0.600
Sodium	11/25/03	60900	50000	5000	1160
Thallium	11/25/03	ND	10	10.00	1.90
Vanadium	11/25/03	0.717	NLE	5.00	0.200
Zinc	11/25/03	83.9	5000	50.00	1.60

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 #: 3073105
Sample Received: 11/13/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	11/25/03	762	200	200	21.8
Antimony	11/25/03	ND	20	20.00	3.70
Arsenic	11/25/03	10.7	8	5.00	2.30
Barium	11/25/03	37.6	2000	5.00	0.500
Beryllium	11/25/03	0.157	20	0.500	0.020
Cadmium	11/25/03	ND	4	2.00	0.400
Calcium	11/25/03	1200	NLE	1000	65.00
Chromium	11/25/03	8.95	100	5.00	1.00
Cobalt	11/25/03	ND	NLE	2.00	0.300
Copper	11/25/03	4.92	1000	5.00	0.300
Iron	11/25/03	3830	300	500	78.00
Lead	11/25/03	13.3	10	5.00	0.800
Magnesium	11/25/03	1140	NLE	1000	11.00
Manganese	11/25/03	6.20	50	5.00	0.900
Mercury	12/01/03	ND	2	0.500	0.100
Nickel	11/25/03	2.91	100	5.00	0.700
Potassium	11/25/03	1770	NLE	1000	25.00
Selenium	11/25/03	9.53	50	20.00	4.80
Silver	11/25/03	0.636	20	5.00	0.600
Sodium	11/25/03	13500	50000	5000	1160
Thallium	11/25/03	ND	10	10.00	1.90
Vanadium	11/25/03	3.29	NLE	5.00	0.200
Zinc	11/25/03	17.4	5000	50.00	1.60

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 #: 3073106
Sample Received: 11/13/03
Sample Matrix: Aqueous

Site: 283

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3015A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)	MDL (ug/L)
Aluminum	11/25/03	234	200	200	21.8
Antimony	11/25/03	ND	20	20.00	3.70
Arsenic	11/25/03	8.10	8	5.00	2.30
Barium	11/25/03	131	2000	5.00	0.500
Beryllium	11/25/03	0.128	20	0.500	0.020
Cadmium	11/25/03	0.463	4	2.00	0.400
Calcium	11/25/03	12300	NLE	1000	65.00
Chromium	11/25/03	1.93	100	5.00	1.00
Cobalt	11/25/03	0.542	NLE	2.00	0.300
Copper	11/25/03	ND	1000	5.00	0.300
Iron	11/25/03	10300	300	500	78.00
Lead	11/25/03	ND	10	5.00	0.800
Magnesium	11/25/03	2360	NLE	1000	11.00
Manganese	11/25/03	38.4	50	5.00	0.900
Mercury	12/01/03	ND	2	0.500	0.100
Nickel	11/25/03	5.40	100	5.00	0.700
Potassium	11/25/03	7920	NLE	1000	25.00
Selenium	11/25/03	ND	50	20.00	4.80
Silver	11/25/03	ND	20	5.00	0.600
Sodium	11/25/03	7330	50000	5000	1160
Thallium	11/25/03	ND	10	10.00	1.90
Vanadium	11/25/03	0.524	NLE	5.00	0.200
Zinc	11/25/03	14.1	5000	50.00	1.60

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	Aluminum	Arsenic	Iron	Manganese	Depth to Water					Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	Feet					-
NJDEP Criteria:	-	200	8	300	50	NLE					-
06/28/2000	FMETL	2070	ND	1450	22.2	6.31					V,S,P,M
08/10/2000	FMETL	1930	ND	739	23.8	5.54					V,S,P,M
10/17/2000	FMETL	2120	ND	306	21.8	6.07					V,S,P,M
01/05/2001	FMETL	2460	ND	868	26.0	6.11					V,S,P,M
04/04/2001	FMETL	2350	ND	410	34.7	4.62					V,S,P,M
07/24/2001	FMETL	3150	ND	575	55.2	6.25					V,S,P,M
07/24/2001D	FMETL	3160	ND	576	34.3	6.25					V,S,P,M
12/11/2001	FMETL	3600	ND	4490	29.3	7.15					V,S,P,M
03/08/2002	FMETL	3520	ND	897	36.1	6.43					V,S,P,M
05/16/2002	FMETL	3330	27.7	577	33.9	6.14					V,S,P,M
09/10/2002	FMETL	3350	3.16	692	33.1	5.91					V,S,P,M
12/03/2002	FMETL	3190	ND	281	43.2	5.37					V,S,P,M
02/27/2003	FMETL	3130	ND	ND	40.6	5.12					V,S,P,M
05/19/2003	FMETL	3140	ND	275	36.3	6.02					V,S,P,M
08/04/2003	FMETL	2960	ND	194	33.0	5.74					V,S,P,M
11/13/2003	FMETL	4010	ND	515	42.9	5.72					V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 11/13/2003

NOTES:

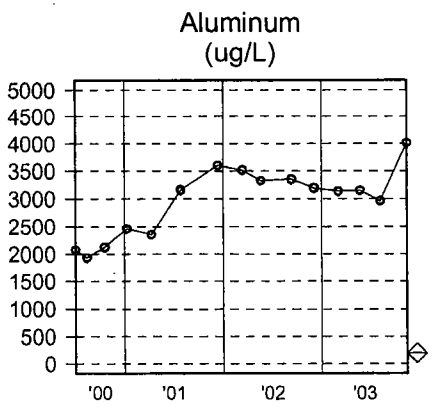
Page 1 of 1.

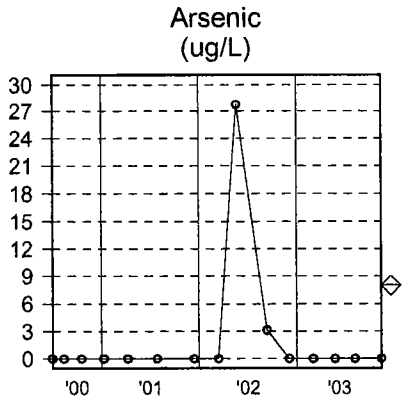
FORT MONMOUTH

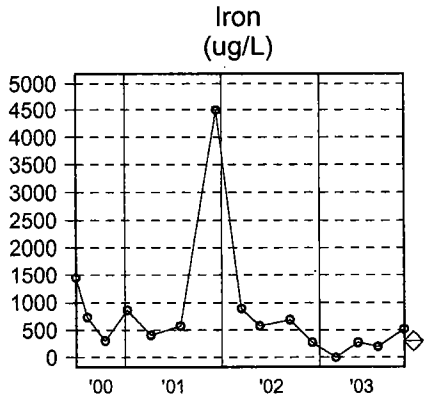
GW MONITORING
BLDG. 283

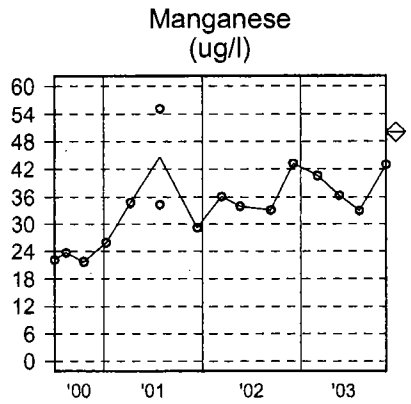
Source 2 of 3

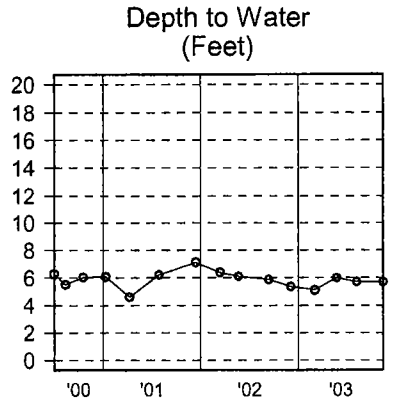
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV











SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 11/13/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Benzene	Ethyl benzene	Xylenes	Naphtha lene	Aluminum	Arsenic	Iron	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:	-	1	700	40	NLE	200	8	300	10	NLE	-
09/20/1999	FMETL	536.9	797.4	3831.4	119.2	309	4.74	2330	22.0	7.20	V,S,P,M
12/27/1999	FMETL	720.56	422.50	2125.86	183.38	123	ND	2060	6.92	6.81	V,S,P,M
03/23/2000	FMETL	827.72	725.71	4295.69	82.44	241	ND	2010	15.3	6.38	V,S,P,M
06/28/2000	FMETL	908.16	1129.23	5960.70	174.92	81.4	ND	2130	11.5	7.83	V,S,P,M
08/10/2000	FMETL	152.00	717.50	4009.44	101.97	812	3.40	2060	31.9	6.28	V,S,P,M
10/17/2000	FMETL	670.35	810.07	3829.91	152.89	917	2.38	3340	14.5	7.09	V,S,P,M
10/17/2000D	FMETL	621.26	791.70	3577.78	126.93	973	4.89	3210	15.9	7.09	V,S,P,M
01/05/2001	FMETL	1009.73	1160.45	5143.75	223.45	360	3.72	3220	25.3	7.32	V,S,P,M
04/04/2001	FMETL	264	502.14	3221.45	65.12	2200	3.00	4360	23.0	4.81	V,S,P,M
07/24/2001	FMETL	502.20	604.67	2797.88	ND	1780	6.78	4050	12.3	6.75	V,S,P,M
12/11/2001	FMETL	1055.06	711.17	1524.1	89.93	1470	3.09	7120	11.8	8.54	V,S,P,M
03/08/2002	FMETL	710.22	925.08	3744.16	80.67	249	ND	3220	9.02	7.47	V,S,P,M
05/16/2002	FMETL	395.51	659.80	2192.84	101.90	996	24.2	4040	7.47	6.90	V,S,P,M
09/10/2002	FMETL	223.80	476.21	1910.78	135.69	267	7.95	2490	9.58	5.93	V,S,P,M
12/03/2002	FMETL	119.4	349.99	970.72	76.68	157	6.04	1720	5.84	5.28	V,S,P,M
02/27/2003	FMETL	123.79	560.9	3067.89	21.97	235	2.59	1230	17.1	4.70	V,S,P,M
05/19/2003	FMETL	112.54	215.60	2499.45	51.41	2690	6.64	8350	11.8	6.46	V,S,P,M
08/04/2003	FMETL	239.49	485.84	1985.34	80.88	984	4.95	4420	9.71	6.11	V,S,P,M
11/13/2003	FMETL	262.27	644.36	2264.45	108.81	762	10.7	3830	13.3	6.03	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 11/13/2003

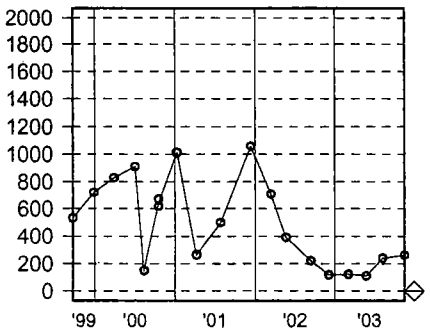
NOTES:

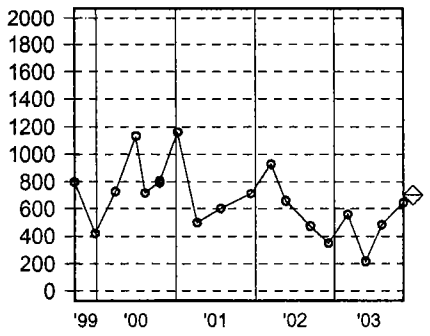
FORT MONMOUTH

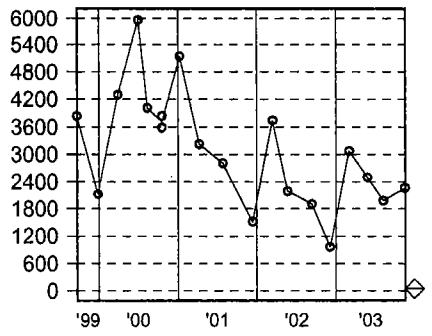
GW MONITORING
BLDG. 283

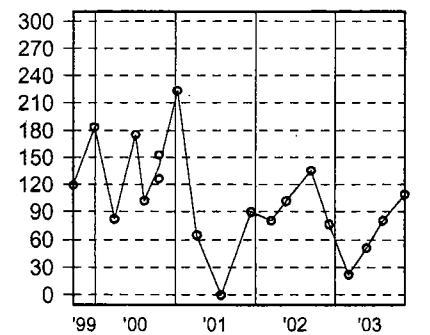
Source 1 of 3

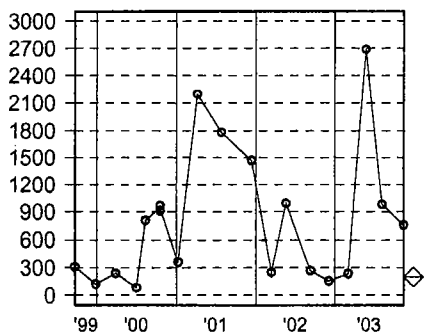
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

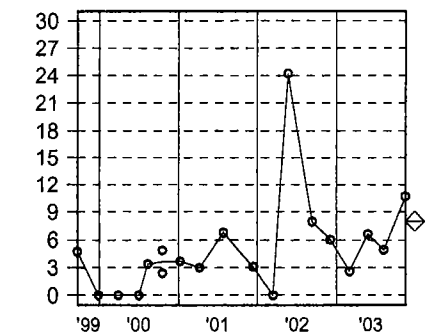


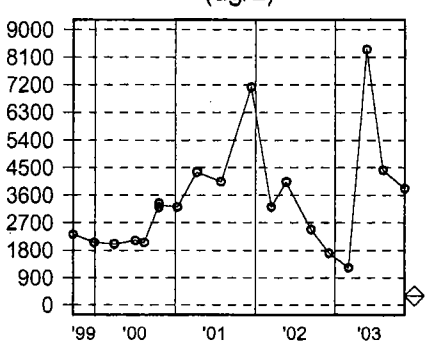


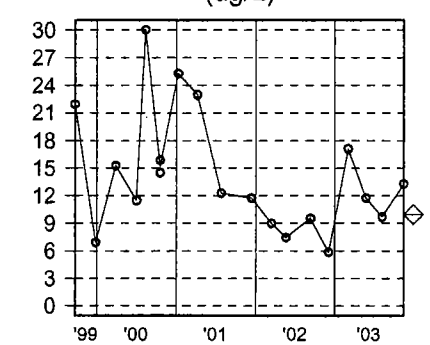


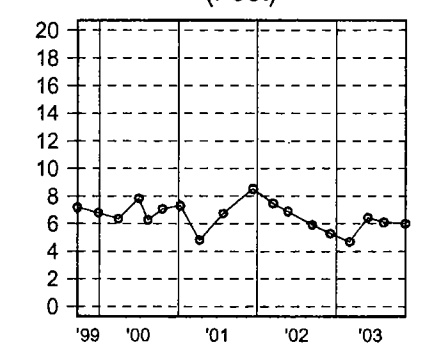












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 11/13/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

12-23-2003 X:\MtechData\283\283.WSF

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Depth to Water			Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	Feet			-
NJDEP Criteria:	-	1	200	8	300	10	50	NLE			-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	7.12			V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	6.41			V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	6.88			V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	6.94			V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	6.94			V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	5.75			V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	5.75			V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	7.00			V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	7.67			V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	7.10			V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	6.90			V,S,P,M
09/10/2002	FMETL	ND	393	6.61	10700	ND	35.7	6.51			V,S,P,M
12/03/2002	FMETL	3.45	48.3	4.18	1230	9.11	48.2	6.31			V,S,P,M
02/27/2003	FMETL	8.24	64.0	2.74	6360	ND	33.5	5.94			V,S,P,M
05/19/2003	FMETL	1.47	336	7.68	26500	1.16	40.8	6.77			V,S,P,M
08/04/2003	FMETL	ND	109	3.10	12300	ND	34.4	6.56			V,S,P,M
11/13/2003	FMETL	ND	234	8.10	10300	ND	38.4	6.45			V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 11/13/2003

NOTES:

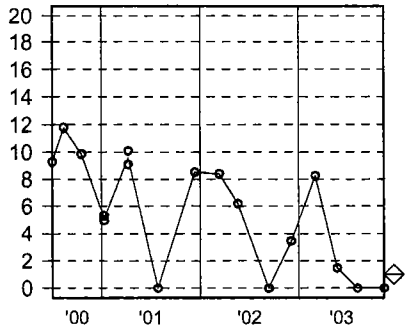
FORT MONMOUTH

GW MONITORING
BLDG. 283

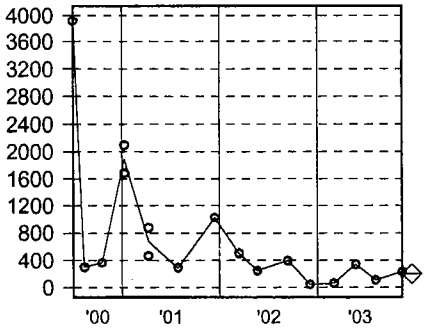
Source 3 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

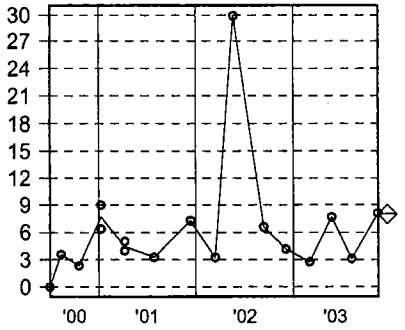
Benzene
(ug/L)



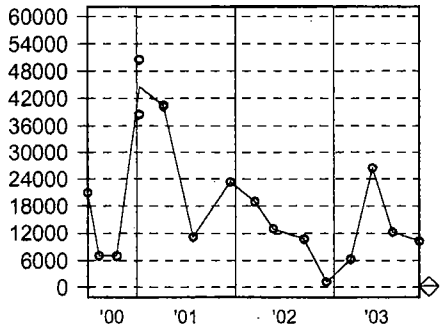
Aluminum
(ug/L)



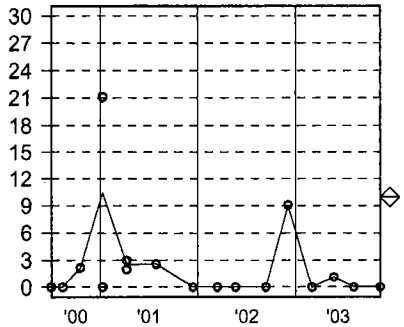
Arsenic
(ug/L)



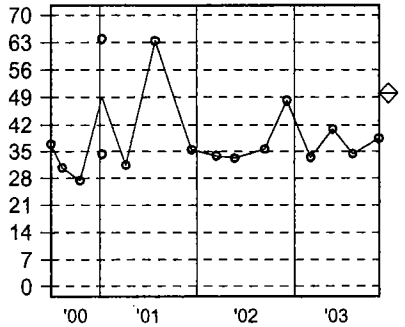
Iron
(ug/L)



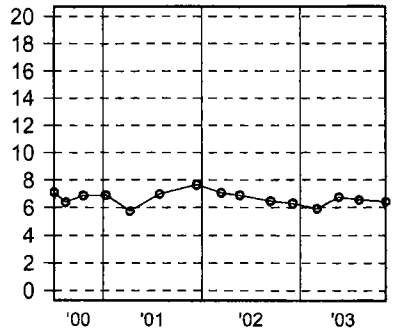
Lead
(ug/L)



Manganese
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 11/13/2003

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

12-23-2003 X:\MtechData\283\283.WSF

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732)532-4359 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. 283 #19

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
4010204	0283MW01	29-40367	02/05/04
4010205	0283MW02	29-40887	02/05/04
4010206	0283MW03	29-41650	02/05/04

NJDEP Laboratory Certification # 13461

3-1-04

Daniel Wright/Date:
Laboratory Director

The enclosed report relates only to the items tested. The report may not be reproduced, except in full, without written approval of the U.S. Army Fort Monmouth Directorate of Public Works.

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: TFAL/OA
Phone #: X26223
(X)DERA ( )OMA ( )Other:_____

Project No:
Location: 283 wells
1st Qtr '04

Samplers Name / Company: Corey McCormack, TVS

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	VOA+15	TAL Mtls	Pest / PCB	BNA+25				Haw Pad	Remarks / Preservation Method
40102 01	Trip	2/5/04	0749	AQ	2	✓							1	
02	Field Blank		0850		5	✓	✓	✓	✓				—	
03	Dupe		—		5	✓	✓	✓	✓				—	
04	283 mw01		1035		5	✓	✓	✓	✓				0.0	29-40367
05	283 mw02		1039			✓	✓	✓	✓				0.0	29-40887
06	283 mw03 *		1053			✓	✓	✓	✓				0.0	29-41650

Comments: HCL/HNO_3/4°C

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Corey McCormack	2/5/04 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: Shows T/FB/D w/ MI8/290 same date com
Tide: N/A

print legibly

COC XLS12/30/2003

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW01
NJDEP ID #: 29-40567
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02/05/04
WEATHER: Sunny and cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.50 ft
DEPTH OF WELL: 19.75 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.25 ft
(14.25) X 0.65 X 3 = 27.78
GALLONS OF H_2O TO BE PURGED: 28 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: 08:33
pH 5.63 su — TEMP 16.71 °C
DISSOLVED O_2 3.61 mg/L — SPECIFIC CONDUCTIVITY 479.3 µs/cm

PURGE END TIME: 10:34
pH 5.50 su — TEMP 16.31 °C
DISSOLVED O_2 2.40 mg/L — SPECIFIC CONDUCTIVITY 529.7 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 6.00 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 28 gal

SAMPLE START TIME: 10:35
pH 5.48 su — TEMP 16.27 °C
DISSOLVED O_2 2.37 mg/L — SPECIFIC CONDUCTIVITY 531.4 µs/cm

SAMPLE END TIME: 10:38

COMMENTS:

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW02
NJDEP ID #: 29-40887
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02/05/04
WEATHER: Sunny and cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 5.60 ft
DEPTH OF WELL: 19.69 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 14.09 ft
(14.09) X 0.65 X 3 = 27.47
GALLONS OF H_2O TO BE PURGED: 27 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: 08:41
pH 5.37 su — TEMP 16.57 °C
DISSOLVED O_2 3.34 mg/L — SPECIFIC CONDUCTIVITY 297.1 µs/cm

PURGE END TIME: 10:38
pH 5.20 su — TEMP 16.47 °C
DISSOLVED O_2 2.24 mg/L — SPECIFIC CONDUCTIVITY 342.8 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 12.10 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 27 gal

SAMPLE START TIME: 10:39
pH 5.21 su — TEMP 16.46 °C
DISSOLVED O_2 2.23 mg/L — SPECIFIC CONDUCTIVITY 341.7 µs/cm

SAMPLE END TIME: 10:44

COMMENTS: Large draw down.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATA

LOCATION: 283
MW#: 0283MW03
NJDEP ID #: 29-41650
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02/05/04
WEATHER: Sunny and cold.
TIDE: N/A

LNAPLs: N
DNAPLs: N
ELEV. OF CASING SURVEY MARK: N/A ft
INNER CASING DIA: 4"
DEPTH TO WATER: 6.60 ft
DEPTH OF WELL: 24.05 ft
DEPTH TO TOP OF SCREEN: ft
HEIGHT OF WATER: 17.45 ft
(17.45) X 0.65 X 3 = 34.02
GALLONS OF H_2O TO BE PURGED: 34 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: 08:25
pH 5.68 su — TEMP 16.27 °C
DISSOLVED O_2 3.31 mg/L — SPECIFIC CONDUCTIVITY 263.3 µs/cm

PURGE END TIME: 10:52
pH 5.52 su — TEMP 16.07 °C
DISSOLVED O_2 2.17 mg/L — SPECIFIC CONDUCTIVITY 279.8 µs/cm

DEPTH TO H_2O AFTER PURGE AND BEFORE SAMPLING: 7.18 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 34 gal

SAMPLE START TIME: 10:53
pH 5.51 su — TEMP 16.08 °C
DISSOLVED O_2 2.15 mg/L — SPECIFIC CONDUCTIVITY 278.7 µs/cm

SAMPLE END TIME: 10:58

COMMENTS: DUP. Here.

VOLATILE ORGANICS

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

U: The compound was analyzed for but not detected.

B: Indicates that the compound was found in the associated method blank as well as in the sample.

J: Indicates an estimated value. This flag is used:

(1) When the mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.

(2) When estimating the concentration of a tentatively identified compound (TIC), where a 1:1 response is assumed.

D: This flag is used to identify all compounds (target or TIC) that required a dilution.

E: Indicates the compound's concentration exceeds the calibration range of the instrument for that specific analysis.

N: This flag is only used for TICs. It indicates the presumptive evidence of a compound. For a generic characterization of a TIC, such as unknown hydrocarbon, the flag is not used.

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015626.D**	Sample Name	**MB 12Feb04**
Operator	**Skelton**	Field ID	**MB 12Feb04**
Date Acquired	**12 Feb 2004 3:53 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 12Feb04**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 12Feb04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015626.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/12/2004

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	**VB015664.D**	Sample Name	**MB 13Feb04**
Operator	**Skelton**	Field ID	**MB 13Feb04**
Date Acquired	**13 Feb 2004 5:48 pm**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.75	28590	0.71 ug/L	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MB 13Feb04**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: MB 13Feb04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015664.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/13/2004

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.	unknown	27.83	7	J
2.	unknown	31.37	6	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015646.D**	Sample Name	**4010201**
Operator	**Skelton**	Field ID	**Trip Blank**
Date Acquired	**13 Feb 2004 4:18 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.75	30280	0.72 ug/L	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 4010201

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015646.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/13/2004

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.	unknown	27.81	25	J
2.	unknown	31.37	13	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015647.D**	Sample Name	**4010202**
Operator	**Skelton**	Field ID	**Field Blank**
Date Acquired	**13 Feb 2004 4:55 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.76	27946	0.69 ug/L	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 4010202

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015647.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/13/2004

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.	unknown	27.82	22	J
2.	unknown	31.38	13	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015648.D**	Sample Name	**4010203**
Operator	**Skelton**	Field ID	**Dupe**
Date Acquired	**13 Feb 2004 5:32 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene	18.24	254446	3.12 ug/L	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Dupe**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 4010203

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015648.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/13/2004

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.	unknown	27.83	20	J
2.	unknown	31.38	12	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015649.D**	Sample Name	**4010204**
Operator	**Skelton**	Field ID	**283MW01**
Date Acquired	**13 Feb 2004 6:09 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW01**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 4010204

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015649.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. _____ Date Analyzed: 2/13/2004

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.	unknown	27.82	19	J
2.	unknown	31.37	11	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015650.D**	Sample Name	**4010205**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Feb 2004 6:46 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone	12.18	45434	2.78 ug/L	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene	18.24	12055022	123.83 ug/L	1	0.30 ug/L	2.00 ug/L	E
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene	22.76	5460478	47.53 ug/L	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.79	34401199	250.85 ug/L	700	0.30 ug/L	2.00 ug/L	E
1330-20-7	m+p-Xylenes	26.09	24510419	478.02 ug/L	nle	0.63 ug/L	4.00 ug/L	E
95-47-6	o-Xylene	26.91	29704906	283.05 ug/L	nle	0.29 ug/L	2.00 ug/L	E
100-42-5	Styrene	27.01	141708	2.00 ug/L	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015665.D**	Sample Name	**4010205**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Feb 2004 6:25 pm**	Sample Multiplier	**10**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	32.70 ug/L	200.00 ug/L	
107131	Acrylonitrile			not detected	50	28.20 ug/L	200.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	27.80 ug/L	200.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	2.90 ug/L	20.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	3.20 ug/L	20.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	3.20 ug/L	20.00 ug/L	
74-87-3	Chloromethane			not detected	30	3.90 ug/L	20.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	4.00 ug/L	20.00 ug/L	
74-83-9	Bromomethane			not detected	10	4.00 ug/L	20.00 ug/L	
75-00-3	Chloroethane			not detected	nle	3.40 ug/L	20.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	3.10 ug/L	20.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	3.30 ug/L	20.00 ug/L	
67-64-1	Acetone	11.79	59749	26.05 ug/L	700	4.00 ug/L	20.00 ug/L	D
75-15-0	Carbon Disulfide			not detected	nle	3.00 ug/L	20.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	3.50 ug/L	20.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	3.40 ug/L	20.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	3.50 ug/L	20.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	8.60 ug/L	20.00 ug/L	
78-93-3	2-Butanone			not detected	300	2.80 ug/L	20.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	2.90 ug/L	20.00 ug/L	
67-66-3	Chloroform			not detected	6	3.20 ug/L	20.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	2.90 ug/L	20.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	2.70 ug/L	20.00 ug/L	
71-43-2	Benzene	18.24	1377386	156.83 ug/L	1	3.00 ug/L	20.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	2.90 ug/L	20.00 ug/L	
79-01-6	Trichloroethene			not detected	1	2.80 ug/L	20.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	2.70 ug/L	20.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	2.50 ug/L	20.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.90 ug/L	20.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	1.90 ug/L	20.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	2.70 ug/L	20.00 ug/L	
108-88-3	Toluene	22.76	589441	57.10 ug/L	1000	3.40 ug/L	20.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	2.60 ug/L	20.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	2.90 ug/L	20.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	3.20 ug/L	20.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	2.10 ug/L	20.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	2.30 ug/L	20.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	3.20 ug/L	20.00 ug/L	
100-41-4	Ethylbenzene	25.80	8736180	721.73 ug/L	700	3.00 ug/L	20.00 ug/L	E D
1330-20-7	m+p-Xylenes	26.08	3849659	879.29 ug/L	nle	6.30 ug/L	40.00 ug/L	D
95-47-6	o-Xylene	26.92	5481333	600.18 ug/L	nle	2.90 ug/L	20.00 ug/L	E D
100-42-5	Styrene			not detected	100	2.20 ug/L	20.00 ug/L	
75-25-2	Bromoform			not detected	4	2.10 ug/L	20.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	2.60 ug/L	20.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	3.30 ug/L	20.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	3.30 ug/L	20.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	3.10 ug/L	20.00 ug/L	

*Results between MDL and RL are estimated values

*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
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R.T. = Retention Time
R.L. = Reporting Limit

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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015666.D**	Sample Name	**4010205**
Operator	**Skelton**	Field ID	**283MW02**
Date Acquired	**13 Feb 2004 7:02 pm**	Sample Multiplier	**20**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	65.40 ug/L	400.00 ug/L	
107131	Acrylonitrile			not detected	50	56.40 ug/L	400.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	55.60 ug/L	400.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	5.80 ug/L	40.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	6.40 ug/L	40.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	6.40 ug/L	40.00 ug/L	
74-87-3	Chloromethane			not detected	30	7.80 ug/L	40.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	8.00 ug/L	40.00 ug/L	
74-83-9	Bromomethane			not detected	10	8.00 ug/L	40.00 ug/L	
75-00-3	Chloroethane			not detected	nle	6.80 ug/L	40.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	6.20 ug/L	40.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	6.60 ug/L	40.00 ug/L	
67-64-1	Acetone			not detected	700	8.00 ug/L	40.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	6.00 ug/L	40.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	7.00 ug/L	40.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	6.80 ug/L	40.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	7.00 ug/L	40.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	17.20 ug/L	40.00 ug/L	
78-93-3	2-Butanone			not detected	300	5.60 ug/L	40.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	5.80 ug/L	40.00 ug/L	
67-66-3	Chloroform			not detected	6	6.40 ug/L	40.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	5.80 ug/L	40.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	5.40 ug/L	40.00 ug/L	
71-43-2	Benzene	18.24	657415	149.65 ug/L	1	6.00 ug/L	40.00 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	5.80 ug/L	40.00 ug/L	
79-01-6	Trichloroethene			not detected	1	5.60 ug/L	40.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	5.40 ug/L	40.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	5.00 ug/L	40.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	3.80 ug/L	40.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	3.80 ug/L	40.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	5.40 ug/L	40.00 ug/L	
108-88-3	Toluene	22.76	298986	57.90 ug/L	1000	6.80 ug/L	40.00 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	5.20 ug/L	40.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	5.80 ug/L	40.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	6.40 ug/L	40.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	4.20 ug/L	40.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	4.60 ug/L	40.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	6.40 ug/L	40.00 ug/L	
100-41-4	Ethylbenzene	25.80	4120882	672.01 ug/L	700	6.00 ug/L	40.00 ug/L	D
1330-20-7	m+p-Xylenes	26.08	1785896	805.19 ug/L	nle	12.60 ug/L	80.00 ug/L	D
95-47-6	o-Xylene	26.91	2534576	547.81 ug/L	nle	5.80 ug/L	40.00 ug/L	D
100-42-5	Styrene			not detected	100	4.40 ug/L	40.00 ug/L	
75-25-2	Bromoform			not detected	4	4.20 ug/L	40.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	5.20 ug/L	40.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	6.60 ug/L	40.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	6.60 ug/L	40.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	6.20 ug/L	40.00 ug/L	

*Results between MDL and RL are estimated values

*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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW02**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 4010205

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015650.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/13/2004

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. 000098-82-8	Benzene, (1-methylethyl)-	27.51	66	JN
2. 000103-65-1	Benzene, propyl-	28.31	68	JN
3. 000611-14-3	Benzene, 1-ethyl-2-methyl-	28.51	240	JN
4. 000108-67-8	Benzene, 1,3,5-trimethyl-	28.66	210	JN
5. 000611-14-3	Benzene, 1-ethyl-2-methyl-	29.10	210	JN
6. 000526-73-8	Benzene, 1,2,3-trimethyl-	29.43	500	JN
7. 000095-36-3	1,2,4-Trimethylbenzene	30.29	180	JN
8.	unknown	30.58	240	J
9.	unknown	31.39	81	J
10.	unknown	31.66	95	J

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**VB015655.D**	Sample Name	**4010206**
Operator	**Skelton**	Field ID	**283MW03**
Date Acquired	**13 Feb 2004 10:17 am**	Sample Multiplier	**1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	50	3.27 ug/L	20.00 ug/L	
107131	Acrylonitrile			not detected	50	2.82 ug/L	20.00 ug/L	
75650	tert-Butyl alcohol			not detected	nle	2.78 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.29 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.32 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.32 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.39 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.40 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.40 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.34 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.31 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.33 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	0.40 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.30 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.35 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.34 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.35 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.86 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.28 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	10	0.29 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.32 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.29 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.27 ug/L	2.00 ug/L	
71-43-2	Benzene	18.24	254976	3.21 ug/L	1	0.30 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.29 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.27 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.19 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.19 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.27 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.34 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.26 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.29 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.21 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.23 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.32 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.30 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.29 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.22 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.21 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.26 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.33 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.33 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.31 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*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
R.L. = Reporting Limit

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **283MW03**

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 40102 Location: 283 SDG No.: Wells

Matrix: (soil/water) WATER Lab Sample ID: 4010206

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB015655.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: not dec. Date Analyzed: 2/13/2004

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.	unknown	27.81	14	J
2.	unknown	31.37	7	J

SEMI-VOLATILE

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN07144.D**	Sample Name	**MB-021104-01**
Operator	**B.Patel**	Misc Info	**MB-021104-01**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN07144.D**	Sample Name	**MB-021104-01**
Operator	**B.Patel**	Misc Info	**MB-021104-01**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **MB-021104-01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 40102 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: MB-021104-01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN07144.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/2004

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/18/2004

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	**BN07152.D**	Sample Name	**4010202**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN07152.D**	Sample Name	**4010202**
Operator	**B.Patel**	Misc Info	**Field Blank**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate	18.55	18436	1.14 ug/L	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Field Blank**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 40102 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4010202

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN07152.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/2004

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/18/2004

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. 000000-00-0	Butyl hexadecanoate	24.45	4	JN
2. 000123-95-5	Octadecanoic acid, butyl ester	26.15	5	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN07153.D**	Sample Name	**4010203**
Operator	**B.Patel**	Misc Info	**Dupe**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN07153.D**	Sample Name	**4010203**
Operator	**B.Patel**	Misc Info	**Dupe**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate	18.55	75220	5.39 ug/L	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **Dupe**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 40102 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4010203

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN07153.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/2004

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/18/2004

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	24.44	6	J
2. 000123-95-5	Octadecanoic acid, butyl ester	26.15	6	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN07154.D**	Sample Name	**4010204**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN07154.D**	Sample Name	**4010204**
Operator	**B.Patel**	Misc Info	**283MW01**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW01**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 40102 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4010204

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN07154.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/2004

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/18/2004

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	7.59	4	J

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN07155.D**	Sample Name	**4010205**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol	11.32	21709	2.72 ug/L	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol	12.52	43109	4.88 ug/L	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene	13.15	1958945	62.19 ug/L	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene	14.77	160267	10.16 ug/L	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
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Data File Name	**BN07155.D**	Sample Name	**4010205**
Operator	**B.Patel**	Misc Info	**283MW02**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate	18.54	16251	1.01 ug/L	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW02**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 40102 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4010205

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN07155.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/2004

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/18/2004

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.83	41	J
2.	unknown	5.20	150	J
3.	unknown	5.96	81	J
4.	unknown	6.81	110	J
5.	unknown	6.93	34	J
6.	unknown	7.02	260	J
7.	unknown	8.07	100	J
8.	unknown	8.16	56	J
9. 000098-82-8	Benzene, (1-methylethyl)-	8.63	30	JN
10.	unknown	8.76	77	J
11.	unknown	8.94	91	J
12.	unknown	9.03	42	J
13.	unknown	9.08	39	J
14. 000611-14-3	Benzene, 1-ethyl-2-methyl-	9.36	100	JN
15. 000095-63-6	Benzene, 1,2,4-trimethyl-	9.47	110	JN
16. 000095-36-3	1,2,4-Trimethylbenzene	9.94	260	JN
17. 000095-36-3	1,2,4-Trimethylbenzene	10.45	120	JN
18. 000496-11-7	Indane	10.69	100	JN
19. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	12.09	32	JN
20. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	12.41	34	JN
21. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	12.59	68	JN
22. 010544-50-0	Sulfur, mol. (S8)	23.53	52	JN

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	**BN07156.D**	Sample Name	**4010206**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
110-86-1	Pyridine			not detected	NLE	0.69	10.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.52	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	1.66	10.00	ug/L	
108-95-2	Phenol			not detected	4000	0.59	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.55	10.00	ug/L	
95-57-8	2-Chlorophenol			not detected	40	1.52	10.00	ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.94	10.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.81	10.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.97	10.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.83	10.00	ug/L	
95-48-7	2-Methylphenol			not detected	NLE	1.45	10.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.70	10.00	ug/L	
106-44-5	4-Methylphenol			not detected	NLE	1.61	10.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.70	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.83	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.64	10.00	ug/L	
78-59-1	Isophorone			not detected	100	0.57	10.00	ug/L	
88-75-5	2-Nitrophenol			not detected	NLE	1.16	10.00	ug/L	
105-67-9	2,4-Dimethylphenol			not detected	100	1.52	10.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.77	10.00	ug/L	
120-83-2	2,4-Dichlorophenol			not detected	20	1.63	10.00	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.72	10.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.84	10.00	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.67	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.67	10.00	ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.85	10.00	ug/L	
59-50-7	4-Chloro-3-methylphenol			not detected	NLE	1.38	10.00	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.74	10.00	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.66	10.00	ug/L	
88-06-2	2,4,6-Trichlorophenol			not detected	20	1.28	10.00	ug/L	
95-95-4	2,4,5-Trichlorophenol			not detected	700	1.53	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.66	10.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	1.49	10.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.63	10.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.62	10.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.35	10.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.89	10.00	ug/L	
83-32-9	Acenaphthene			not detected	400	0.54	10.00	ug/L	
51-28-5	2,4-Dinitrophenol			not detected	40	0.88	10.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.62	10.00	ug/L	
100-02-7	4-Nitrophenol			not detected	NLE	0.88	10.00	ug/L	

Semi-Volatile Analysis Report
Page 2

Data File Name	**BN07156.D**	Sample Name	**4010206**
Operator	**B.Patel**	Misc Info	**283MW03**
Date Acquired	**18-Feb-04**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifier
121-14-2	2,4-Dinitrotoluene			not detected	10	0.58	10.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.60	10.00	ug/L	
86-73-7	Fluorene			not detected	300	0.54	10.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.60	10.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	NLE	1.02	10.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.59	10.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.52	10.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.57	10.00	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.60	10.00	ug/L	
87-86-5	Pentachlorophenol			not detected	1	0.95	10.00	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.56	10.00	ug/L	
120-12-7	Anthracene			not detected	2000	1.24	10.00	ug/L	
84-74-2	Di-n-butylphthalate			not detected	900	0.51	10.00	ug/L	
206-44-0	Fluoranthene			not detected	300	1.21	10.00	ug/L	
92-87-5	Benzidine			not detected	50	2.22	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.55	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.61	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.54	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.06	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.57	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.63	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.48	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.67	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	1.11	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.97	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.16	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	1.26	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.24	10.00	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL= Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID: **283MW03**

Lab Name: FMETL Lab Code 13461

Project: LTM Case No.: 40102 Location: 283 SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 4010206

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN07156.D

Level: (low/med) LOW Date Received: 2/5/2004

% Moisture: decanted: (Y/N) N Date Extracted: 2/11/2004

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/18/2004

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. 000123-95-5	Octadecanoic acid, butyl ester	26.15	5	JN

PEST/PCB's

U.S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

TABULATED ANALYTICAL REPORT
SW 846 608
Pesticides/PCB

mb 020604-02

Matrix: Aqueous
Date Extracted: 2/6/2004
Ext. Batch: 020604
Filename: 02248.D
Date Analysed: 2/9/2004

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	**alpha-BHC**	ND	0.0011
319-85-7	**beta-BHC**	ND	0.0050
58-89-9	**gamma-BHC**	ND	0.0013
319-86-8	**delta-BHC**	ND	0.0016
76-44-8	**Heptachlor**	ND	0.0035
309-00-2	**Aldrin**	ND	0.0026
1024-57-3	**Heptachlor epoxide**	ND	0.0020
5103-74-2	**gamma-Chlordane**	ND	0.0007
5103-71-9	**alpha-Chlordane**	ND	0.0036
959-98-8	**Endosulfan I**	ND	0.0016
72-55-9	**4,4'-DDE**	ND	0.0021
60-57-1	**Dieldrin**	ND	0.0020
72-20-8	**Endrin**	ND	0.0032
33213-65-9	**Endosulfan II**	ND	0.0022
72-54-8	**4,4'-DDD**	ND	0.0020
7421-93-4	**Endrin aldehyde**	ND	0.0100
50-29-3	**4,4'-DDT**	ND	0.0052
1031-07-8	**Endosulfan sulfate**	ND	0.0026
53494-70-5	**Endrin ketone**	ND	0.0026
72-43-5	**Methoxychlor**	ND	0.0100
8001-35-2	**Toxaphene**	ND	0.0157
12674-11-2	**Arochlor 1016**	ND	0.0683
11104-28-2	**Arochlor 1221**	ND	0.0666
11141-16-5	**Arochlor 1232**	ND	0.0648
53469-21-9	**Arochlor 1242**	ND	0.0485
12672-29-6	**Arochlor 1248**	ND	0.0544
11097-69-1	**Arochlor 1254**	ND	0.0608
11096-82-5	**Arochlor 1260**	ND	0.0732

MDL = METHOD DETECTION LIMIT
ND =NOT DETECTED, BELOW MDL

Initial vol. (ml): 1000
Final vol. (ml): 10

U.S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

TABULATED ANALYTICAL REPORT
SW 846 608
Pesticides/PCB

mb 021204-02

Matrix: Aqueous
Date Extracted: 2/6/2004
Ext. Batch: 020604
Filename: 02364.D
Date Analysed: 2/13/2004

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	MDL (ug/L)
319-84-6	**alpha-BHC**	ND	0.0011
319-85-7	**beta-BHC**	ND	0.0050
58-89-9	**gamma-BHC**	ND	0.0013
319-86-8	**delta-BHC**	ND	0.0016
76-44-8	**Heptachlor**	ND	0.0035
309-00-2	**Aldrin**	ND	0.0026
1024-57-3	**Heptachlor epoxide**	ND	0.0020
5103-74-2	**gamma-Chlordane**	ND	0.0007
5103-71-9	**alpha-Chlordane**	ND	0.0036
959-98-8	**Endosulfan I**	ND	0.0016
72-55-9	**4,4'-DDE**	ND	0.0021
60-57-1	**Dieldrin**	ND	0.0020
72-20-8	**Endrin**	ND	0.0032
33213-65-9	**Endosulfan II**	ND	0.0022
72-54-8	**4,4'-DDD**	ND	0.0020
7421-93-4	**Endrin aldehyde**	ND	0.0100
50-29-3	**4,4'-DDT**	ND	0.0052
1031-07-8	**Endosulfan sulfate**	ND	0.0026
53494-70-5	**Endrin ketone**	ND	0.0026
72-43-5	**Methoxychlor**	ND	0.0100
8001-35-2	**Toxaphene**	ND	0.0157
12674-11-2	**Arochlor 1016**	ND	0.0683
11104-28-2	**Arochlor 1221**	ND	0.0666
11141-16-5	**Arochlor 1232**	ND	0.0648
53469-21-9	**Arochlor 1242**	ND	0.0485
12672-29-6	**Arochlor 1248**	ND	0.0544
11097-69-1	**Arochlor 1254**	ND	0.0608
11096-82-5	**Arochlor 1260**	ND	0.0732

MDL = METHOD DETECTION LIMIT
ND =NOT DETECTED, BELOW MDL

Initial vol. (ml): 1000
Final vol. (ml): 10

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 1st Qrtr. '04
Field ID: FIELDBLANK
Lab ID: 4010202
Filename: 02257.D
Lab Project : 40102

Location: 283 Wells, 1st Qrtr. '04
MATRIX: Aqueous
Ext. Batch: 020604
Date Extracted: 02/06/04
Date Analyzed: 02/09/04
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.02	0.02		0.0011
319-85-7	beta-BHC	ND	0.02	0.20		0.0050
58-89-9	gamma-BHC	ND	0.02	0.20		0.0013
319-86-8	delta-BHC	ND	0.02	NLE		0.0016
76-44-8	Heptachlor	ND	0.02	0.40		0.0035
309-00-2	Aldrin	ND	0.02	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.02	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.02	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.02	0.50		0.0036
959-98-8	Endosulfan I	ND	0.02	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.02	0.10		0.0021
60-57-1	Dieldrin	ND	0.02	0.03		0.0020
72-20-8	Endrin	ND	0.02	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.02	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.02	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.02	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.02	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.02	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.02	NLE		0.0026
72-43-5	Methoxychlor	ND	0.02	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.50		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000.0
Final Vol.(ml) 10.0

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	**U.S. Army, DPW, SELFM-PW-EV**	**Location:**	**283 Wells, 1st Qrtr. '04**
Project Name:	**283 Wells, 1st Qrtr. '04**	**MATRIX:**	**Aqueous**
Field ID:	**Dupe**	**Ext. Batch:**	**020604**
Lab ID:	**4010203**	**Date Extracted:**	**02/06/04**
Filename:	**02258.D**	**Date Analyzed:**	**02/09/04**
Lab Project :	**40102**	**Dilution:**	**1**
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.02	0.02		0.0011
319-85-7	beta-BHC	ND	0.02	0.20		0.0050
58-89-9	gamma-BHC	ND	0.02	0.20		0.0013
319-86-8	delta-BHC	ND	0.02	NLE		0.0016
76-44-8	Heptachlor	ND	0.02	0.40		0.0035
309-00-2	Aldrin	ND	0.02	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.02	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.02	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.02	0.50		0.0036
959-98-8	Endosulfan I	ND	0.02	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.02	0.10		0.0021
60-57-1	Dieldrin	ND	0.02	0.03		0.0020
72-20-8	Endrin	ND	0.02	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.02	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.02	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.02	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.02	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.02	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.02	NLE		0.0026
72-43-5	Methoxychlor	ND	0.02	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.50		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10.0

***Higher of PQL's and ground water criteria as per NJAC 7:9-6**
***Results between MDL and RL are estimated.**
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client:	U.S. Army, DPW, SELFM-PW-EV	**Location:**	283 Wells, 1st Qrtr. '04
Project Name:	283 Wells, 1st Qrtr. '04	**MATRIX:**	Aqueous
Field ID:	283 MW01	**Ext. Batch:**	020604
Lab ID:	4010204	**Date Extracted:**	02/06/04
Filename:	02259.D	**Date Analyzed:**	02/09/04
Lab Project :	40102	**Dilution:**	1
		Analyst:	A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.02	0.02		0.0011
319-85-7	beta-BHC	ND	0.02	0.2		0.0050
58-89-9	gamma-BHC	ND	0.02	0.20		0.0013
319-86-8	delta-BHC	ND	0.02	NLE		0.0016
76-44-8	Heptachlor	ND	0.02	0.40		0.0035
309-00-2	Aldrin	ND	0.02	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.02	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.02	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.02	0.50		0.0036
959-98-8	Endosulfan I	ND	0.02	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.02	0.10		0.0021
60-57-1	Dieldrin	ND	0.02	0.03		0.0020
72-20-8	Endrin	ND	0.02	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.02	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.02	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.02	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.02	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.02	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.02	NLE		0.0026
72-43-5	Methoxychlor	ND	0.02	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.50		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 1st Qrtr. '04
Field ID: 283 MW02
Lab ID: 4010205
Filename: 02366.D
Lab Project : 40102

Location: 283 Wells, 1st Qrtr. '04
MATRIX: Aqueous
Ext. Batch: 020604
Date Extracted: 02/06/04
Date Analyzed: 02/13/04
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.02	0.02		0.0011
319-85-7	beta-BHC	ND	0.02	0.2		0.0050
58-89-9	gamma-BHC	ND	0.02	0.2		0.0013
319-86-8	delta-BHC	ND	0.02	NLE		0.0016
76-44-8	Heptachlor	ND	0.02	0.40		0.0035
309-00-2	Aldrin	ND	0.02	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.02	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.02	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.02	0.50		0.0036
959-98-8	Endosulfan I	ND	0.02	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.02	0.10		0.0021
60-57-1	Dieldrin	ND	0.02	0.03		0.0020
72-20-8	Endrin	ND	0.02	2.00		0.0032
33213-65-9	Endósulfan II	ND	0.02	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.02	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.02	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.02	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.02	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.02	NLE		0.0026
72-43-5	Methoxychlor	ND	0.02	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.50		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

U. S. Army, Fort Monmouth Environmental Laboratory.
173 Riverside Avenue, NJ 07703.

Report of Analysis
NJDEP Certification # 13461
EPA Method 608
PESTICIDES/PCB

Client: U.S. Army, DPW, SELFM-PW-EV
Project Name: 283 Wells, 1st Qrtr. '04
Field ID: 283 MW03
Lab ID: 4010206
Filename: 02367.D
Lab Project : 40102

Location: 283 Wells, 1st Qrtr. '04
MATRIX: Aqueous
Ext. Batch: 020604
Date Extracted: 02/06/04
Date Analyzed: 02/13/04
Dilution: 1
Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/L)	Reporting Limit (ug/L)	Regulatory Level (ug/L)	Qualifier	MDL (ug/L)
319-84-6	alpha-BHC	ND	0.02	0.02		0.0011
319-85-7	beta-BHC	ND	0.02	0.2		0.0050
58-89-9	gamma-BHC	ND	0.02	0.2		0.0013
319-86-8	delta-BHC	ND	0.02	NLE		0.0016
76-44-8	Heptachlor	ND	0.02	0.40		0.0035
309-00-2	Aldrin	ND	0.02	0.04		0.0026
1024-57-3	Heptachlor epoxide	ND	0.02	0.20		0.0020
5103-74-2	gamma-Chlordane	ND	0.02	0.50		0.0007
5103-71-9	alpha-Chlordane	ND	0.02	0.50		0.0036
959-98-8	Endosulfan I	ND	0.02	0.40		0.0016
72-55-9	4,4'-DDE	ND	0.02	0.10		0.0021
60-57-1	Dieldrin	ND	0.02	0.03		0.0020
72-20-8	Endrin	ND	0.02	2.00		0.0032
33213-65-9	Endosulfan II	ND	0.02	0.40		0.0022
72-54-8	4,4'-DDD	ND	0.02	0.10		0.0020
7421-93-4	Endrin aldehyde	ND	0.02	NLE		0.0100
50-29-3	4,4'-DDT	ND	0.02	0.10		0.0052
1031-07-8	Endosulfan sulfate	ND	0.02	0.40		0.0026
53494-70-5	Endrin ketone	ND	0.02	NLE		0.0026
72-43-5	Methoxychlor	ND	0.02	40.00		0.0100
8001-35-2	Toxaphene	ND	0.50	3.00		0.0157
12674-11-2	Arochlor 1016	ND	0.50	0.50		0.0683
11104-28-2	Arochlor 1221	ND	0.50	0.50		0.0666
11141-16-5	Arochlor 1232	ND	0.50	0.50		0.0648
53469-21-9	Arochlor 1242	ND	0.50	0.50		0.0485
12672-29-6	Arochlor 1248	ND	0.50	0.50		0.0544
11097-69-1	Arochlor 1254	ND	0.50	0.50		0.0608
11096-82-5	Arochlor 1260	ND	0.50	0.50		0.0732

MDL = Method Detection Limit.
ND =Not Decteded / Below MDL.
B = Present in the associated Blank.
E = Exceeded Calibration Range, Dilution to follow.
D = Dilution.
NLE = No Limit Established.
RL = Reporting Limit.
PQL = Practical Quantitation Limit.

Initial Vol.(ml) 1000
Final Vol.(ml) 10

*Higher of PQL's and ground water criteria as per NJAC 7:9-6
*Results between MDL and RL are estimated.
Column-Primary: Rtx-CLPesticides 30/.32mm ID/.25um.
Column-Confirmation: Rtx-CLPesticides2 30m/.32mm ID/.5um.

TAL 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 #: 40102
Sample Prepared: 02//04

Site: 283 Wells
Ft. Monmouth, New Jersey

Field ID#: Method Blank

Method of Digestion: E.P.A SW-846, Method 3010A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)
Aluminum	02/17/04	ND	200	100
Antimony	02/17/04	ND	20	20.00
Arsenic	02/17/04	ND	8	5.00
Barium	02/17/04	ND	2000	5.00
Beryllium	02/17/04	ND	20	0.500
Cadmium	02/17/04	ND	4	2.00
Calcium	02/17/04	ND	NLE	1000
Chromium	02/17/04	ND	100	5.00
Cobalt	02/17/04	ND	NLE	2.00
Copper	02/17/04	ND	1000	5.00
Iron	02/17/04	ND	300	500
Lead	02/17/04	ND	10	5.00
Magnesium	02/17/04	ND	NLE	1000
Manganese	02/17/04	ND	50	5.00
Mercury	02/13/04	ND	2	0.500
Nickel	02/17/04	ND	100	5.00
Potassium	02/17/04	1050	NLE	1000
Selenium	02/17/04	ND	50	20.00
Silver	02/17/04	ND	20	5.00
Sodium	02/17/04	ND	50000	5000
Thallium	02/17/04	ND	10	10.00
Vanadium	02/17/04	ND	NLE	5.00
Zinc	02/17/04	ND	5000	50.00

ND = Not Detected, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6
R.L= Reporting limit.

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 #: 4010202
Sample Received: 02/05/04
Sample Matrix: Aqueous

Site: 283 Wells
Ft. Monmouth, New Jersey

Field ID#: Field Blank

Method of Digestion: E.P.A SW-846, Method 3010A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)
Aluminum	02/17/04	ND	200	100
Antimony	02/17/04	ND	20	20.00
Arsenic	02/17/04	ND	8	5.00
Barium	02/17/04	ND	2000	5.00
Beryllium	02/17/04	ND	20	0.500
Cadmium	02/17/04	ND	4	2.00
Calcium	02/17/04	ND	NLE	1000
Chromium	02/17/04	ND	100	5.00
Cobalt	02/17/04	ND	NLE	2.00
Copper	02/17/04	ND	1000	5.00
Iron	02/17/04	ND	300	500
Lead	02/17/04	ND	10	5.00
Magnesium	02/17/04	ND	NLE	1000
Manganese	02/17/04	ND	50	5.00
Mercury	02/13/04	ND	2	0.500
Nickel	02/17/04	ND	100	5.00
Potassium	02/17/04	ND	NLE	1000
Selenium	02/17/04	ND	50	20.00
Silver	02/17/04	ND	20	5.00
Sodium	02/17/04	ND	50000	5000
Thallium	02/17/04	ND	10	10.00
Vanadium	02/17/04	ND	NLE	5.00
Zinc	02/17/04	ND	5000	50.00

ND = Not Detected, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6
R.L= Reporting limit.

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 #: 4010203
Sample Received: 02/05/04
Sample Matrix: Aqueous

Site: 283 Wells
Ft. Monmouth, New Jersey

Field ID#: Dupe

Method of Digestion: E.P.A SW-846, Method 3010A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)
Aluminum	02/17/04	439	200	100
Antimony	02/17/04	ND	20	20.00
Arsenic	02/17/04	5.84	8	5.00
Barium	02/17/04	353	2000	5.00
Beryllium	02/17/04	ND	20	0.500
Cadmium	02/17/04	ND	4	2.00
Calcium	02/17/04	14600	NLE	1000
Chromium	02/17/04	ND	100	5.00
Cobalt	02/17/04	ND	NLE	2.00
Copper	02/17/04	ND	1000	5.00
Iron	02/17/04	20700	300	500
Lead	02/17/04	ND	10	5.00
Magnesium	02/17/04	2810	NLE	1000
Manganese	02/17/04	49.2	50	5.00
Mercury	02/13/04	ND	2	0.500
Nickel	02/17/04	5.67	100	5.00
Potassium	02/17/04	8860	NLE	1000
Selenium	02/17/04	ND	50	20.00
Silver	02/17/04	ND	20	5.00
Sodium	02/17/04	14700	50000	5000
Thallium	02/17/04	ND	10	10.00
Vanadium	02/17/04	ND	NLE	5.00
Zinc	02/17/04	ND	5000	50.00

ND = Not Detected, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6
R.L= Reporting limit.

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 #: 4010204
Sample Received: 02/05/04
Sample Matrix: Aqueous

Site: 283 Wells
Ft. Monmouth, New Jersey

Field ID#: 283MW01

Method of Digestion: E.P.A SW-846, Method 3010A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)
Aluminum	02/17/04	4710	200	100
Antimony	02/17/04	ND	20	20.00
Arsenic	02/17/04	ND	8	5.00
Barium	02/17/04	121	2000	5.00
Beryllium	02/17/04	1.01	20	0.500
Cadmium	02/17/04	ND	4	2.00
Calcium	02/17/04	13300	NLE	1000
Chromium	02/17/04	ND	100	5.00
Cobalt	02/17/04	6.39	NLE	2.00
Copper	02/17/04	5.33	1000	5.00
Iron	02/17/04	ND	300	500
Lead	02/17/04	ND	10	5.00
Magnesium	02/17/04	22400	NLE	1000
Manganese	02/17/04	58.2	50	5.00
Mercury	02/13/04	ND	2	0.500
Nickel	02/17/04	13.5	100	5.00
Potassium	02/17/04	6360	NLE	1000
Selenium	02/17/04	ND	50	20.00
Silver	02/17/04	ND	20	5.00
Sodium	02/17/04	80100	50000	5000
Thallium	02/17/04	ND	10	10.00
Vanadium	02/17/04	ND	NLE	5.00
Zinc	02/17/04	99.5	5000	50.00

ND = Not Detected, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6
R.L= Reporting limit.

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 #: 4010205
Sample Received: 02/05/04
Sample Matrix: Aqueous

Site: 283 Wells
Ft. Monmouth, New Jersey

Field ID#: 283MW02

Method of Digestion: E.P.A SW-846, Method 3010A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)
Aluminum	02/17/04	3760	200	100
Antimony	02/17/04	ND	20	20.00
Arsenic	02/17/04	10.1	8	5.00
Barium	02/17/04	48.4	2000	5.00
Beryllium	02/17/04	ND	20	0.500
Cadmium	02/17/04	ND	4	2.00
Calcium	02/17/04	1980	NLE	1000
Chromium	02/17/04	46.3	100	5.00
Cobalt	02/17/04	2.32	NLE	2.00
Copper	02/17/04	30.4	1000	5.00
Iron	02/17/04	10100	300	500
Lead	02/17/04	21.5	10	5.00
Magnesium	02/17/04	2360	NLE	1000
Manganese	02/17/04	11.0	50	5.00
Mercury	02/13/04	ND	2	0.500
Nickel	02/17/04	6.53	100	5.00
Potassium	02/17/04	4360	NLE	1000
Selenium	02/17/04	ND	50	20.00
Silver	02/17/04	ND	20	5.00
Sodium	02/17/04	16100	50000	5000
Thallium	02/17/04	ND	10	10.00
Vanadium	02/17/04	17.3	NLE	5.00
Zinc	02/17/04	60.5	5000	50.00

ND = Not Detected, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6
R.L= Reporting limit.

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 #: 4010206
Sample Received: 02/05/04
Sample Matrix: Aqueous

Site: 283 Wells
Ft. Monmouth, New Jersey

Field ID#: 283MW03

Method of Digestion: E.P.A SW-846, Method 3010A
Method of Analysis: Std. Methods 18th, Method 3120B, 3112B

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	R.L. (ug/L)
Aluminum	02/17/04	340	200	100
Antimony	02/17/04	ND	20	20.00
Arsenic	02/17/04	ND	8	5.00
Barium	02/17/04	282	2000	5.00
Beryllium	02/17/04	ND	20	0.500
Cadmium	02/17/04	ND	4	2.00
Calcium	02/17/04	14300	NLE	1000
Chromium	02/17/04	ND	100	5.00
Cobalt	02/17/04	ND	NLE	2.00
Copper	02/17/04	ND	1000	5.00
Iron	02/17/04	17600	300	500
Lead	02/17/04	ND	10	5.00
Magnesium	02/17/04	2750	NLE	1000
Manganese	02/17/04	46.0	50	5.00
Mercury	02/13/04	ND	2	0.500
Nickel	02/17/04	6.00	100	5.00
Potassium	02/17/04	8650	NLE	1000
Selenium	02/17/04	ND	50	20.00
Silver	02/17/04	ND	20	5.00
Sodium	02/17/04	14300	50000	5000
Thallium	02/17/04	ND	10	10.00
Vanadium	02/17/04	ND	NLE	5.00
Zinc	02/17/04	ND	5000	50.00

ND = Not Detected, NLE = No Limit Established
* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6
R.L= Reporting limit.

LTM

	Lab	Aluminum	Arsenic	Iron	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	200	8	300	50	100	NLE				-
06/28/2000	FMETL	2070	ND	1450	22.2	10.4	6.31				V,S,P,M
08/10/2000	FMETL	1930	ND	739	23.8	5.91	5.54				V,S,P,M
10/17/2000	FMETL	2120	ND	306	21.8	5.56	6.07				V,S,P,M
01/05/2001	FMETL	2460	ND	868	26.0	4.89	6.11				V,S,P,M
04/04/2001	FMETL	2350	ND	410	34.7	12.0	4.62				V,S,P,M
07/24/2001	FMETL	3150	ND	575	55.2	20.4	6.25				V,S,P,M
07/24/2001D	FMETL	3160	ND	576	34.3	10.4	6.25				V,S,P,M
12/11/2001	FMETL	3600	ND	4490	29.3	12.5	7.15				V,S,P,M
03/08/2002	FMETL	3520	ND	897	36.1	11.9	6.43				V,S,P,M
05/16/2002	FMETL	3330	27.7	577	33.9	10.9	6.14				V,S,P,M
09/10/2002	FMETL	3350	3.16	692	33.1	11.9	5.91				V,S,P,M
12/03/2002	FMETL	3190	ND	281	43.2	13.4	5.37				V,S,P,M
02/27/2003	FMETL	3130	ND	ND	40.6	11.2	5.12				V,S,P,M
05/19/2003	FMETL	3140	ND	275	36.3	11.1	6.02				V,S,P,M
08/04/2003	FMETL	2960	ND	194	33.0	10.4	5.74				V,S,P,M
11/13/2003	FMETL	4010	ND	515	42.9	13.9	5.72				V,S,P,M
02/05/2004	FMETL	4710	ND	ND	58.2	13.5	5.50				V,S,P,M

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 02/05/2004

NOTES:

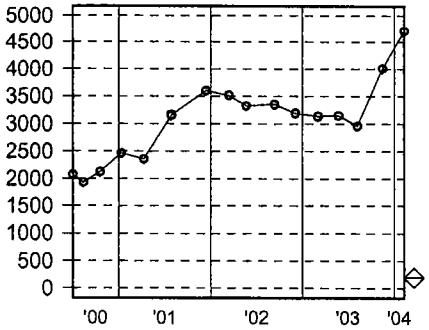
FORT MONMOUTH

GW MONITORING
BLDG. 283

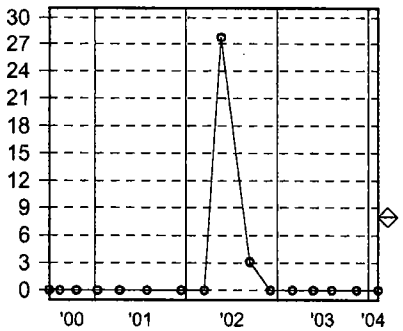
Source 2 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

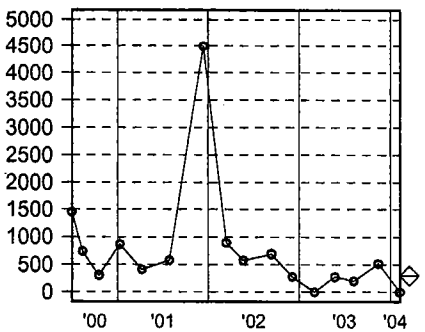
Aluminum
(ug/L)



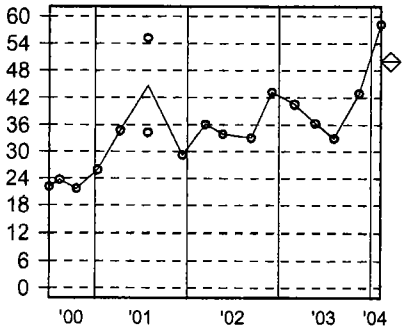
Arsenic
(ug/L)



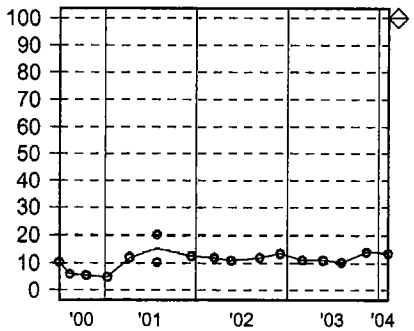
Iron
(ug/L)



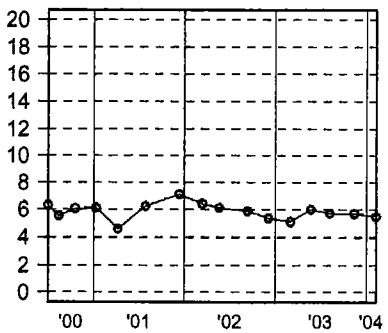
Manganese
(ug/l)



Nickel
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 02/05/2004

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 2 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

	Lab	Benzene	Toluene	Ethyl benzene	Xylenes	Aluminum	Arsenic	Iron	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:	-	1	1000	700	40	200	8	300	10	NLE	-
09/20/1999	FMETL	536.9	598.4	797.4	3831.4	309	4.74	2330	22.0	7.20	V,S,P,M
12/27/1999	FMETL	720.56	413.22	422.50	2125.86	123	ND	2060	6.92	6.81	V,S,P,M
03/23/2000	FMETL	827.72	511.78	725.71	4295.69	241	ND	2010	15.3	6.38	V,S,P,M
06/28/2000	FMETL	908.16	663.58	1129.23	5960.70	81.4	ND	2130	11.5	7.83	V,S,P,M
08/10/2000	FMETL	152.00	381.19	717.50	4009.44	812	3.40	2060	31.9	6.28	V,S,P,M
10/17/2000	FMETL	670.35	303.92	810.07	3829.91	917	2.38	3340	14.5	7.09	V,S,P,M
10/17/2000D	FMETL	621.26	254.97	791.70	3577.78	973	4.89	3210	15.9	7.09	V,S,P,M
01/05/2001	FMETL	1009.73	320.72	1160.45	5143.75	360	3.72	3220	25.3	7.32	V,S,P,M
04/04/2001	FMETL	264	235.04	502.14	3221.45	2200	3.00	4360	23.0	4.81	V,S,P,M
07/24/2001	FMETL	502.20	241.61	604.67	2797.88	1780	6.78	4050	12.3	6.75	V,S,P,M
12/11/2001	FMETL	1055.06	24.78	711.17	1524.1	1470	3.09	7120	11.8	8.54	V,S,P,M
03/08/2002	FMETL	710.22	172.69	925.08	3744.16	249	ND	3220	9.02	7.47	V,S,P,M
05/16/2002	FMETL	395.51	99.10	659.80	2192.84	996	24.2	4040	7.47	6.90	V,S,P,M
09/10/2002	FMETL	223.80	94.08	476.21	1910.78	267	7.95	2490	9.58	5.93	V,S,P,M
12/03/2002	FMETL	119.4	39.32	349.99	970.72	157	6.04	1720	5.84	5.28	V,S,P,M
02/27/2003	FMETL	123.79	122.91	560.9	3067.89	235	2.59	1230	17.1	4.70	V,S,P,M
05/19/2003	FMETL	112.54	27.19	215.60	2499.45	2690	6.64	8350	11.8	6.46	V,S,P,M
08/04/2003	FMETL	239.49	108.66	485.84	1985.34	984	4.95	4420	9.71	6.11	V,S,P,M
11/13/2003	FMETL	262.27	139.08	644.36	2264.45	762	10.7	3830	13.3	6.03	V,S,P,M
02/05/2004	FMETL	156.83	47.53	672.01	1427.1	3760	10.1	10100	21.5	5.60	V,S,P,M

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 02/05/2004

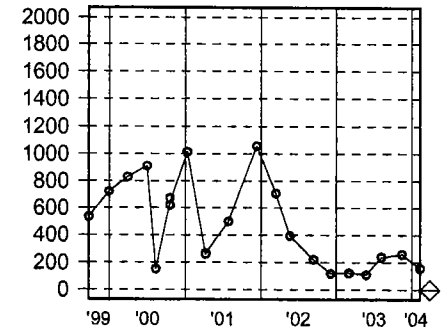
NOTES:

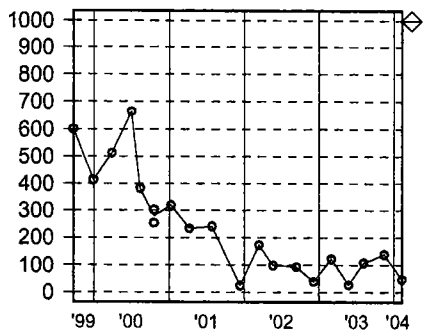
FORT MONMOUTH

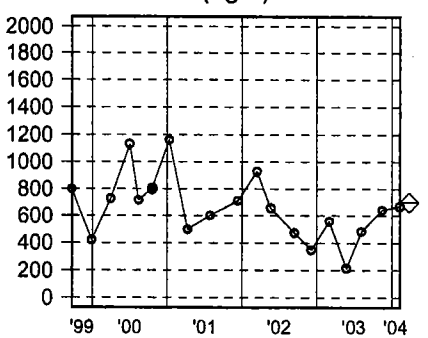
GW MONITORING
BLDG. 283

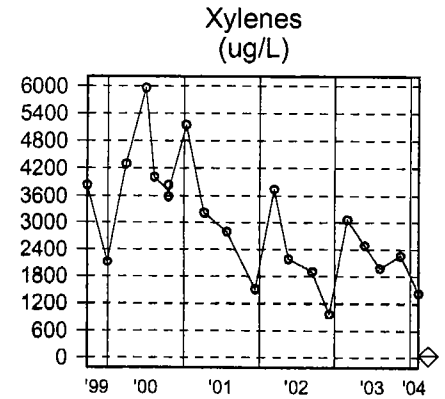
Source 1 of 3

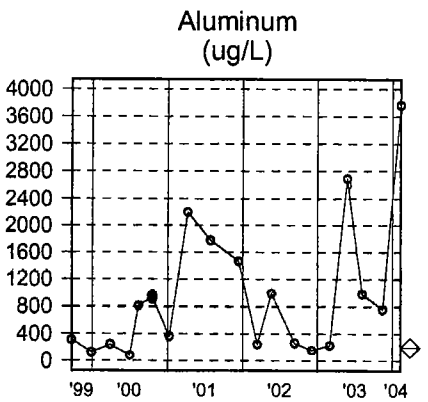
U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

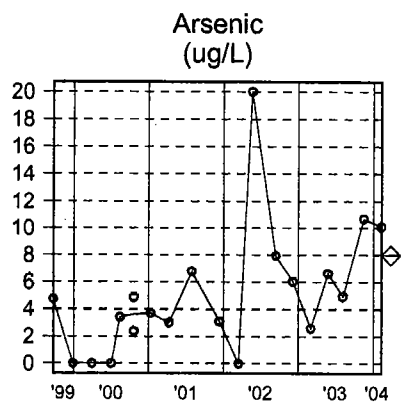


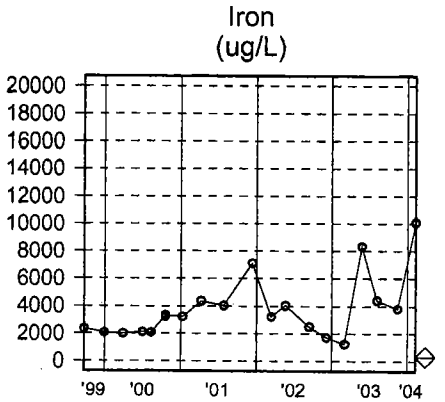


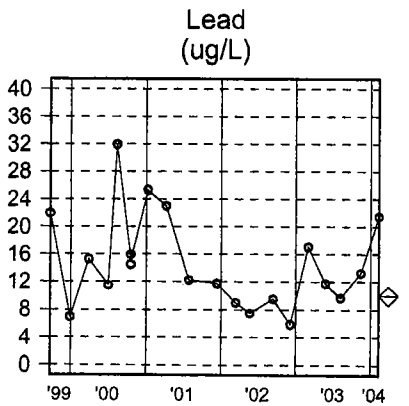


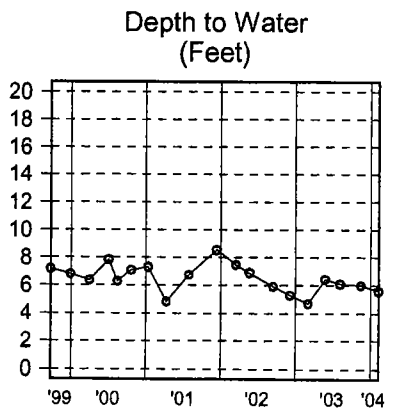












SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 02/05/2004

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 1 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

03-11-2004 \\Gar045\ENVR_Data\MtechData\283\283.WSF

	Lab	Benzene	Aluminum	Arsenic	Iron	Lead	Manganese	Nickel	Depth to Water		Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	Feet		-
NJDEP Criteria:	-	1	200	8	300	10	50	100	NLE		-
06/28/2000	FMETL	9.25	3920	ND	21000	ND	36.9	9.39	7.12		V,S,P,M
08/10/2000	FMETL	11.76	302	3.56	7090	ND	30.8	2.93	6.41		V,S,P,M
10/17/2000	FMETL	9.86	365	2.32	7030	2.17	27.5	1.96	6.88		V,S,P,M
01/05/2001	FMETL	5.30	1680	6.40	38500	21.1	34.3	8.53	6.94		V,S,P,M
01/05/2001	FMETL	4.97	2090	9.03	50500	ND	63.9	16.1	6.94		V,S,P,M
04/04/2001	FMETL	10.06	880	5.00	40500	2.00	31.5	6.00	5.75		V,S,P,M
04/04/2001D	FMETL	9.08	470	4.00	40300	3.00	31.5	7.00	5.75		V,S,P,M
07/24/2001	FMETL	ND	289	3.3	11200	2.60	63.4	14.9	7.00		V,S,P,M
12/11/2001	FMETL	8.53	1030	7.27	23400	ND	35.5	5.80	7.67		V,S,P,M
03/08/2002	FMETL	8.38	503	3.25	19100	ND	33.9	5.30	7.10		V,S,P,M
05/16/2002	FMETL	6.21	246	29.9	13000	ND	33.3	10.2	6.90		V,S,P,M
09/10/2002	FMETL	ND	393	6.61	10700	ND	35.7	5.55	6.51		V,S,P,M
12/03/2002	FMETL	3.45	48.3	4.18	1230	9.11	48.2	3.96	6.31		V,S,P,M
02/27/2003	FMETL	8.24	64.0	2.74	6360	ND	33.5	4.68	5.94		V,S,P,M
05/19/2003	FMETL	1.47	336	7.68	26500	1.16	40.8	5.78	6.77		V,S,P,M
08/04/2003	FMETL	ND	109	3.10	12300	ND	34.4	5.13	6.56		V,S,P,M
11/13/2003	FMETL	ND	234	8.10	10300	ND	38.4	5.40	6.45		V,S,P,M
02/05/2004	FMETL	3.21	340	ND	17600	ND	46.0	6.00	6.60		V,S,P,M

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 02/05/2004

NOTES:

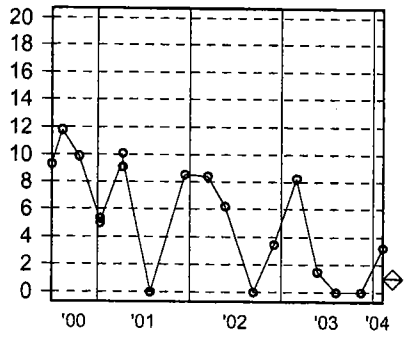
FORT MONMOUTH

GW MONITORING
BLDG. 283

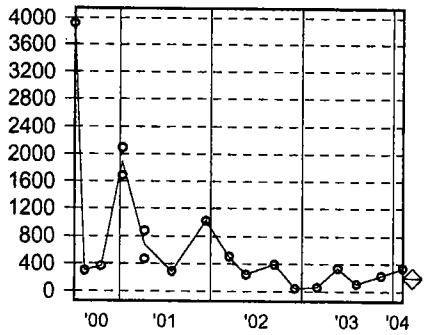
Source 3 of 3

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

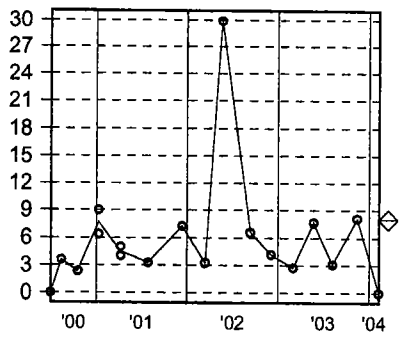
Benzene
(ug/L)



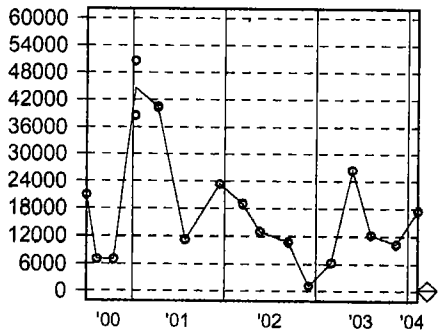
Aluminum
(ug/L)



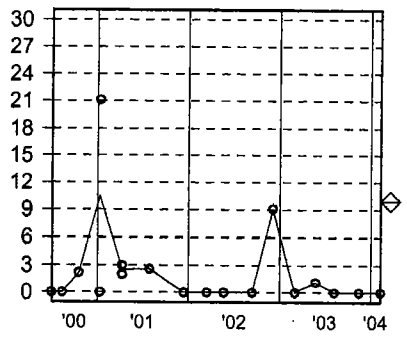
Arsenic
(ug/L)



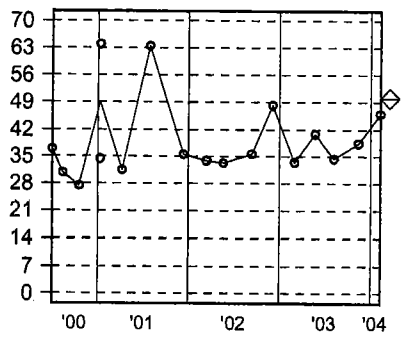
Iron
(ug/L)



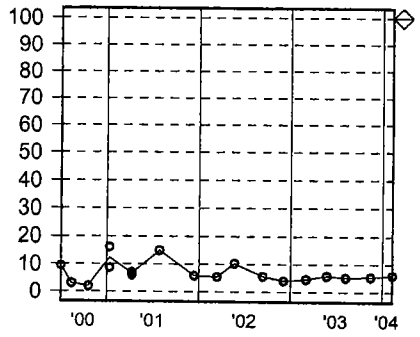
Lead
(ug/L)



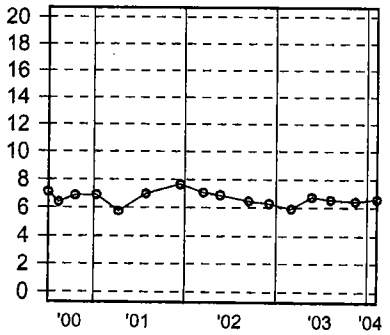
Manganese
(ug/l)



Nickel
(ug/l)



Depth to Water
(Feet)



SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 02/05/2004

LEGEND:

PARAMETER

o = Date Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Source 3 of 3, Graph

U.S.ARMY
FORT MONMOUTH
SELFM-PW-EV

03-11-2004 \\Gar045\ENVR_Data\MtechData\283\283.WSF

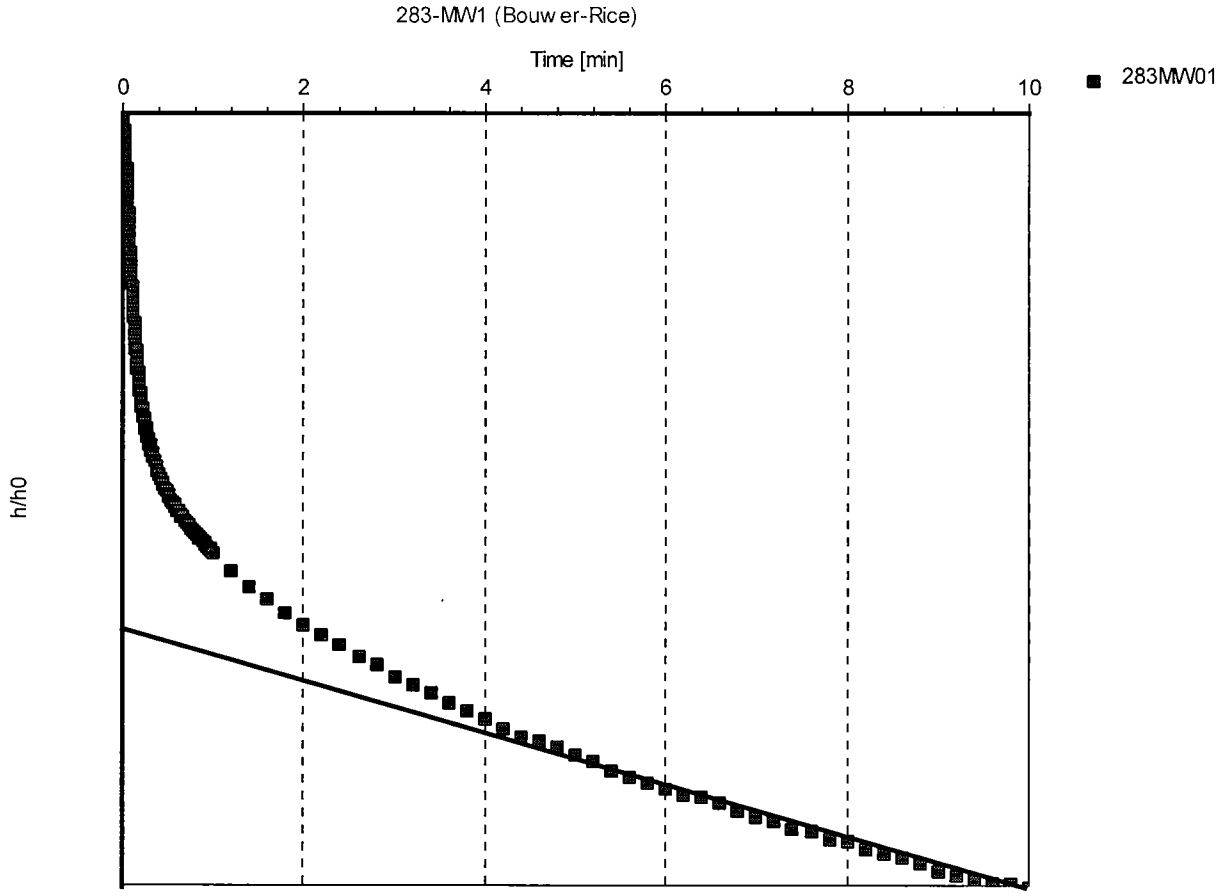
APPENDIX F

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: **283-MW1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 4.06E+0 [ft/d]

Test parameters:

Test well:	283MW01	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	15 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

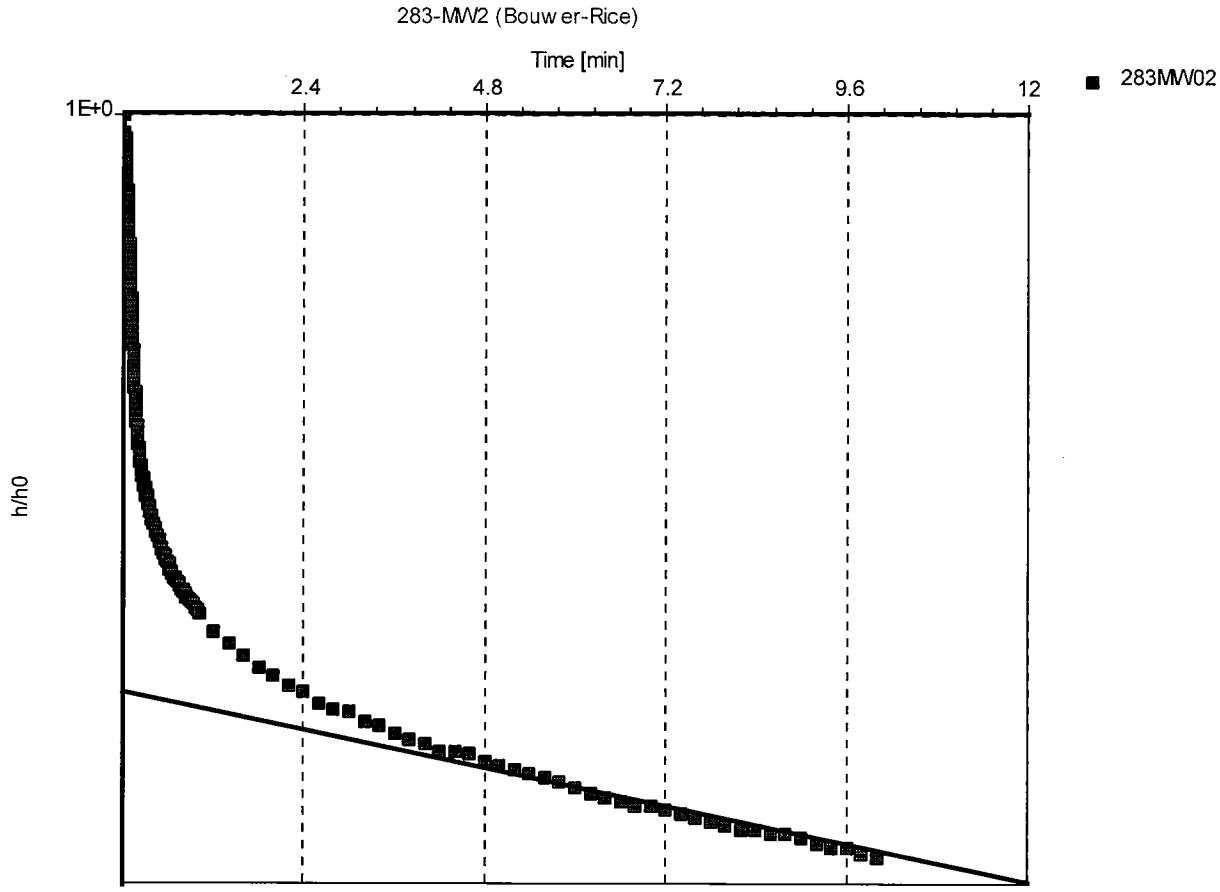
Comments:

Evaluated by: TJK/PS
Date: 8/14/01

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: **283-MW2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.41E+0 [ft/d]

Test parameters:

Test well:	283MW02	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	15 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

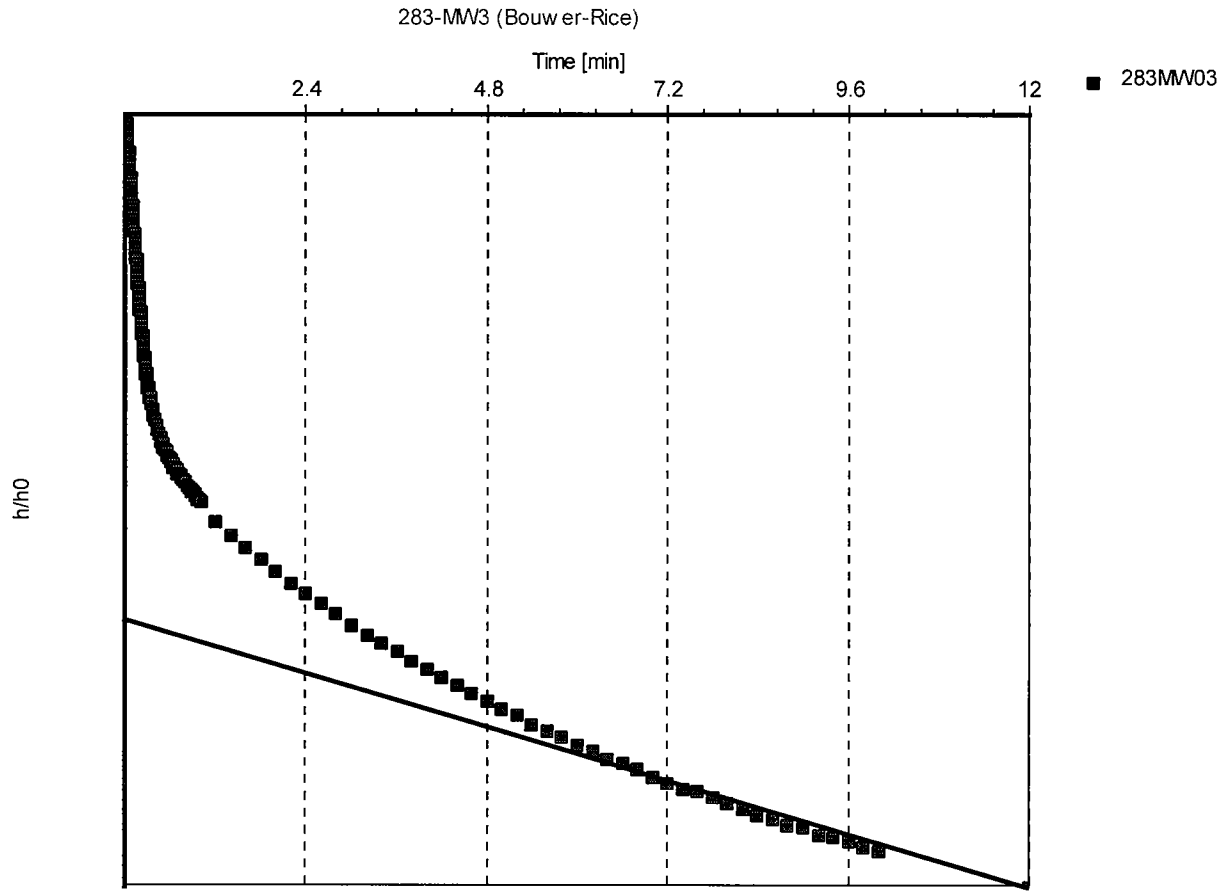
Comments:

Evaluated by: TJK/PS
Date: 8/14/01

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: **283-MW3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 4.38E+0 [ft/d]

Test parameters:

Test well:	283MW03	Aquifer thickness:	100 [ft]
Screen radius:	0.333 [ft]	Gravel pack Porosity (%)	25
Screen length:	15 [ft]		
Casing radius:	0.833 [ft]		
r(eff):	0.740 [ft]		

Comments:

Evaluated by: TJK/PS
Date: 8/14/01

SE1000C
Environmental Logger
08/15 13:11

Unit# 00001 Test 5

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	7.120
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/14 16:17:02

Elapsed Time	INPUT 1
0.0000	13.242
0.0033	13.201
0.0066	13.163
0.0100	13.128
0.0133	13.093
0.0166	13.059
0.0200	13.033
0.0233	12.992
0.0266	12.961
0.0300	12.923
0.0333	12.888
0.0366	12.856
0.0400	12.828
0.0433	12.796
0.0466	12.765
0.0500	12.733
0.0533	12.702
0.0566	12.673
0.0600	12.648
0.0633	12.620
0.0666	12.594
0.0700	12.572
0.0733	12.544
0.0766	12.519
0.0800	12.497

0.0833	12.471
0.0866	12.449
0.0900	12.427
0.0933	12.405
0.0966	12.383
0.1000	12.364
0.1033	12.345
0.1066	12.326
0.1100	12.307
0.1133	12.288
0.1166	12.272
0.1200	12.257
0.1233	12.238
0.1266	12.222
0.1300	12.209
0.1333	12.193
0.1366	12.178
0.1400	12.165
0.1433	12.152
0.1466	12.140
0.1500	12.127
0.1533	12.118
0.1566	12.105
0.1600	12.096
0.1633	12.086
0.1666	12.073
0.1700	12.064
0.1733	12.058
0.1766	12.048
0.1800	12.039
0.1833	12.032
0.1866	12.023
0.1900	12.017
0.1933	12.010
0.1966	12.001
0.2000	11.995
0.2033	11.988
0.2066	11.985
0.2100	11.979
0.2133	11.972
0.2166	11.966
0.2200	11.963
0.2233	11.957
0.2266	11.953
0.2300	11.947
0.2333	11.944
0.2366	11.938
0.2400	11.935

0.2433	11.931
0.2466	11.925
0.2500	11.922
0.2533	11.919
0.2566	11.916
0.2600	11.912
0.2633	11.909
0.2666	11.906
0.2700	11.900
0.2733	11.897
0.2766	11.893
0.2800	11.890
0.2833	11.887
0.2866	11.884
0.2900	11.881
0.2933	11.878
0.2966	11.878
0.3000	11.875
0.3033	11.871
0.3066	11.868
0.3100	11.865
0.3133	11.862
0.3166	11.859
0.3200	11.859
0.3233	11.856
0.3266	11.852
0.3300	11.849
0.3333	11.846
0.3500	11.837
0.3666	11.824
0.3833	11.815
0.4000	11.805
0.4166	11.796
0.4333	11.786
0.4500	11.780
0.4666	11.774
0.4833	11.767
0.5000	11.761
0.5166	11.755
0.5333	11.748
0.5500	11.742
0.5666	11.739
0.5833	11.732
0.6000	11.726
0.6166	11.723
0.6333	11.717
0.6500	11.714
0.6666	11.710

0.6833	11.704
0.7000	11.701
0.7166	11.698
0.7333	11.695
0.7500	11.688
0.7666	11.685
0.7833	11.682
0.8000	11.679
0.8166	11.676
0.8333	11.672
0.8500	11.669
0.8666	11.666
0.8833	11.663
0.9000	11.660
0.9166	11.657
0.9333	11.654
0.9500	11.650
0.9666	11.647
0.9833	11.644
1.0000	11.641
1.2000	11.606
1.4000	11.581
1.6000	11.559
1.8000	11.537
2.0000	11.518
2.2000	11.502
2.4000	11.486
2.6000	11.470
2.8000	11.458
3.0000	11.442
3.2000	11.429
3.4000	11.420
3.6000	11.407
3.8000	11.398
4.0000	11.388
4.2000	11.376
4.4000	11.366
4.6000	11.360
4.8000	11.354
5.0000	11.344
5.2000	11.338
5.4000	11.328
5.6000	11.322
5.8000	11.316
6.0000	11.309
6.2000	11.303
6.4000	11.300
6.6000	11.294

6.8000	11.287
7.0000	11.281
7.2000	11.278
7.4000	11.271
7.6000	11.268
7.8000	11.262
8.0000	11.259
8.2000	11.253
8.4000	11.249
8.6000	11.246
8.8000	11.240
9.0000	11.234
9.2000	11.230
9.4000	11.227
9.6000	11.224
9.8000	11.224
10.0000	11.221

SE1000C
Environmental Logger
08/15 13:08

Unit# 00001 Test 4

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	6.620
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/14 15:49:01

Elapsed Time	INPUT 1
0.0000	8.703
0.0033	8.700
0.0066	8.707
0.0100	8.637
0.0133	8.580
0.0166	8.618
0.0200	8.590
0.0233	8.561
0.0266	8.549
0.0300	8.520
0.0333	8.508
0.0366	8.482
0.0400	8.463
0.0433	8.441
0.0466	8.432
0.0500	8.416
0.0533	8.391
0.0566	8.366
0.0600	8.353
0.0633	8.331
0.0666	8.315
0.0700	8.299
0.0733	8.280
0.0766	8.265
0.0800	8.246

0.0833	8.230
0.0866	8.211
0.0900	8.198
0.0933	8.179
0.0966	8.163
0.1000	8.151
0.1033	8.135
0.1066	8.119
0.1100	8.107
0.1133	8.094
0.1166	8.081
0.1200	8.069
0.1233	8.056
0.1266	8.044
0.1300	8.034
0.1333	8.021
0.1366	8.012
0.1400	8.002
0.1433	7.993
0.1466	7.984
0.1500	7.974
0.1533	7.965
0.1566	7.958
0.1600	7.952
0.1633	7.942
0.1666	7.936
0.1700	7.930
0.1733	7.924
0.1766	7.920
0.1800	7.914
0.1833	7.908
0.1866	7.905
0.1900	7.898
0.1933	7.895
0.1966	7.892
0.2000	7.886
0.2033	7.882
0.2066	7.879
0.2100	7.876
0.2133	7.873
0.2166	7.867
0.2200	7.867
0.2233	7.864
0.2266	7.857
0.2300	7.857
0.2333	7.854
0.2366	7.851
0.2400	7.848

0.2433	7.848
0.2466	7.845
0.2500	7.841
0.2533	7.838
0.2566	7.838
0.2600	7.835
0.2633	7.832
0.2666	7.832
0.2700	7.829
0.2733	7.826
0.2766	7.826
0.2800	7.823
0.2833	7.819
0.2866	7.819
0.2900	7.816
0.2933	7.816
0.2966	7.813
0.3000	7.813
0.3033	7.810
0.3066	7.810
0.3100	7.807
0.3133	7.807
0.3166	7.804
0.3200	7.804
0.3233	7.800
0.3266	7.800
0.3300	7.800
0.3333	7.797
0.3500	7.788
0.3666	7.781
0.3833	7.775
0.4000	7.769
0.4166	7.763
0.4333	7.759
0.4500	7.753
0.4666	7.747
0.4833	7.744
0.5000	7.737
0.5166	7.734
0.5333	7.728
0.5500	7.725
0.5666	7.721
0.5833	7.718
0.6000	7.715
0.6166	7.709
0.6333	7.706
0.6500	7.703
0.6666	7.699

0.6833	7.699
0.7000	7.696
0.7166	7.693
0.7333	7.690
0.7500	7.687
0.7666	7.684
0.7833	7.684
0.8000	7.680
0.8166	7.677
0.8333	7.674
0.8500	7.674
0.8666	7.671
0.8833	7.671
0.9000	7.668
0.9166	7.665
0.9333	7.665
0.9500	7.661
0.9666	7.661
0.9833	7.658
1.0000	7.655
1.2000	7.633
1.4000	7.620
1.6000	7.608
1.8000	7.595
2.0000	7.586
2.2000	7.576
2.4000	7.570
2.6000	7.560
2.8000	7.554
3.0000	7.551
3.2000	7.542
3.4000	7.538
3.6000	7.532
3.8000	7.526
4.0000	7.523
4.2000	7.516
4.4000	7.516
4.6000	7.513
4.8000	7.507
5.0000	7.504
5.2000	7.500
5.4000	7.497
5.6000	7.494
5.8000	7.491
6.0000	7.485
6.2000	7.481
6.4000	7.478
6.6000	7.475

6.8000	7.472
7.0000	7.472
7.2000	7.469
7.4000	7.466
7.6000	7.463
7.8000	7.459
8.0000	7.456
8.2000	7.453
8.4000	7.453
8.6000	7.450
8.8000	7.450
9.0000	7.447
9.2000	7.444
9.4000	7.440
9.6000	7.440
9.8000	7.437
10.0000	7.434
12.0000	7.415

SE1000C
Environmental Logger
08/15 13:14

Unit# 00001 Test 6

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	7.190
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/14 16:46:05

Elapsed Time	INPUT 1
0.0000	0.076
0.0033	0.047
0.0066	0.019
0.0100	-0.005
0.0133	-0.030
0.0166	-0.056
0.0200	-0.078
0.0233	-0.100
0.0266	-0.128
0.0300	-0.150
0.0333	-0.179
0.0366	-0.201
0.0400	-0.214
0.0433	-0.226
0.0466	-0.251
0.0500	-0.277
0.0533	-0.293
0.0566	-0.321
0.0600	-0.340
0.0633	-0.359
0.0666	-0.371
0.0700	-0.381
0.0733	-0.409
0.0766	-0.438
0.0800	-0.457

0.0833	-0.476
0.0866	-0.498
0.0900	-0.517
0.0933	-0.536
0.0966	-0.555
0.1000	-0.574
0.1033	-0.592
0.1066	-0.608
0.1100	-0.627
0.1133	-0.646
0.1166	-0.665
0.1200	-0.681
0.1233	-0.700
0.1266	-0.716
0.1300	-0.735
0.1333	-0.750
0.1366	-0.769
0.1400	-0.785
0.1433	-0.801
0.1466	-0.817
0.1500	-0.836
0.1533	-0.851
0.1566	-0.867
0.1600	-0.883
0.1633	-0.899
0.1666	-0.915
0.1700	-0.927
0.1733	-0.943
0.1766	-0.956
0.1800	-0.971
0.1833	-0.984
0.1866	-0.997
0.1900	-1.012
0.1933	-1.022
0.1966	-1.034
0.2000	-1.047
0.2033	-1.060
0.2066	-1.072
0.2100	-1.082
0.2133	-1.094
0.2166	-1.107
0.2200	-1.120
0.2233	-1.129
0.2266	-1.139
0.2300	-1.151
0.2333	-1.161
0.2366	-1.173
0.2400	-1.183

0.2433	-1.192
0.2466	-1.202
0.2500	-1.214
0.2533	-1.224
0.2566	-1.230
0.2600	-1.237
0.2633	-1.246
0.2666	-1.252
0.2700	-1.262
0.2733	-1.268
0.2766	-1.278
0.2800	-1.281
0.2833	-1.290
0.2866	-1.297
0.2900	-1.303
0.2933	-1.306
0.2966	-1.312
0.3000	-1.319
0.3033	-1.325
0.3066	-1.328
0.3100	-1.334
0.3133	-1.338
0.3166	-1.344
0.3200	-1.347
0.3233	-1.350
0.3266	-1.353
0.3300	-1.360
0.3333	-1.363
0.3500	-1.382
0.3666	-1.401
0.3833	-1.417
0.4000	-1.432
0.4166	-1.448
0.4333	-1.461
0.4500	-1.473
0.4666	-1.483
0.4833	-1.492
0.5000	-1.502
0.5166	-1.511
0.5333	-1.518
0.5500	-1.524
0.5666	-1.533
0.5833	-1.540
0.6000	-1.546
0.6166	-1.552
0.6333	-1.559
0.6500	-1.565
0.6666	-1.568

0.6833	-1.574
0.7000	-1.581
0.7166	-1.584
0.7333	-1.587
0.7500	-1.593
0.7666	-1.600
0.7833	-1.603
0.8000	-1.606
0.8166	-1.612
0.8333	-1.615
0.8500	-1.619
0.8666	-1.625
0.8833	-1.628
0.9000	-1.631
0.9166	-1.634
0.9333	-1.641
0.9500	-1.644
0.9666	-1.647
0.9833	-1.650
1.0000	-1.653
1.2000	-1.701
1.4000	-1.732
1.6000	-1.761
1.8000	-1.786
2.0000	-1.811
2.2000	-1.833
2.4000	-1.852
2.6000	-1.871
2.8000	-1.890
3.0000	-1.909
3.2000	-1.925
3.4000	-1.941
3.6000	-1.953
3.8000	-1.969
4.0000	-1.982
4.2000	-1.994
4.4000	-2.004
4.6000	-2.016
4.8000	-2.029
5.0000	-2.039
5.2000	-2.048
5.4000	-2.061
5.6000	-2.067
5.8000	-2.076
6.0000	-2.086
6.2000	-2.092
6.4000	-2.102
6.6000	-2.108

6.8000	-2.114
7.0000	-2.124
7.2000	-2.130
7.4000	-2.136
7.6000	-2.140
7.8000	-2.146
8.0000	-2.152
8.2000	-2.159
8.4000	-2.165
8.6000	-2.168
8.8000	-2.174
9.0000	-2.177
9.2000	-2.184
9.4000	-2.187
9.6000	-2.190
9.8000	-2.196
10.0000	-2.199
12.0000	-2.231

APPENDIX G

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

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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.

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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

★ Target Property

Roads

Waterways

Environmental or Public Receptor

Federal Lands Linear Features

Federal Lands Area

0 1/2 1 2 Miles

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 H

Well Survey and Well Search Summary

M18 site

401858

740248

A

DONALD T. DIFRANCESCO
Acting Governor

State of New Jersey
Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

WATER SUPPLY ADMINISTRATION
BUREAU OF WATER ALLOCATION
P.O. BOX 426
TRENTON, NEW JERSEY 08625-0426
TEL.# 609-292-2957
FAX.# 609-633-1231

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MIT	NAME	WELLUSE	LOT	BLOCK	MUN	COUNTY	PDATE	DRILL
2900871	Redacted - Privacy Act	D	...	...	40	25	07-21-1953	TICE
2901016		D	...	...	38	25	12-24-1953	GRE
2901308		D	...	...	45	25	12-03-1954	BOR
2901456		D	...	...	42	25	05-20-1955	TICE
2901788		D	...	...	38	25	11-30-1955	APTI
2902505		D	...	...	46	25	10-10-1957	TICE
2902774		D	...	...	46	25	09-22-1958	TICE
2902919	ESSO STANDARD OIL CO	I	...	...	46	25	05-11-1959	TICE
2903369	Redacted - Privacy Act	D	...	...	11	25	08-08-1960	OSB
2904271		D	...	...	38	25	02-13-1964	TICE
2904782		D	...	...	38	25	08-05-1965	PETI
2905052		D	...	...	23	25	05-02-1966	TICE
2905454	MON. CO. HGWY DEPT.	D	...	...	46	25	10-09-1967	TICE
2905609	Redacted - Privacy Act	D	...	...	46	25	10-07-1968	PETI
2905673	P.V.C. CONTAINER CRP	D	...	...	46	25	01-22-1969	TICE
2906510	Redacted - Privacy Act	D	...	...	38	25	06-07-1972	KAYE
2906861		D	...	...	46	25	01-29-1973	KAYE
2907110		D	...	...	46	25	07-24-1973	KAYE
2907451		D	...	...	46	25	04-09-1974	KAYE
2908438		D	...	...	38	25	08-03-1976	BAIN
2908785	PHALANX DEVELOPMENT	D	34	35	09	25	04-28-1977	ENG
2908810	Redacted - Privacy Act	D	...	...	38	25	05-12-1977	AME

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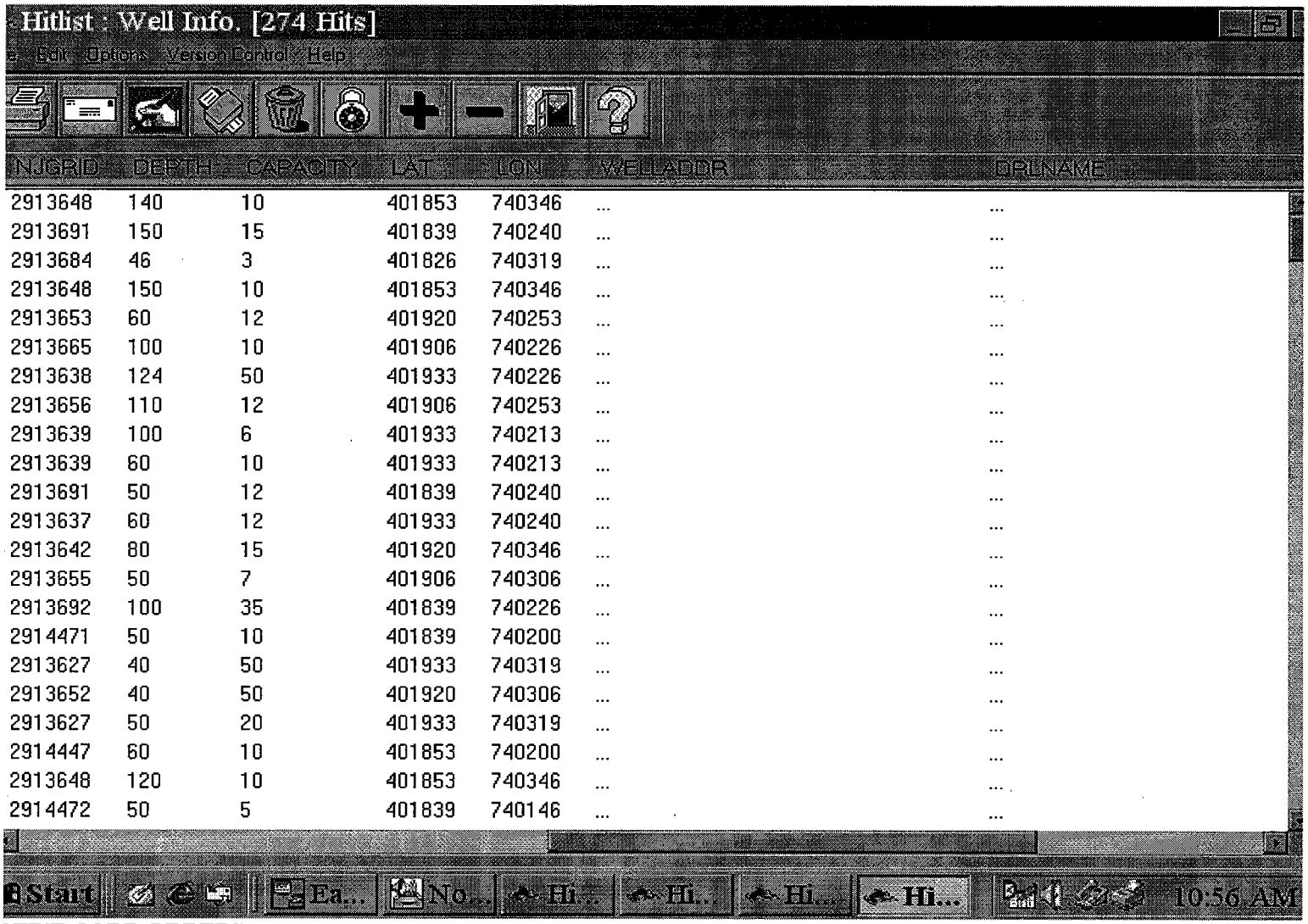

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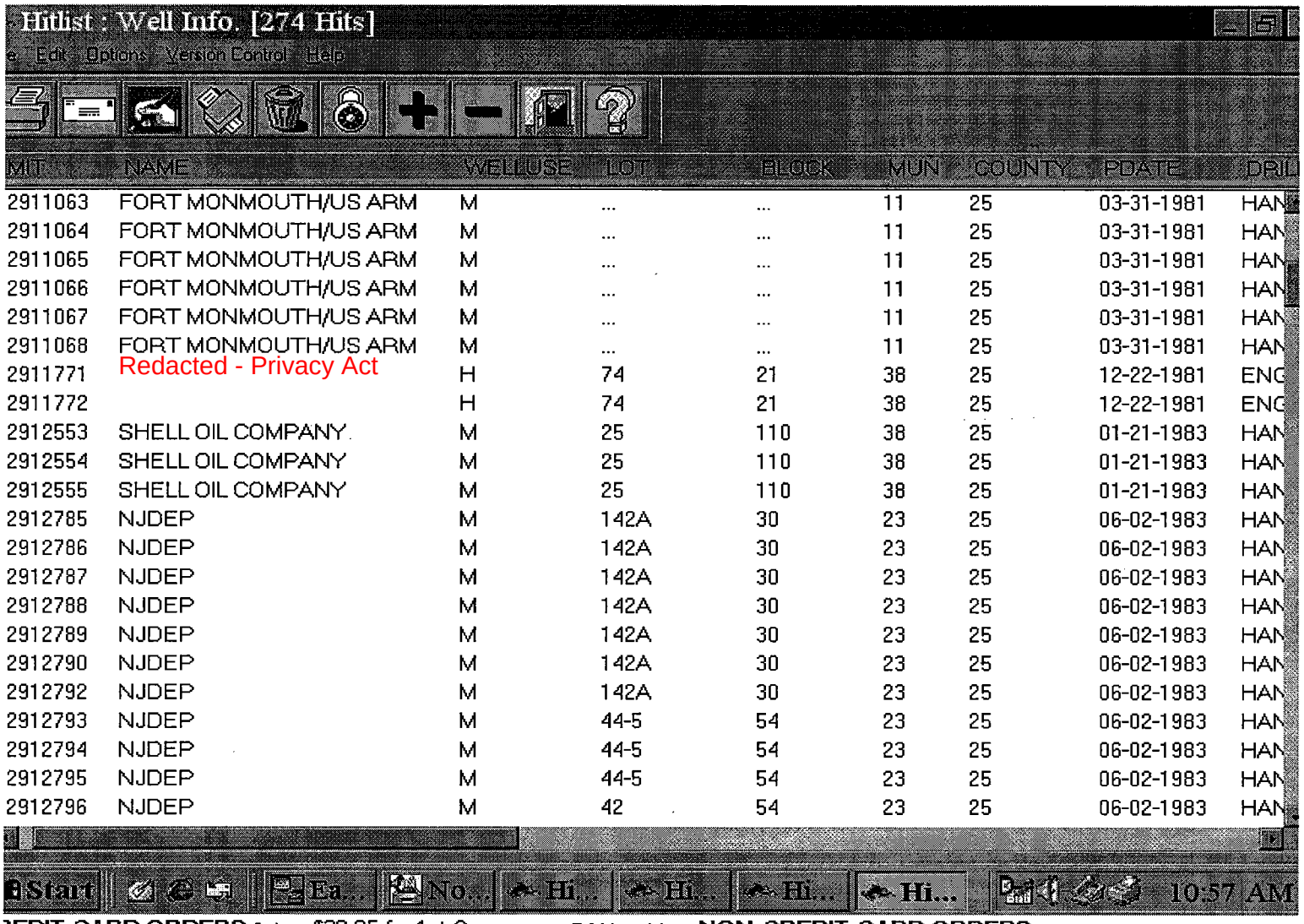

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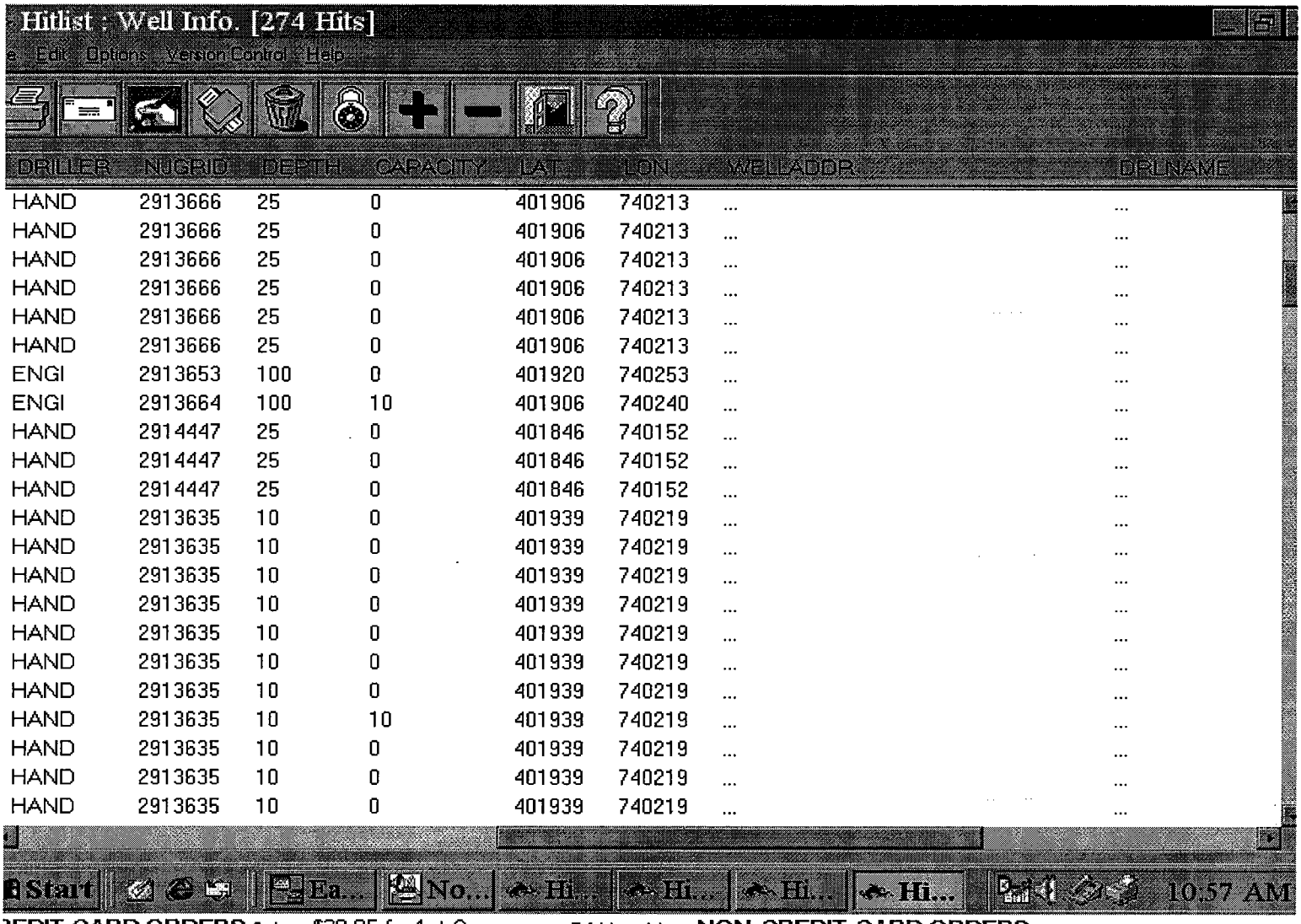

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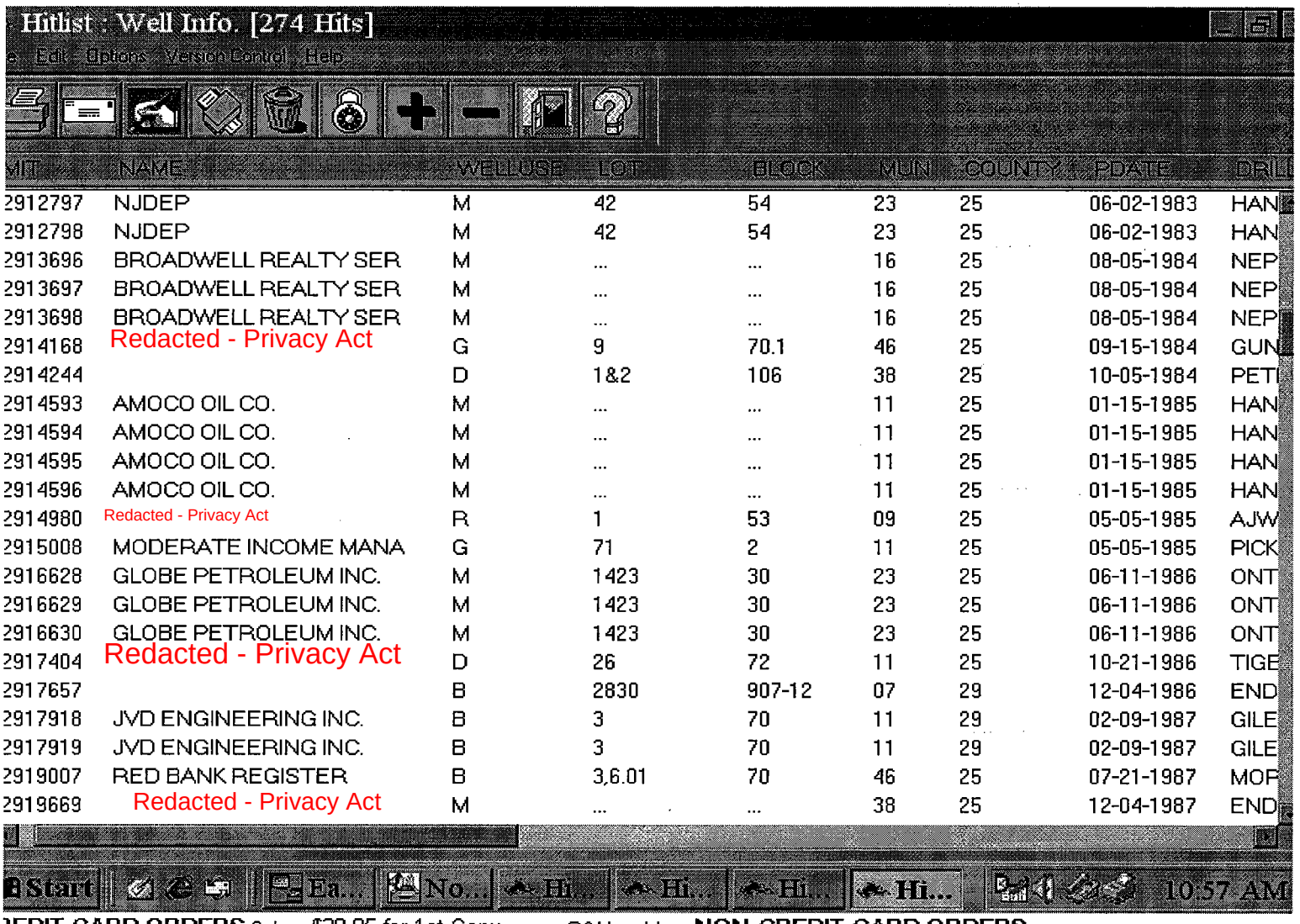

MIT	NAME	WELLUSE	LOT	BLOCK	MUN	COUNTY	PDATE	DRIL
2912797	NJDEP	M	42	54	23	25	06-02-1983	HAN
2912798	NJDEP	M	42	54	23	25	06-02-1983	HAN
2913696	BROADWELL REALTY SER	M	...	...	16	25	08-05-1984	NEP
2913697	BROADWELL REALTY SER	M	...	...	16	25	08-05-1984	NEP
2913698	BROADWELL REALTY SER	M	...	...	16	25	08-05-1984	NEP
2914168	Redacted - Privacy Act	G	9	70.1	46	25	09-15-1984	GUN
2914244		D	1&2	106	38	25	10-05-1984	PET
2914593	AMOCO OIL CO.	M	...	...	11	25	01-15-1985	HAN
2914594	AMOCO OIL CO.	M	...	...	11	25	01-15-1985	HAN
2914595	AMOCO OIL CO.	M	...	...	11	25	01-15-1985	HAN
2914596	AMOCO OIL CO.	M	...	...	11	25	01-15-1985	HAN
2914980	Redacted - Privacy Act	R	1	53	09	25	05-05-1985	AJW
2915008	MODERATE INCOME MANA	G	71	2	11	25	05-05-1985	PICK
2916628	GLOBE PETROLEUM INC.	M	1423	30	23	25	06-11-1986	ONT
2916629	GLOBE PETROLEUM INC.	M	1423	30	23	25	06-11-1986	ONT
2916630	GLOBE PETROLEUM INC.	M	1423	30	23	25	06-11-1986	ONT
2917404	Redacted - Privacy Act	D	26	72	11	25	10-21-1986	TIGE
2917657		B	2830	907-12	07	29	12-04-1986	END
2917918	JVD ENGINEERING INC.	B	3	70	11	29	02-09-1987	GILE
2917919	JVD ENGINEERING INC.	B	3	70	11	29	02-09-1987	GILE
2919007	RED BANK REGISTER	B	3,6.01	70	46	25	07-21-1987	MOR
2919669	Redacted - Privacy Act	M	...	...	38	25	12-04-1987	END

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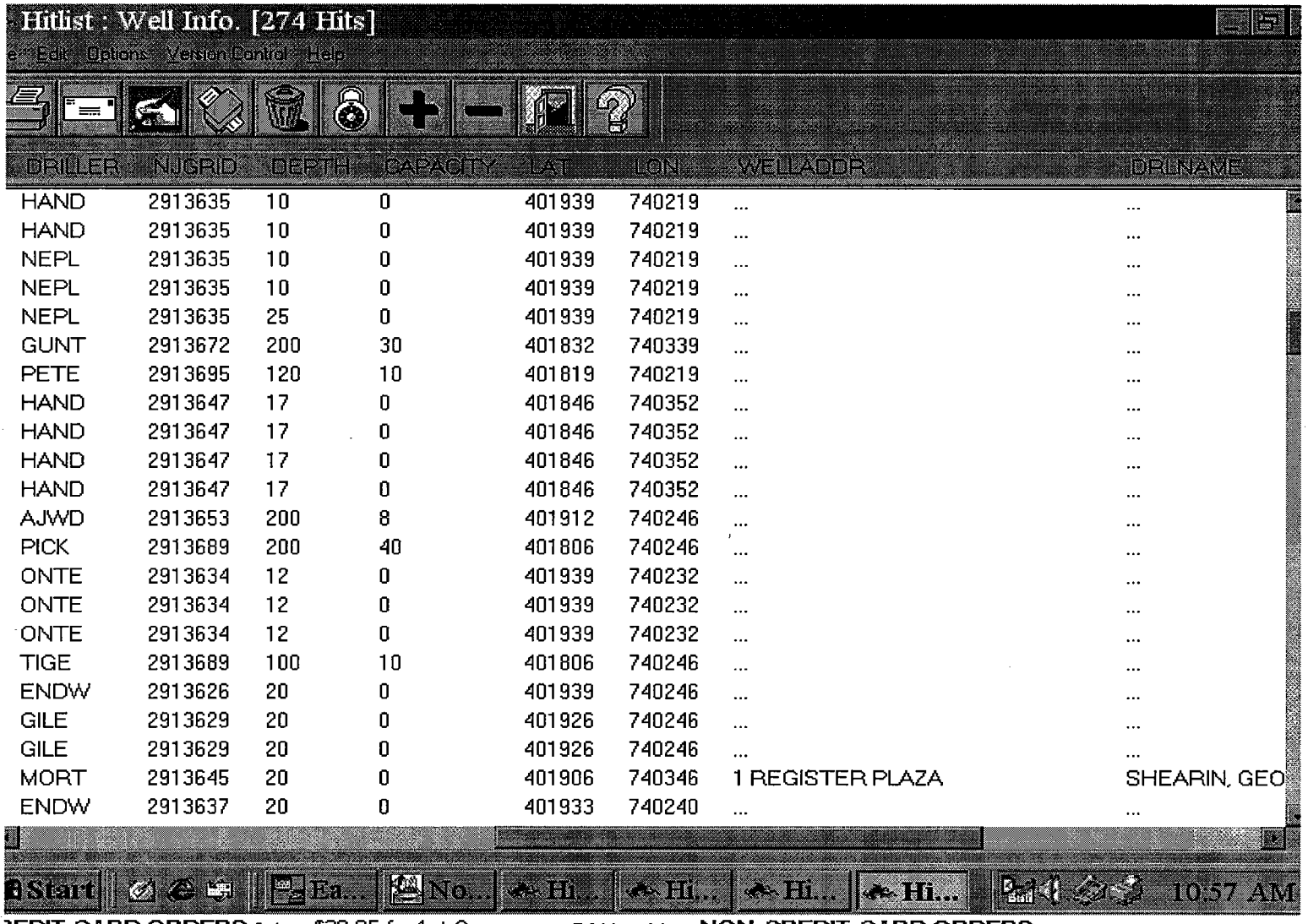

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HAND	2913635	10	0	401939	740219	...	...
NEPL	2913635	10	0	401939	740219	...	...
NEPL	2913635	10	0	401939	740219	...	...
NEPL	2913635	25	0	401939	740219	...	...
GUNT	2913672	200	30	401832	740339	...	...
PETE	2913695	120	10	401819	740219	...	...
HAND	2913647	17	0	401846	740352	...	...
HAND	2913647	17	0	401846	740352	...	...
HAND	2913647	17	0	401846	740352	...	...
HAND	2913647	17	0	401846	740352	...	...
AJWD	2913653	200	8	401912	740246	...	...
PICK	2913689	200	40	401806	740246	...	...
ONTE	2913634	12	0	401939	740232	...	...
ONTE	2913634	12	0	401939	740232	...	...
ONTE	2913634	12	0	401939	740232	...	...
TIGE	2913689	100	10	401806	740246	...	...
ENDW	2913626	20	0	401939	740246	...	...
GILE	2913629	20	0	401926	740246	...	...
GILE	2913629	20	0	401926	740246	...	...
MORT	2913645	20	0	401906	740346	1 REGISTER PLAZA	SHEARIN, GEO
ENDW	2913637	20	0	401933	740240	...	...

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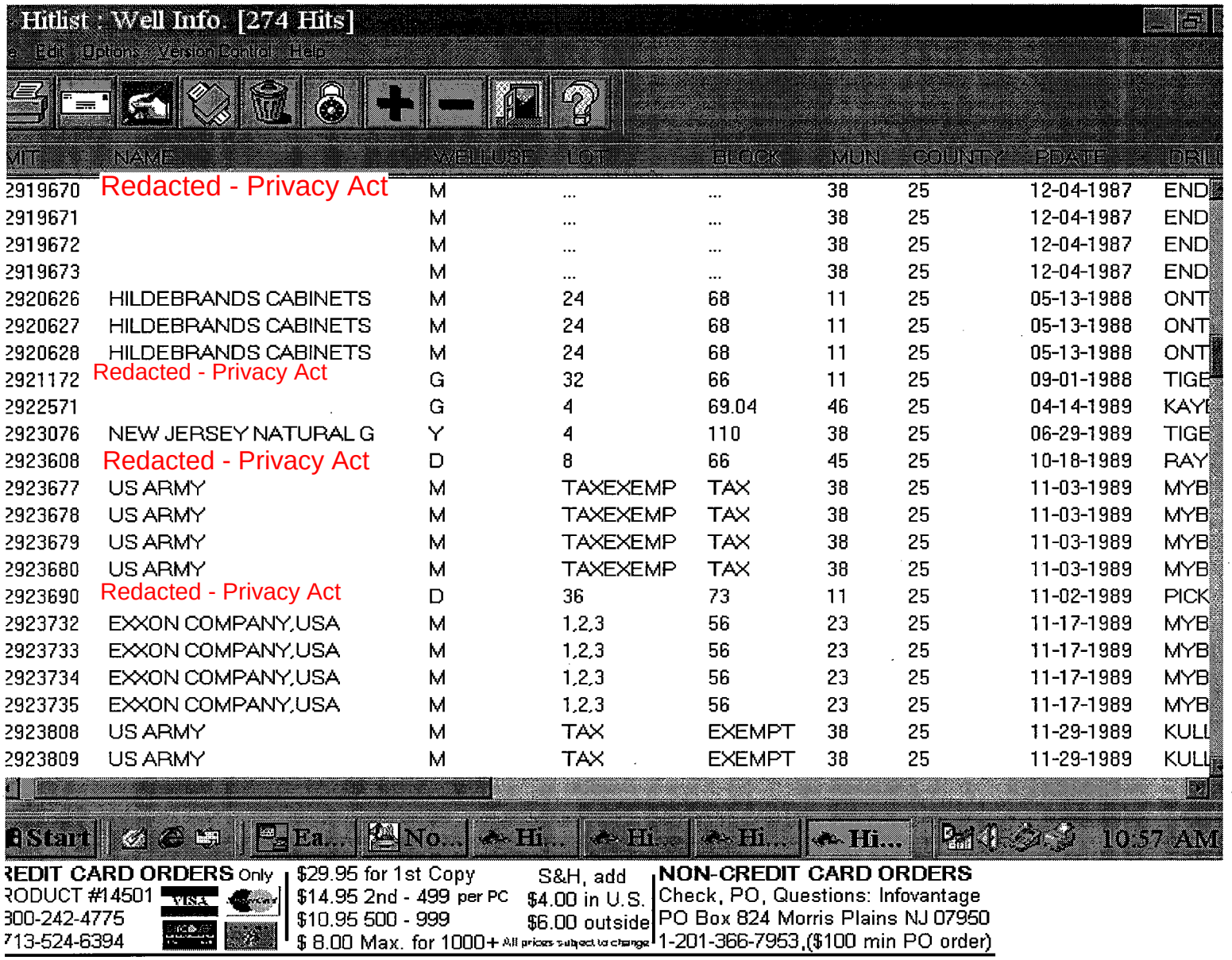

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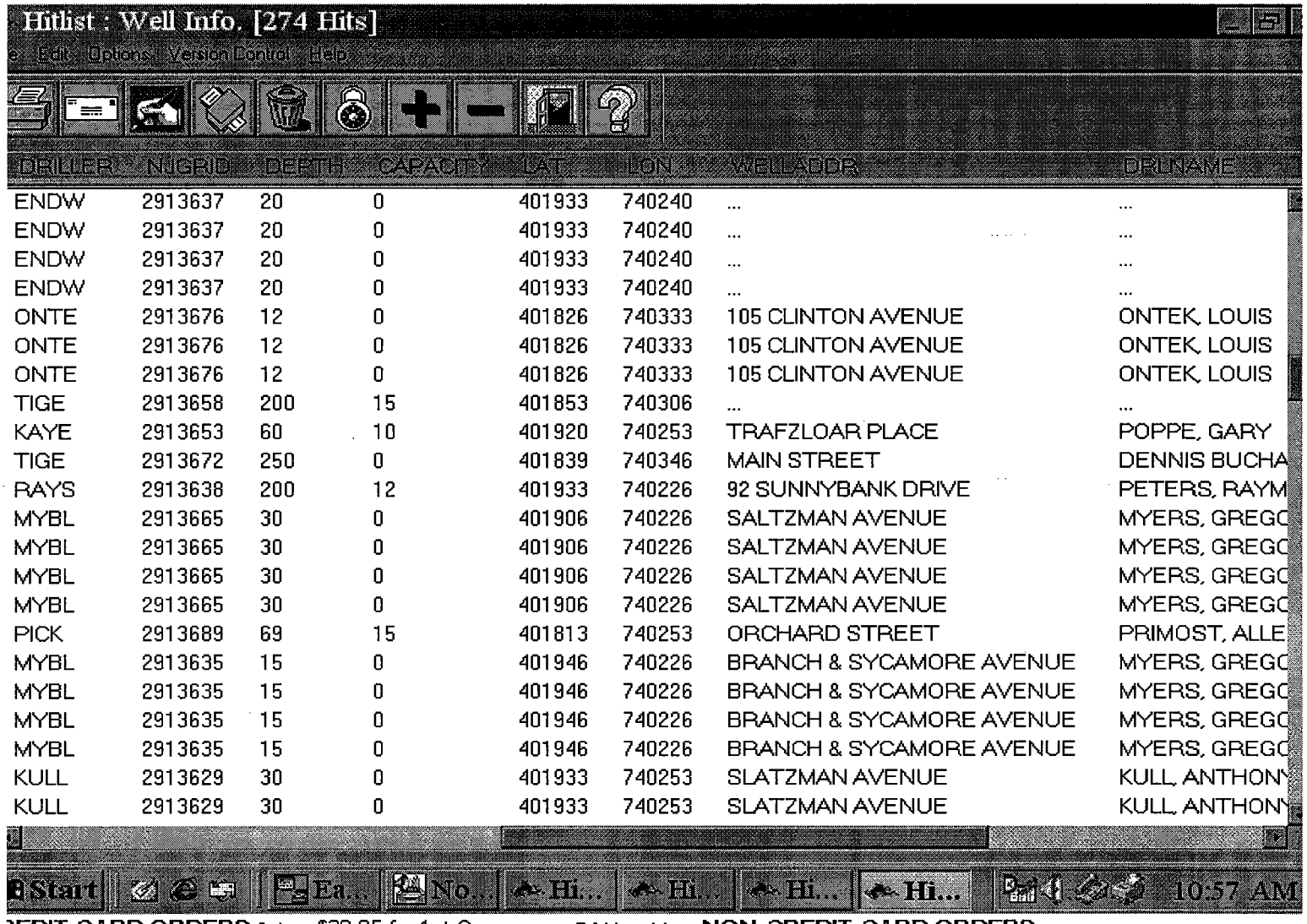

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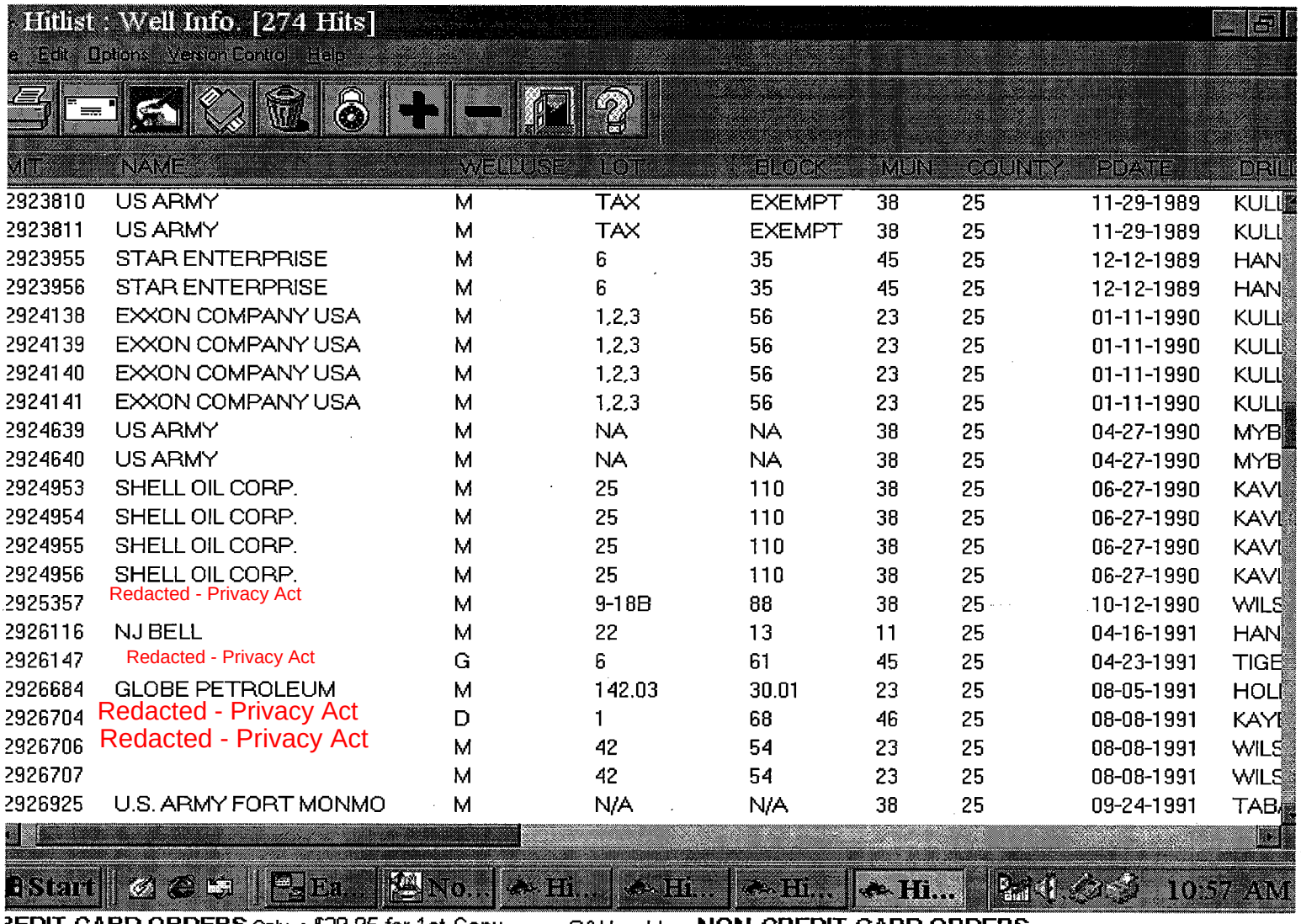
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2923811 US ARMY M TAX EXEMPT 38 25 11-29-1989 KULL
2923955 STAR ENTERPRISE M 6 35 45 25 12-12-1989 HAN
2923956 STAR ENTERPRISE M 6 35 45 25 12-12-1989 HAN
2924138 EXXON COMPANY USA M 1,2,3 56 23 25 01-11-1990 KULL
2924139 EXXON COMPANY USA M 1,2,3 56 23 25 01-11-1990 KULL
2924140 EXXON COMPANY USA M 1,2,3 56 23 25 01-11-1990 KULL
2924141 EXXON COMPANY USA M 1,2,3 56 23 25 01-11-1990 KULL
2924639 US ARMY M NA NA 38 25 04-27-1990 MYB
2924640 US ARMY M NA NA 38 25 04-27-1990 MYB
2924953 SHELL OIL CORP. M 25 110 38 25 06-27-1990 KAVI
2924954 SHELL OIL CORP. M 25 110 38 25 06-27-1990 KAVI
2924955 SHELL OIL CORP. M 25 110 38 25 06-27-1990 KAVI
2924956 SHELL OIL CORP. M 25 110 38 25 06-27-1990 KAVI
2925357 Redacted - Privacy Act M 9-18B 88 38 25 10-12-1990 WILS
2926116 NJ BELL M 22 13 11 25 04-16-1991 HAN
2926147 Redacted - Privacy Act G 6 61 45 25 04-23-1991 TIGE
2926684 GLOBE PETROLEUM M 142.03 30.01 23 25 08-05-1991 HOL
2926704 Redacted - Privacy Act D 1 68 46 25 08-08-1991 KAYI
2926706 Redacted - Privacy Act M 42 54 23 25 08-08-1991 WILS
2926707 M 42 54 23 25 08-08-1991 WILS
2926925 U.S. ARMY FORT MONMO M N/A N/A 38 25 09-24-1991 TAB
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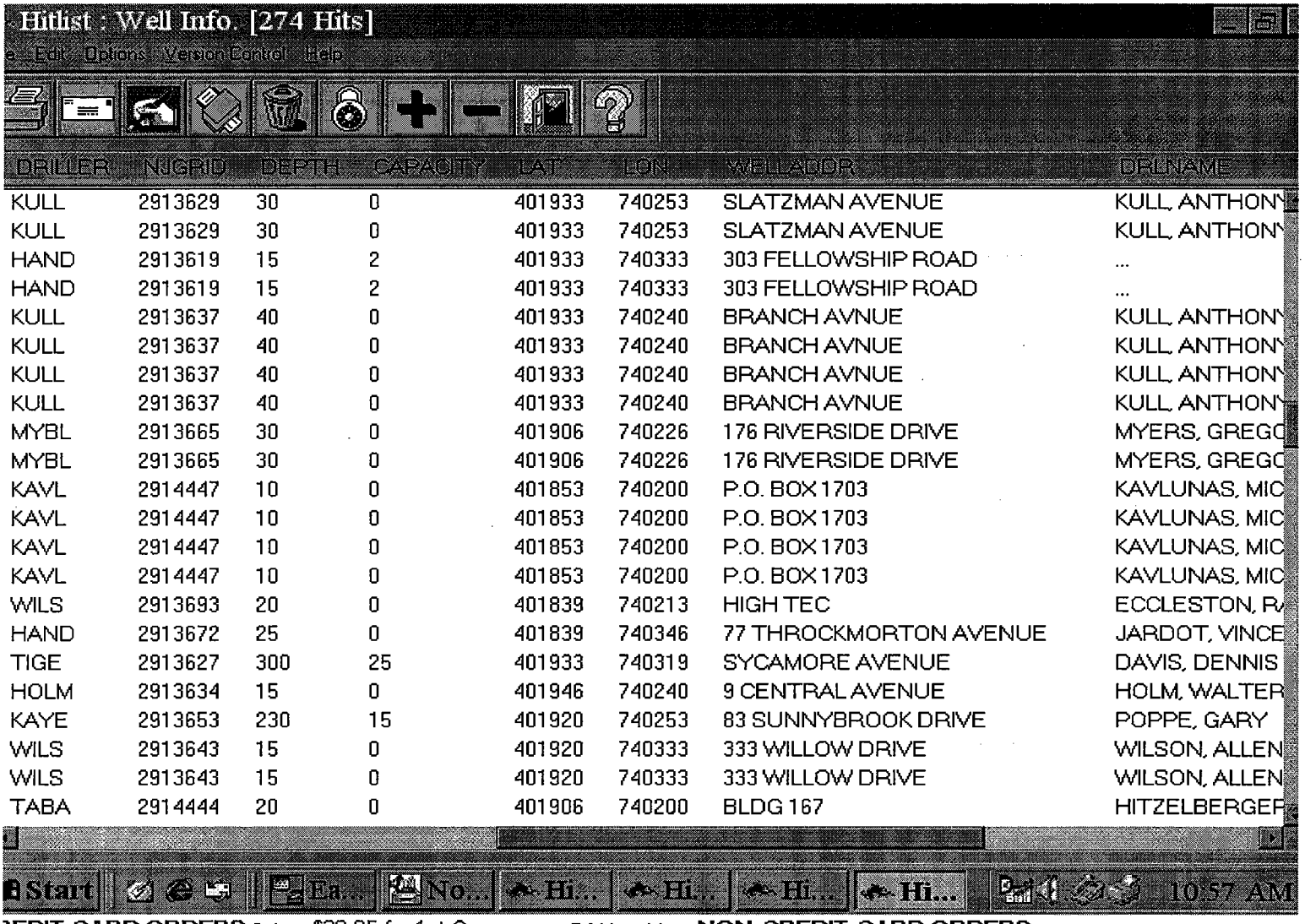

DRILLER	NJGRID	DEPTH	CAPACITY	LAT	LON	WELLADDR	DRLNAME
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KULL	2913629	30	0	401933	740253	SLATZMAN AVENUE	KULL, ANTHONY
HAND	2913619	15	2	401933	740333	303 FELLOWSHIP ROAD	...
HAND	2913619	15	2	401933	740333	303 FELLOWSHIP ROAD	...
KULL	2913637	40	0	401933	740240	BRANCH AVNUE	KULL, ANTHONY
KULL	2913637	40	0	401933	740240	BRANCH AVNUE	KULL, ANTHONY
KULL	2913637	40	0	401933	740240	BRANCH AVNUE	KULL, ANTHONY
KULL	2913637	40	0	401933	740240	BRANCH AVNUE	KULL, ANTHONY
MYBL	2913665	30	0	401906	740226	176 RIVERSIDE DRIVE	MYERS, GREGO
MYBL	2913665	30	0	401906	740226	176 RIVERSIDE DRIVE	MYERS, GREGO
KAVL	2914447	10	0	401853	740200	P.O. BOX 1703	KAVLUNAS, MIC
KAVL	2914447	10	0	401853	740200	P.O. BOX 1703	KAVLUNAS, MIC
KAVL	2914447	10	0	401853	740200	P.O. BOX 1703	KAVLUNAS, MIC
KAVL	2914447	10	0	401853	740200	P.O. BOX 1703	KAVLUNAS, MIC
WILS	2913693	20	0	401839	740213	HIGH TEC	ECCLESTON, R
HAND	2913672	25	0	401839	740346	77 THROCKMORTON AVENUE	JARDOT, VINCE
TIGE	2913627	300	25	401933	740319	SYCAMORE AVENUE	DAVIS, DENNIS
HOLM	2913634	15	0	401946	740240	9 CENTRAL AVENUE	HOLM, WALTER
KAYE	2913653	230	15	401920	740253	83 SUNNYBROOK DRIVE	POPPE, GARY
WILS	2913643	15	0	401920	740333	333 WILLOW DRIVE	WILSON, ALLEN
WILS	2913643	15	0	401920	740333	333 WILLOW DRIVE	WILSON, ALLEN
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER

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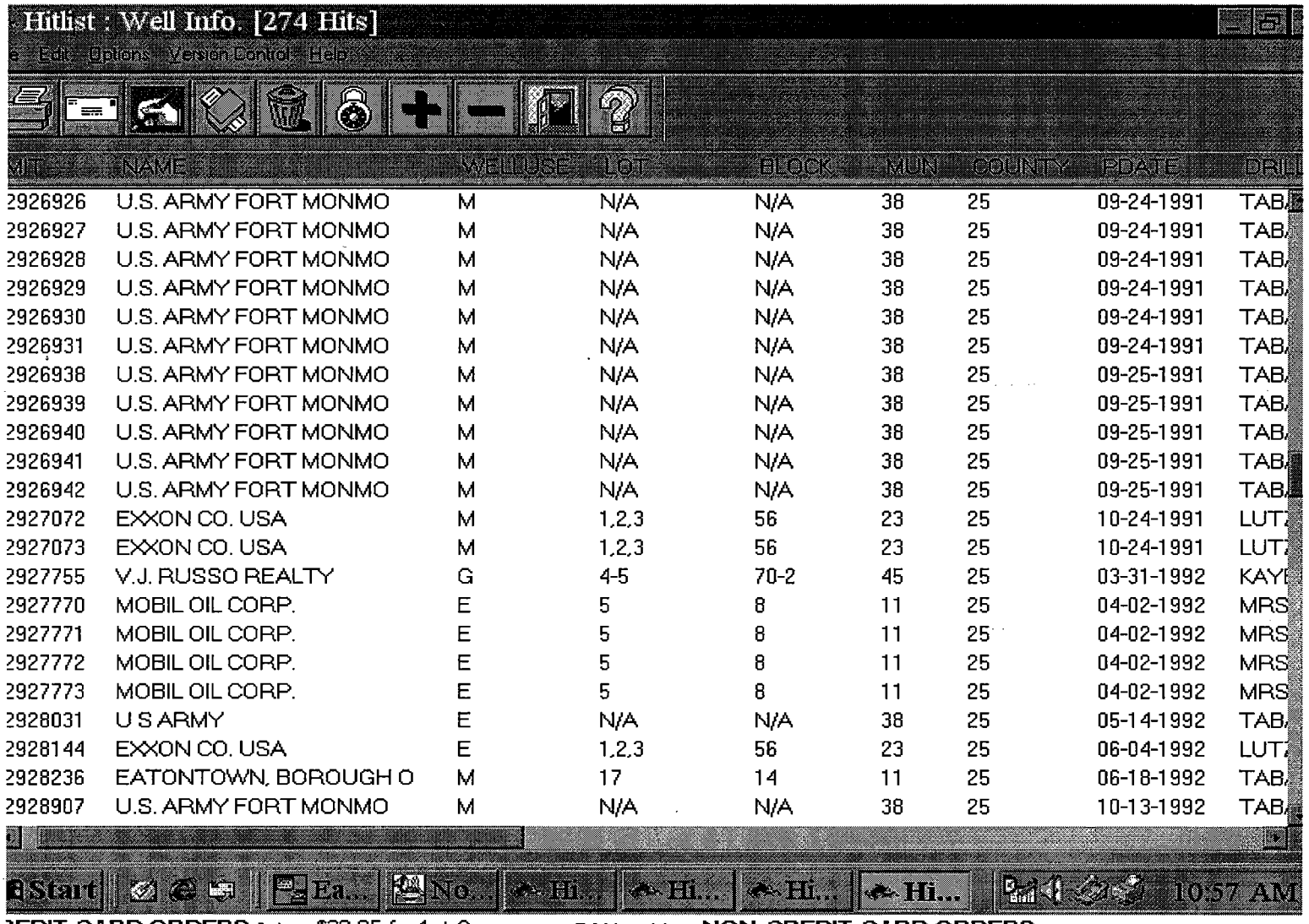

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2926927	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-24-1991	TAB
2926928	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-24-1991	TAB
2926929	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-24-1991	TAB
2926930	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-24-1991	TAB
2926931	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-24-1991	TAB
2926938	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-25-1991	TAB
2926939	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-25-1991	TAB
2926940	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-25-1991	TAB
2926941	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-25-1991	TAB
2926942	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	09-25-1991	TAB
2927072	EXXON CO. USA	M	1,2,3	56	23	25	10-24-1991	LUT
2927073	EXXON CO. USA	M	1,2,3	56	23	25	10-24-1991	LUT
2927755	V.J. RUSSO REALTY	G	4-5	70-2	45	25	03-31-1992	KAY
2927770	MOBIL OIL CORP.	E	5	8	11	25	04-02-1992	MRS
2927771	MOBIL OIL CORP.	E	5	8	11	25	04-02-1992	MRS
2927772	MOBIL OIL CORP.	E	5	8	11	25	04-02-1992	MRS
2927773	MOBIL OIL CORP.	E	5	8	11	25	04-02-1992	MRS
2928031	U S ARMY	E	N/A	N/A	38	25	05-14-1992	TAB
2928144	EXXON CO. USA	E	1,2,3	56	23	25	06-04-1992	LUT
2928236	EATONTOWN, BOROUGH O	M	17	14	11	25	06-18-1992	TAB
2928907	U.S. ARMY FORT MONMO	M	N/A	N/A	38	25	10-13-1992	TAB

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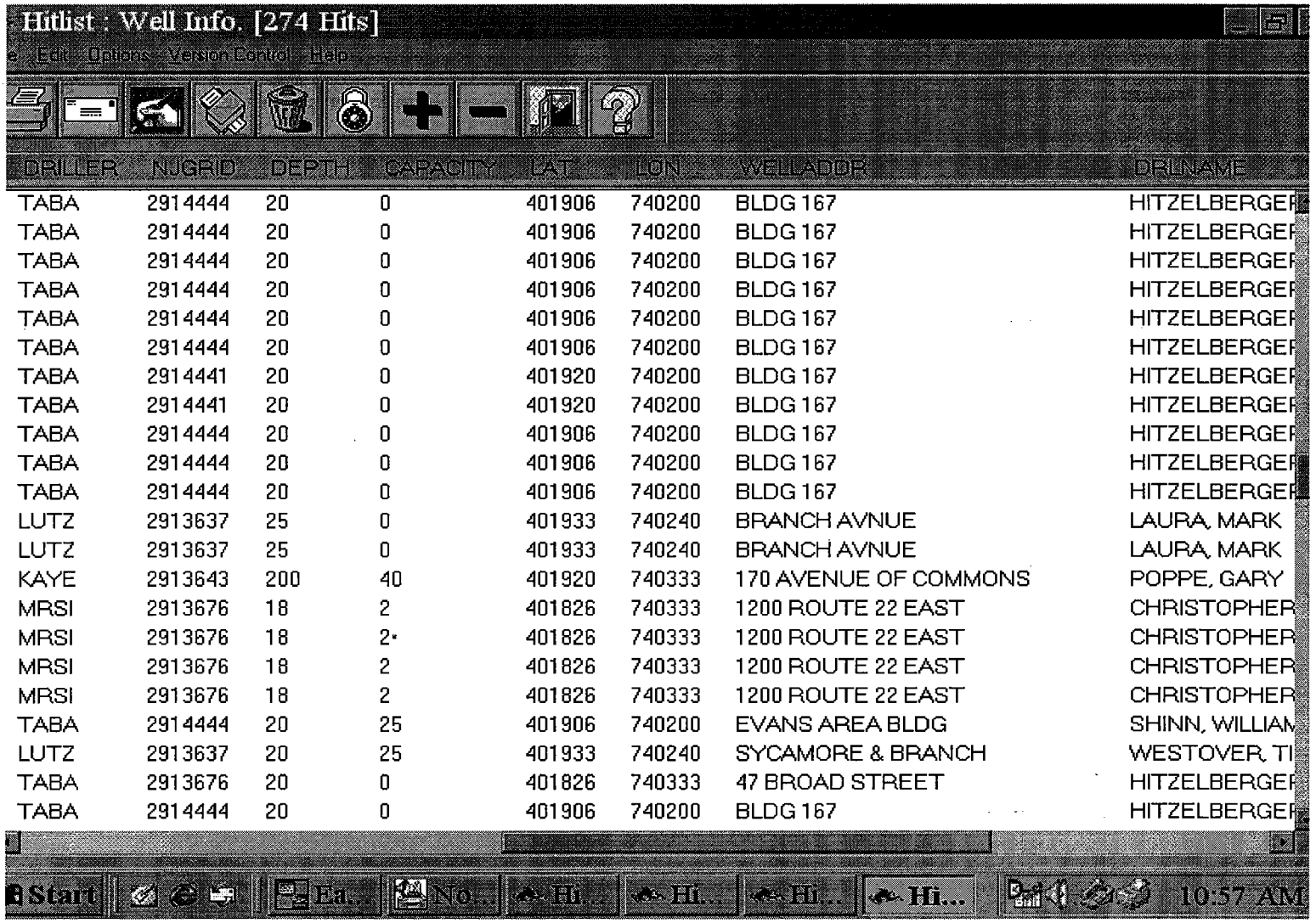

DRILLER	NJGRID	DEPTH	CAPACITY	LAT	LON	WELLADDR	DRLNAME
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914441	20	0	401920	740200	BLDG 167	HITZELBERGER
TABA	2914441	20	0	401920	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER
LUTZ	2913637	25	0	401933	740240	BRANCH AVNUE	LAURA, MARK
LUTZ	2913637	25	0	401933	740240	BRANCH AVNUE	LAURA, MARK
KAYE	2913643	200	40	401920	740333	170 AVENUE OF COMMONS	POPPE, GARY
MRSI	2913676	18	2	401826	740333	1200 ROUTE 22 EAST	CHRISTOPHER
MRSI	2913676	18	2	401826	740333	1200 ROUTE 22 EAST	CHRISTOPHER
MRSI	2913676	18	2	401826	740333	1200 ROUTE 22 EAST	CHRISTOPHER
MRSI	2913676	18	2	401826	740333	1200 ROUTE 22 EAST	CHRISTOPHER
TABA	2914444	20	25	401906	740200	EVANS AREA BLDG	SHINN, WILLIAM
LUTZ	2913637	20	25	401933	740240	SYCAMORE & BRANCH	WESTOVER, TI
TABA	2913676	20	0	401826	740333	47 BROAD STREET	HITZELBERGER
TABA	2914444	20	0	401906	740200	BLDG 167	HITZELBERGER

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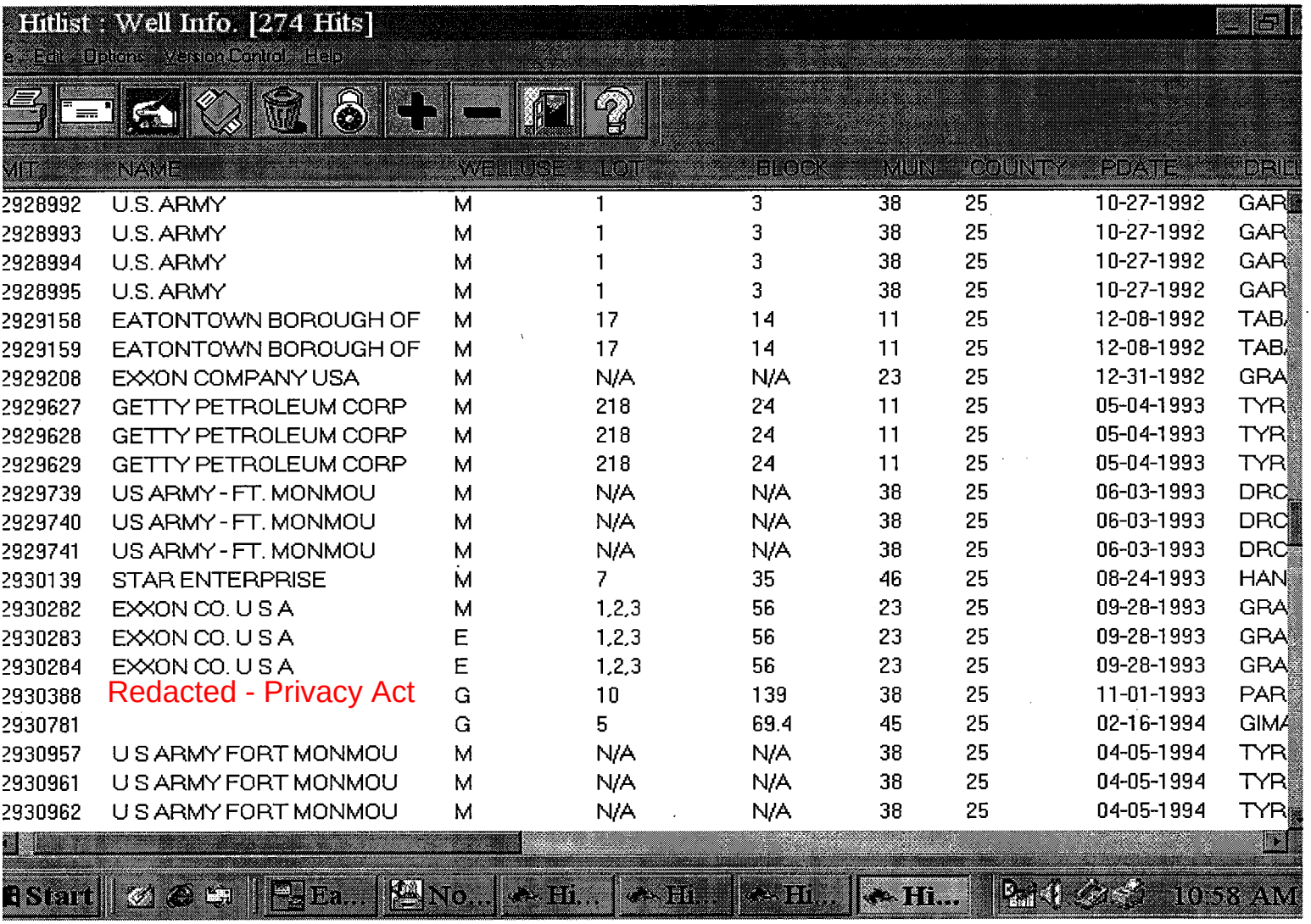

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MIT	NAME	WELLUSE	LOT	BLOCK	MUN	COUNTY	PDATE	DRIL
2928992	U.S. ARMY	M	1	3	38	25	10-27-1992	GAR
2928993	U.S. ARMY	M	1	3	38	25	10-27-1992	GAR
2928994	U.S. ARMY	M	1	3	38	25	10-27-1992	GAR
2928995	U.S. ARMY	M	1	3	38	25	10-27-1992	GAR
2929158	EATONTOWN BOROUGH OF	M	17	14	11	25	12-08-1992	TAB
2929159	EATONTOWN BOROUGH OF	M	17	14	11	25	12-08-1992	TAB
2929208	EXXON COMPANY USA	M	N/A	N/A	23	25	12-31-1992	GRA
2929627	GETTY PETROLEUM CORP	M	218	24	11	25	05-04-1993	TYR
2929628	GETTY PETROLEUM CORP	M	218	24	11	25	05-04-1993	TYR
2929629	GETTY PETROLEUM CORP	M	218	24	11	25	05-04-1993	TYR
2929739	US ARMY - FT. MONMOU	M	N/A	N/A	38	25	06-03-1993	DRC
2929740	US ARMY - FT. MONMOU	M	N/A	N/A	38	25	06-03-1993	DRC
2929741	US ARMY - FT. MONMOU	M	N/A	N/A	38	25	06-03-1993	DRC
2930139	STAR ENTERPRISE	M	7	35	46	25	08-24-1993	HAN
2930282	EXXON CO. U S A	M	1,2,3	56	23	25	09-28-1993	GRA
2930283	EXXON CO. U S A	E	1,2,3	56	23	25	09-28-1993	GRA
2930284	EXXON CO. U S A	E	1,2,3	56	23	25	09-28-1993	GRA
2930388	Redacted - Privacy Act	G	10	139	38	25	11-01-1993	PAR
2930781		G	5	69.4	45	25	02-16-1994	GIM
2930957	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930961	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930962	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR

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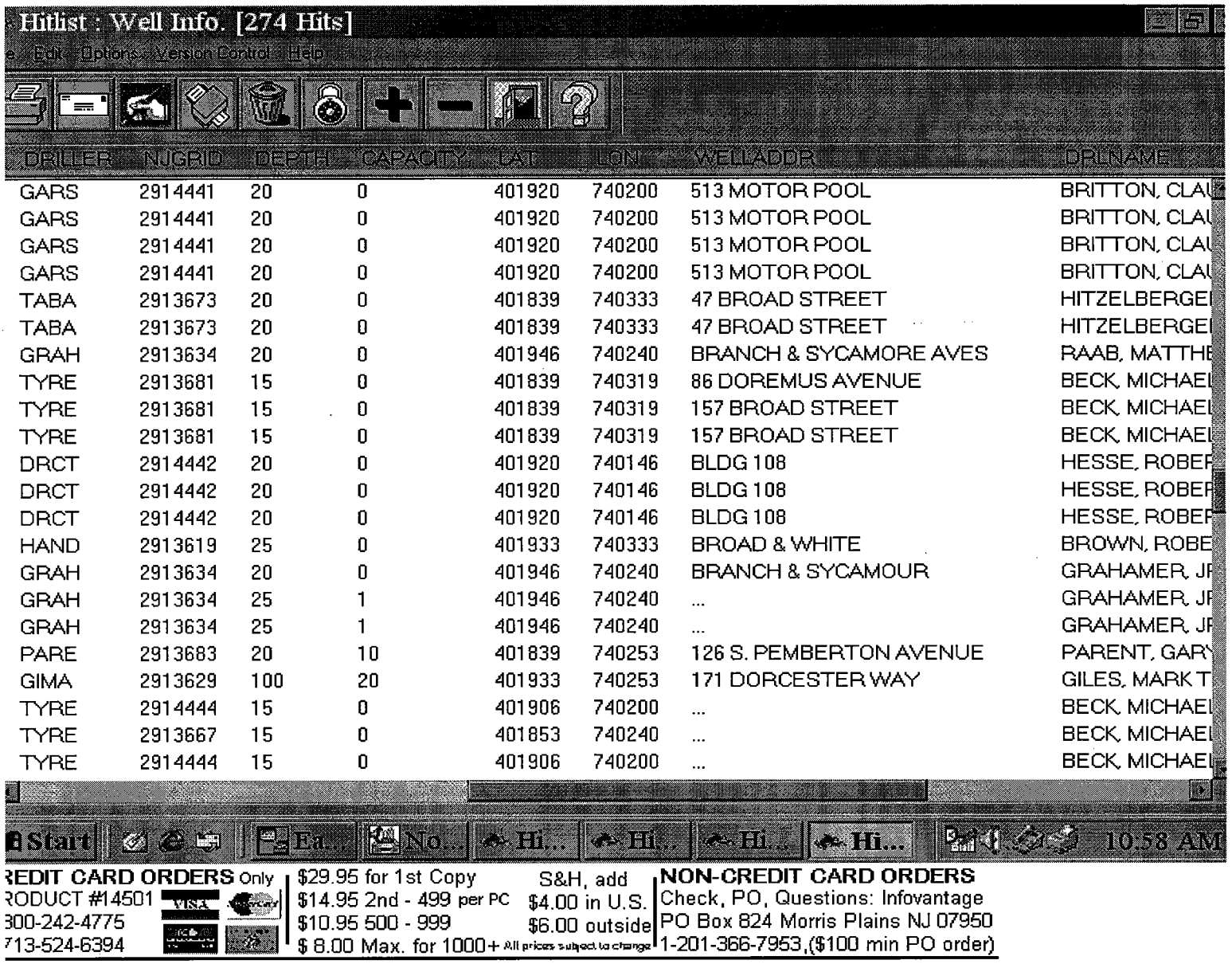

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DRILLER	NJGRID	DEPTH	CAPACITY	LAT	LON	WELLADDR	DRLNAME
GARS	2914441	20	0	401920	740200	513 MOTOR POOL	BRITTON, CLA
GARS	2914441	20	0	401920	740200	513 MOTOR POOL	BRITTON, CLA
GARS	2914441	20	0	401920	740200	513 MOTOR POOL	BRITTON, CLA
GARS	2914441	20	0	401920	740200	513 MOTOR POOL	BRITTON, CLA
TABA	2913673	20	0	401839	740333	47 BROAD STREET	HITZELBERGE
TABA	2913673	20	0	401839	740333	47 BROAD STREET	HITZELBERGE
GRAH	2913634	20	0	401946	740240	BRANCH & SYCAMORE AVES	RAAB, MATTHE
TYRE	2913681	15	0	401839	740319	86 DOREMUS AVENUE	BECK, MICHAE
TYRE	2913681	15	0	401839	740319	157 BROAD STREET	BECK, MICHAE
TYRE	2913681	15	0	401839	740319	157 BROAD STREET	BECK, MICHAE
DRCT	2914442	20	0	401920	740146	BLDG 108	HESSE, ROBE
DRCT	2914442	20	0	401920	740146	BLDG 108	HESSE, ROBE
DRCT	2914442	20	0	401920	740146	BLDG 108	HESSE, ROBE
HAND	2913619	25	0	401933	740333	BROAD & WHITE	BROWN, ROBE
GRAH	2913634	20	0	401946	740240	BRANCH & SYCAMOUR	GRAHAMER, J
GRAH	2913634	25	1	401946	740240	...	GRAHAMER, J
GRAH	2913634	25	1	401946	740240	...	GRAHAMER, J
PARE	2913683	20	10	401839	740253	126 S. PEMBERTON AVENUE	PARENT, GAR
GIMA	2913629	100	20	401933	740253	171 DORCESTER WAY	GILES, MARK T
TYRE	2914444	15	0	401906	740200	...	BECK, MICHAE
TYRE	2913667	15	0	401853	740240	...	BECK, MICHAE
TYRE	2914444	15	0	401906	740200	...	BECK, MICHAE

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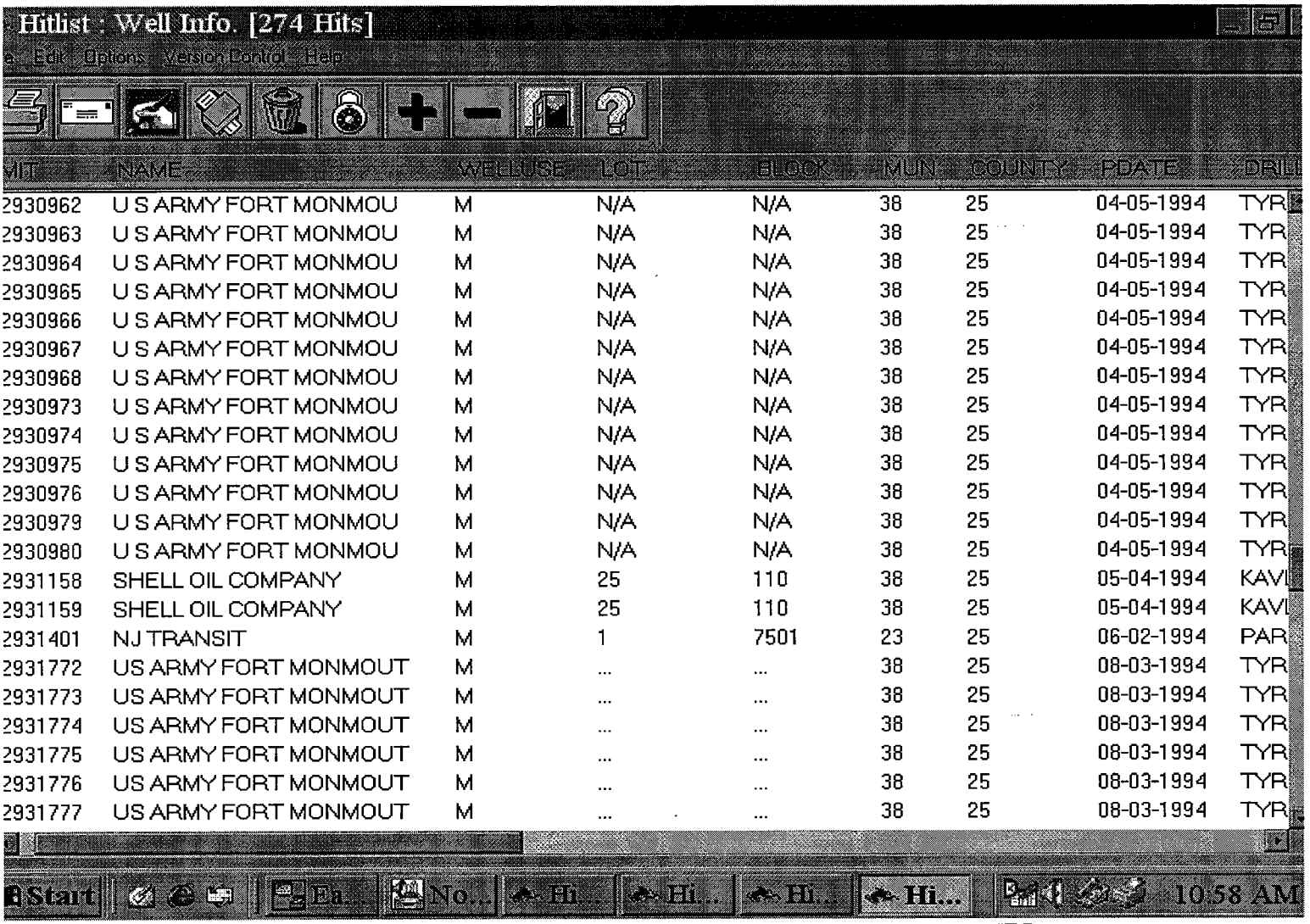

MIT	NAME	WELLUSE	LOT	BLOCK	MUN	COUNTY	PDATE	DRIL
2930962	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930963	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930964	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930965	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930966	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930967	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930968	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930973	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930974	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930975	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930976	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930979	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2930980	U S ARMY FORT MONMOU	M	N/A	N/A	38	25	04-05-1994	TYR
2931158	SHELL OIL COMPANY	M	25	110	38	25	05-04-1994	KAVI
2931159	SHELL OIL COMPANY	M	25	110	38	25	05-04-1994	KAVI
2931401	NJ TRANSIT	M	1	7501	23	25	06-02-1994	PAR
2931772	US ARMY FORT MONMOUT	M	...	...	38	25	08-03-1994	TYR
2931773	US ARMY FORT MONMOUT	M	...	...	38	25	08-03-1994	TYR
2931774	US ARMY FORT MONMOUT	M	...	...	38	25	08-03-1994	TYR
2931775	US ARMY FORT MONMOUT	M	...	...	38	25	08-03-1994	TYR
2931776	US ARMY FORT MONMOUT	M	...	...	38	25	08-03-1994	TYR
2931777	US ARMY FORT MONMOUT	M	...	...	38	25	08-03-1994	TYR

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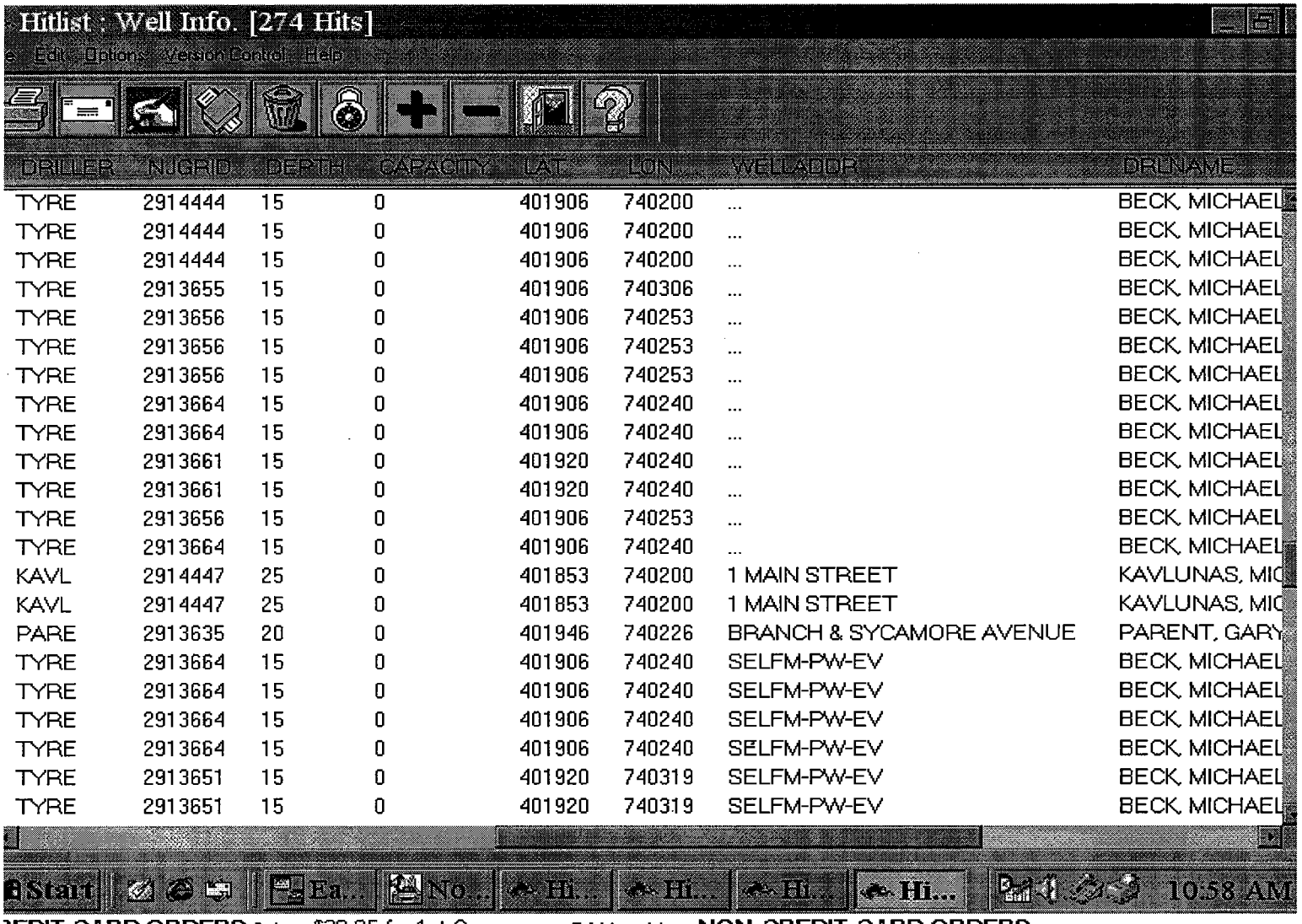

DRILLER	NJGRID	DEPTH	CAPACITY	LAT	LON	WELLADDR	DRLNAME
TYRE	2914444	15	0	401906	740200	...	BECK, MICHAEL
TYRE	2914444	15	0	401906	740200	...	BECK, MICHAEL
TYRE	2914444	15	0	401906	740200	...	BECK, MICHAEL
TYRE	2913655	15	0	401906	740306	...	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	...	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	...	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	...	BECK, MICHAEL
TYRE	2913664	15	0	401906	740240	...	BECK, MICHAEL
TYRE	2913664	15	0	401906	740240	...	BECK, MICHAEL
TYRE	2913661	15	0	401920	740240	...	BECK, MICHAEL
TYRE	2913661	15	0	401920	740240	...	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	...	BECK, MICHAEL
TYRE	2913664	15	0	401906	740240	...	BECK, MICHAEL
KAVL	2914447	25	0	401853	740200	1 MAIN STREET	KAVLUNAS, MIC
KAVL	2914447	25	0	401853	740200	1 MAIN STREET	KAVLUNAS, MIC
PARE	2913635	20	0	401946	740226	BRANCH & SYCAMORE AVENUE	PARENT, GARY
TYRE	2913664	15	0	401906	740240	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913664	15	0	401906	740240	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913664	15	0	401906	740240	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913664	15	0	401906	740240	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913651	15	0	401920	740319	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913651	15	0	401920	740319	SELFM-PW-EV	BECK, MICHAEL

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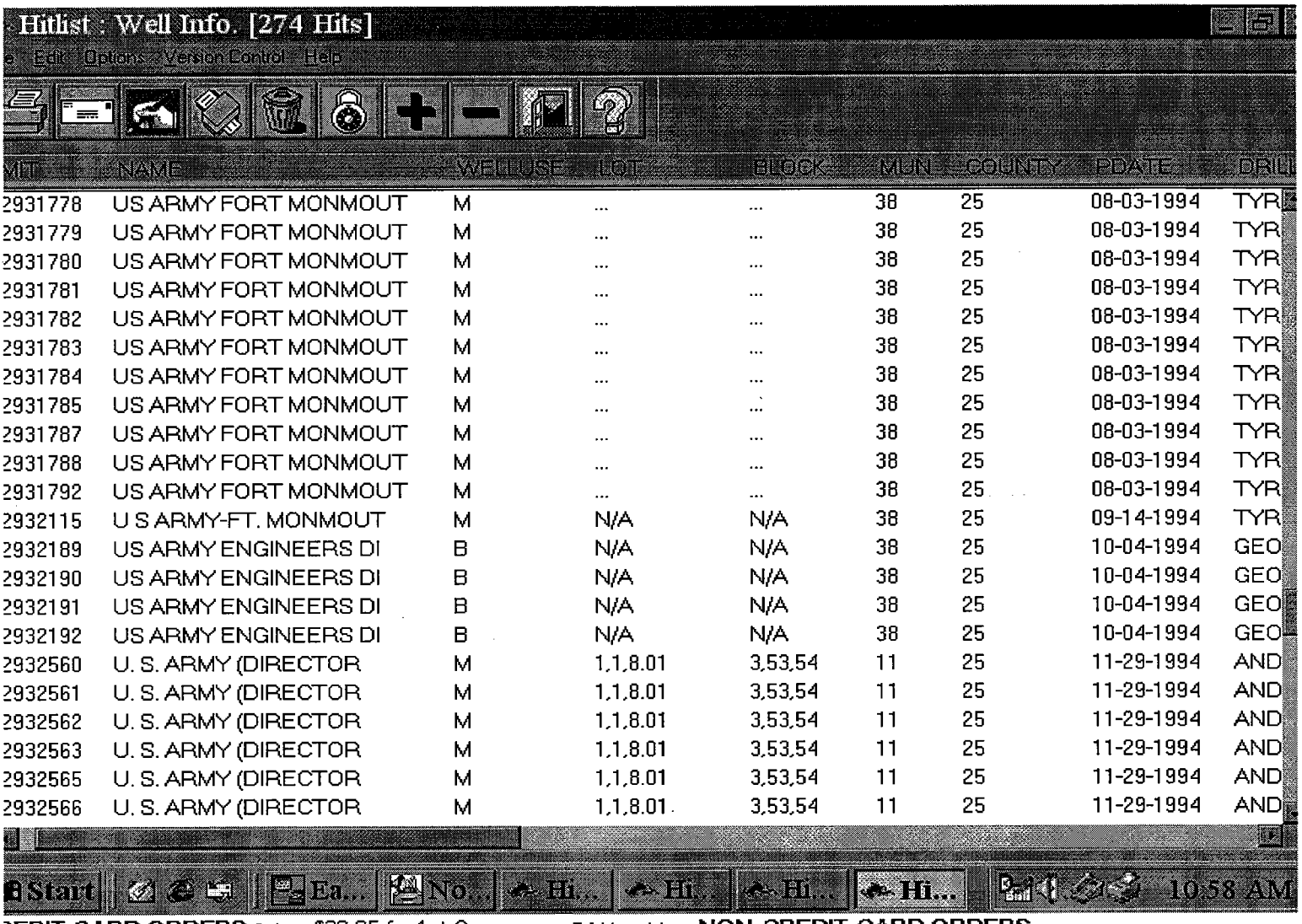

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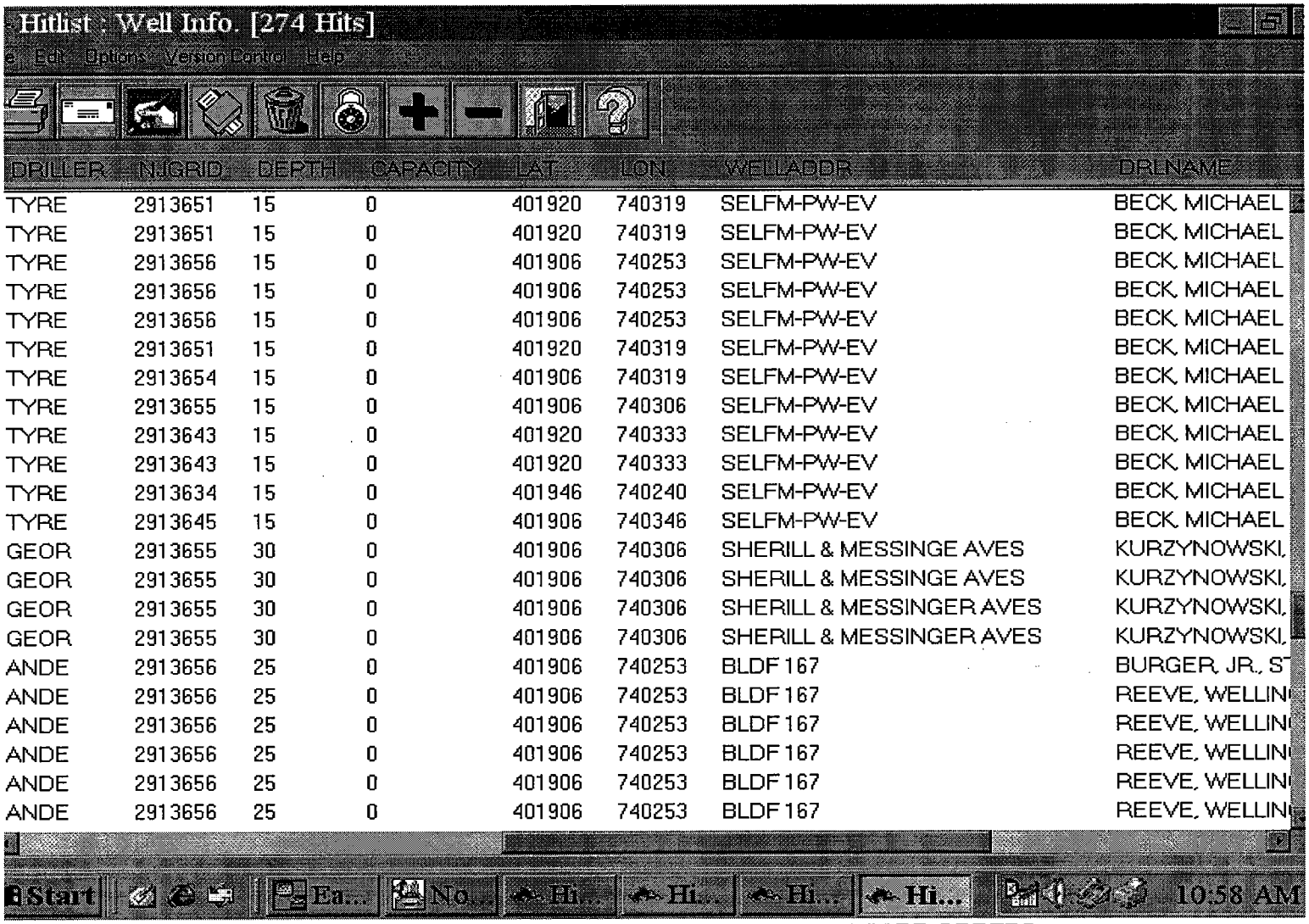

DRILLER	NJGRID	DEPTH	CAPACITY	LAT	LON	WELLADDR	DRLNAME
TYRE	2913651	15	0	401920	740319	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913651	15	0	401920	740319	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913656	15	0	401906	740253	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913651	15	0	401920	740319	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913654	15	0	401906	740319	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913655	15	0	401906	740306	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913643	15	0	401920	740333	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913643	15	0	401920	740333	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913634	15	0	401946	740240	SELFM-PW-EV	BECK, MICHAEL
TYRE	2913645	15	0	401906	740346	SELFM-PW-EV	BECK, MICHAEL
GEOR	2913655	30	0	401906	740306	SHERILL & MESSINGE AVES	KURZYNOWSKI,
GEOR	2913655	30	0	401906	740306	SHERILL & MESSINGE AVES	KURZYNOWSKI,
GEOR	2913655	30	0	401906	740306	SHERILL & MESSINGER AVES	KURZYNOWSKI,
GEOR	2913655	30	0	401906	740306	SHERILL & MESSINGER AVES	KURZYNOWSKI,
ANDE	2913656	25	0	401906	740253	BLDF 167	BURGER, JR., S
ANDE	2913656	25	0	401906	740253	BLDF 167	REEVE, WELLIN
ANDE	2913656	25	0	401906	740253	BLDF 167	REEVE, WELLIN
ANDE	2913656	25	0	401906	740253	BLDF 167	REEVE, WELLIN
ANDE	2913656	25	0	401906	740253	BLDF 167	REEVE, WELLIN
ANDE	2913656	25	0	401906	740253	BLDF 167	REEVE, WELLIN

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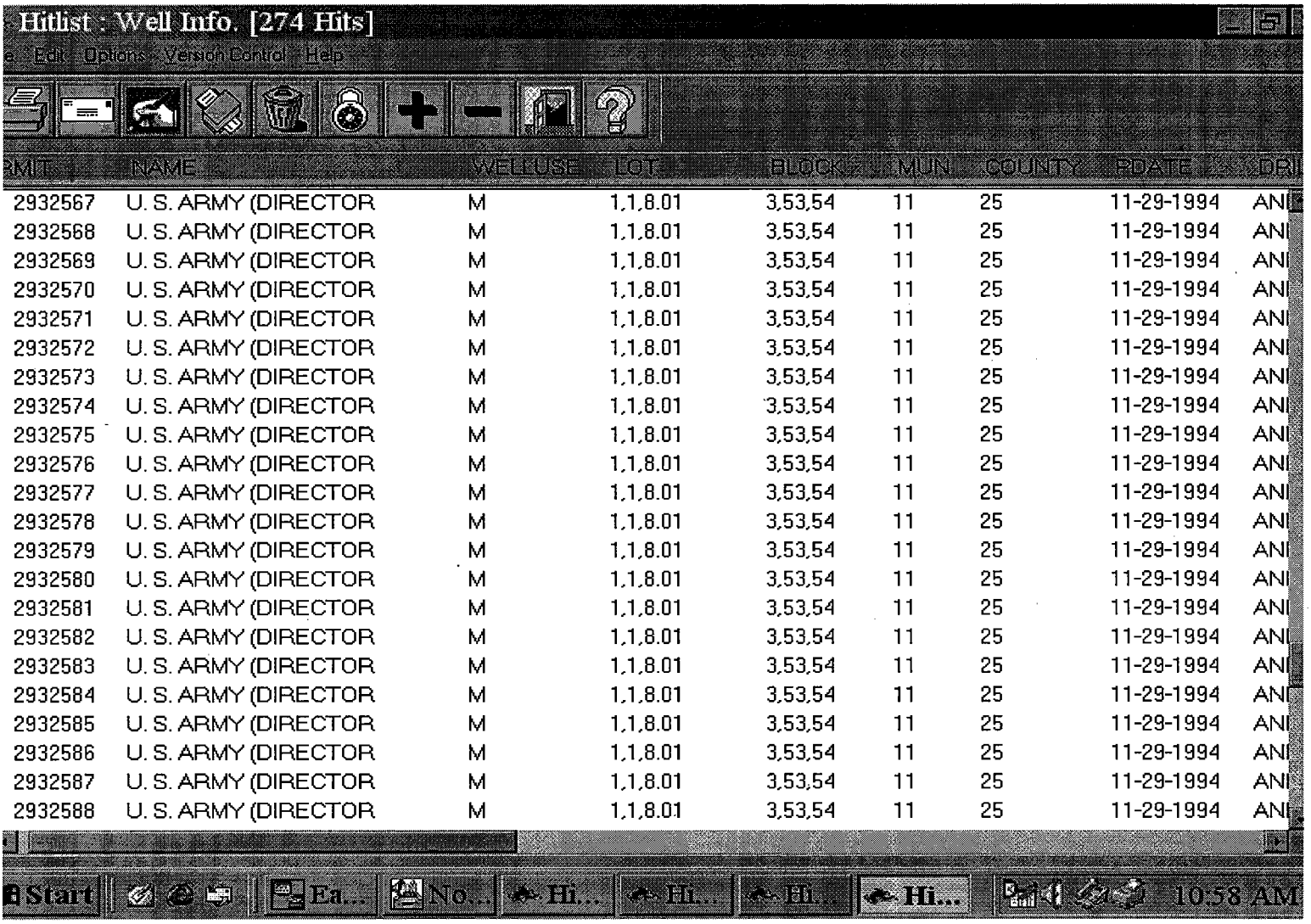

PERMIT	NAME	WELLUSE	LOT	BLOCK	MUN	COUNTY	RDATE	DRI
2932567	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932568	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932569	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932570	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932571	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932572	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932573	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932574	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932575	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932576	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932577	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932578	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932579	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932580	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932581	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932582	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932583	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932584	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932585	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932586	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932587	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI
2932588	U. S. ARMY (DIRECTOR	M	1,1,8.01	3,53,54	11	25	11-29-1994	ANI

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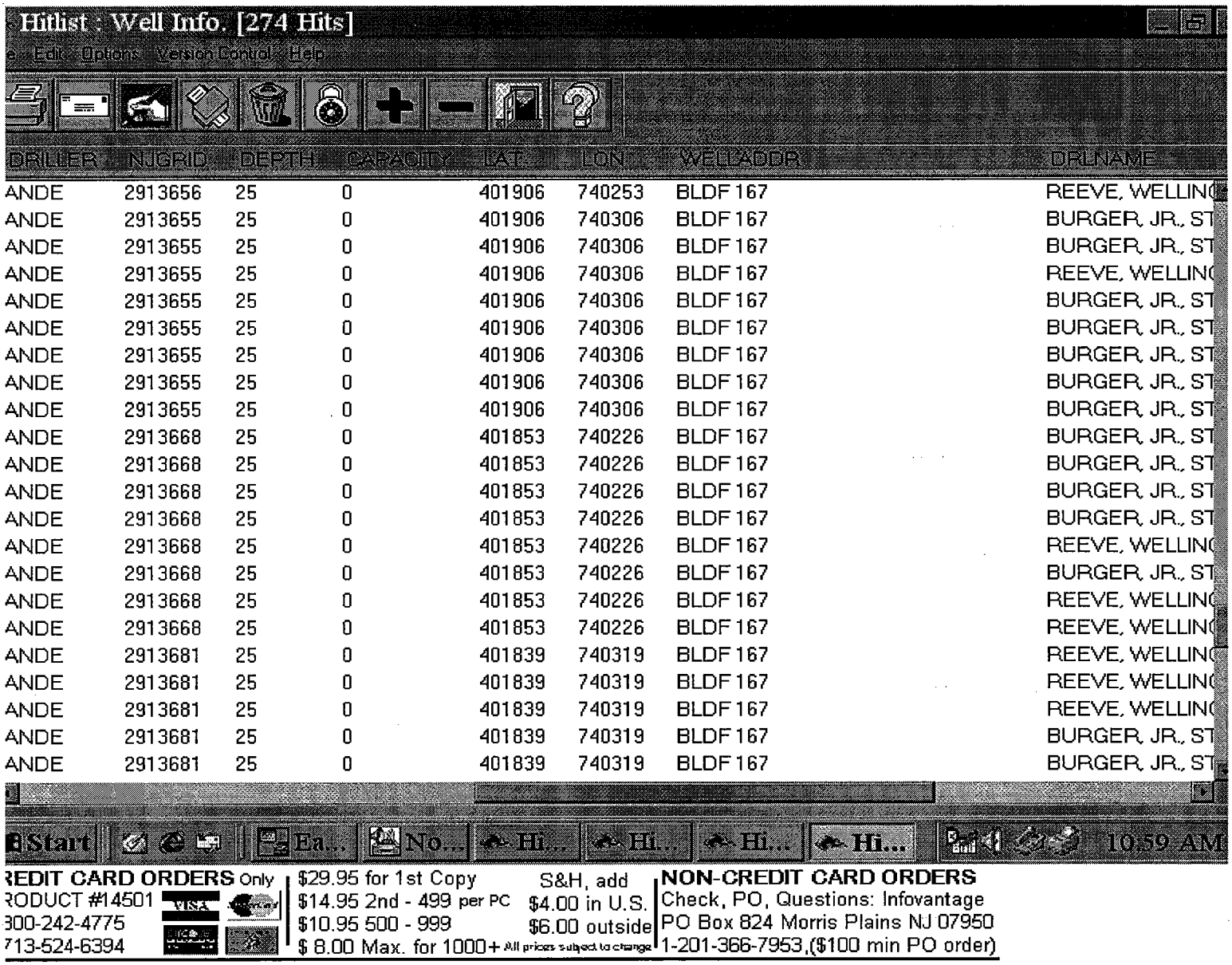

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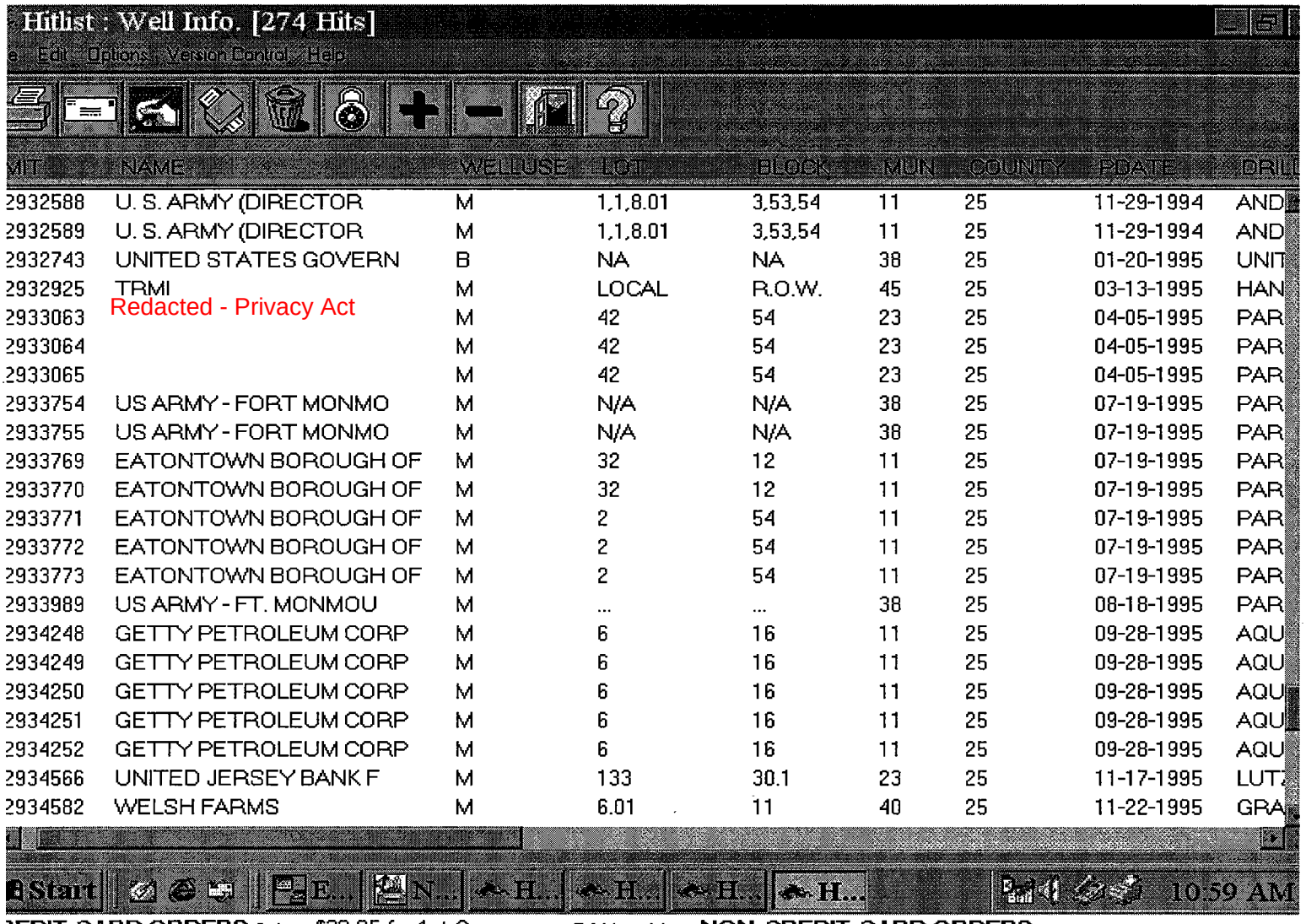

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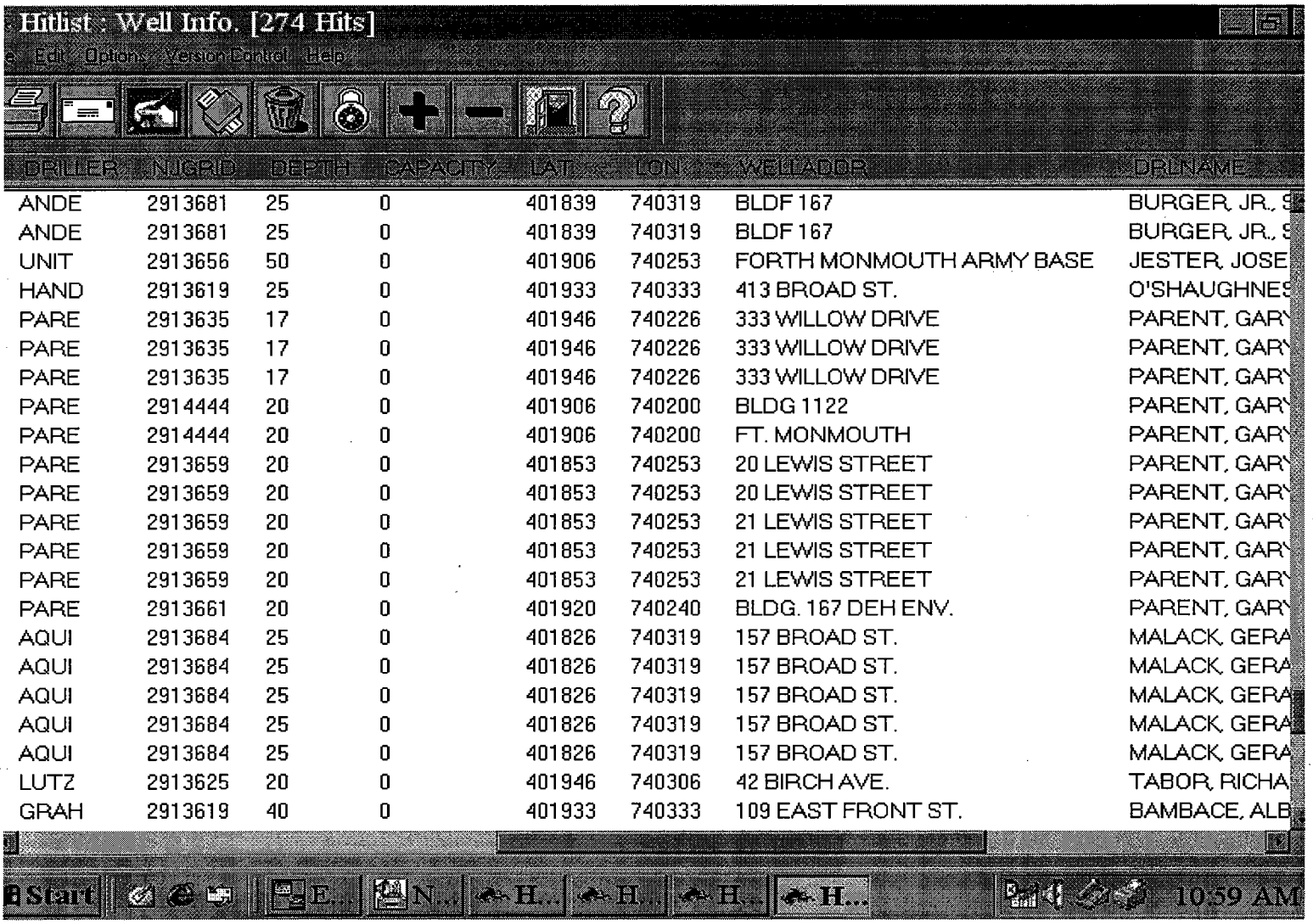

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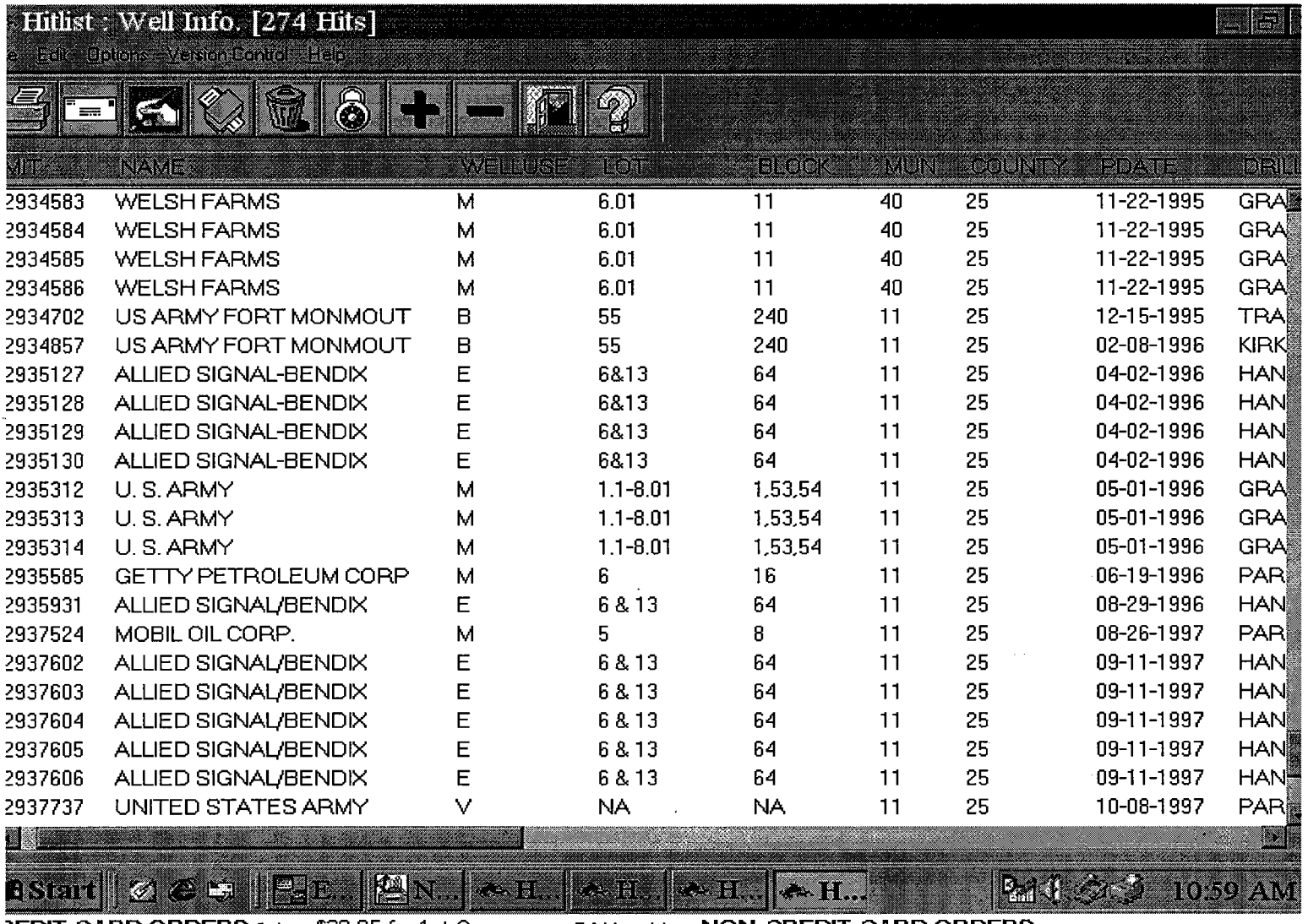

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MIT	NAME	WELLUSE	LOT	BLOCK	MUN	COUNTY	PDATE	DRIL
2934583	WELSH FARMS	M	6.01	11	40	25	11-22-1995	GRA
2934584	WELSH FARMS	M	6.01	11	40	25	11-22-1995	GRA
2934585	WELSH FARMS	M	6.01	11	40	25	11-22-1995	GRA
2934586	WELSH FARMS	M	6.01	11	40	25	11-22-1995	GRA
2934702	US ARMY FORT MONMOUT	B	55	240	11	25	12-15-1995	TRA
2934857	US ARMY FORT MONMOUT	B	55	240	11	25	02-08-1996	KIRK
2935127	ALLIED SIGNAL-BENDIX	E	6&13	64	11	25	04-02-1996	HAN
2935128	ALLIED SIGNAL-BENDIX	E	6&13	64	11	25	04-02-1996	HAN
2935129	ALLIED SIGNAL-BENDIX	E	6&13	64	11	25	04-02-1996	HAN
2935130	ALLIED SIGNAL-BENDIX	E	6&13	64	11	25	04-02-1996	HAN
2935312	U. S. ARMY	M	1.1-8.01	1,53,54	11	25	05-01-1996	GRA
2935313	U. S. ARMY	M	1.1-8.01	1,53,54	11	25	05-01-1996	GRA
2935314	U. S. ARMY	M	1.1-8.01	1,53,54	11	25	05-01-1996	GRA
2935585	GETTY PETROLEUM CORP	M	6	16	11	25	06-19-1996	PAR
2935931	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	08-29-1996	HAN
2937524	MOBIL OIL CORP.	M	5	8	11	25	08-26-1997	PAR
2937602	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HAN
2937603	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HAN
2937604	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HAN
2937605	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HAN
2937606	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HAN
2937737	UNITED STATES ARMY	V	NA	NA	11	25	10-08-1997	PAR

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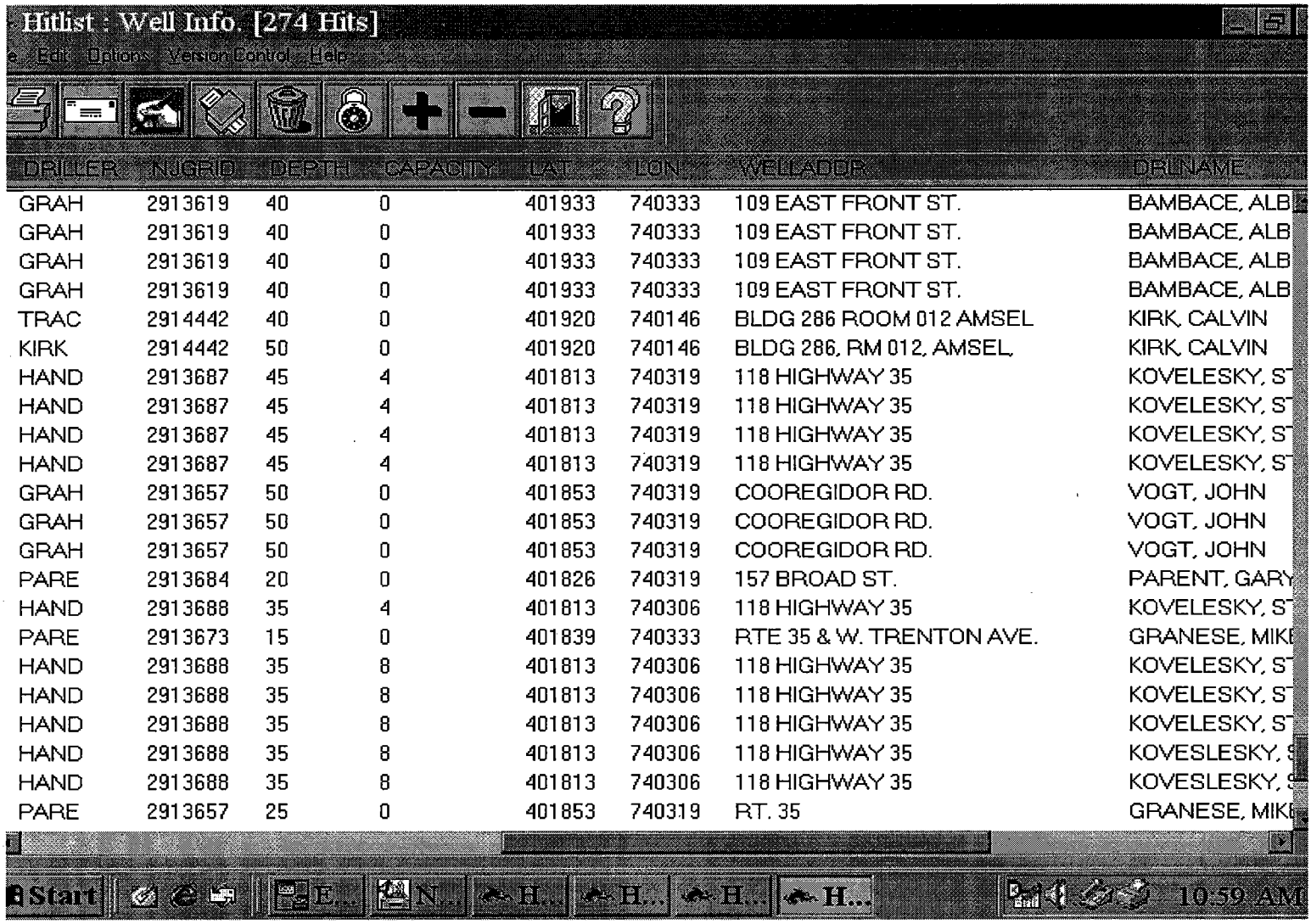

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DRILLER	NJGRID	DEPTH	CAPACITY	LAT	LON	WELLADDR	DRLNAME
GRAH	2913619	40	0	401933	740333	109 EAST FRONT ST.	BAMBACE, ALB
GRAH	2913619	40	0	401933	740333	109 EAST FRONT ST.	BAMBACE, ALB
GRAH	2913619	40	0	401933	740333	109 EAST FRONT ST.	BAMBACE, ALB
GRAH	2913619	40	0	401933	740333	109 EAST FRONT ST.	BAMBACE, ALB
TRAC	2914442	40	0	401920	740146	BLDG 286 ROOM 012 AMSEL	KIRK, CALVIN
KIRK	2914442	50	0	401920	740146	BLDG 286, RM 012, AMSEL,	KIRK, CALVIN
HAND	2913687	45	4	401813	740319	118 HIGHWAY 35	KOVELESKY, S
HAND	2913687	45	4	401813	740319	118 HIGHWAY 35	KOVELESKY, S
HAND	2913687	45	4	401813	740319	118 HIGHWAY 35	KOVELESKY, S
HAND	2913687	45	4	401813	740319	118 HIGHWAY 35	KOVELESKY, S
GRAH	2913657	50	0	401853	740319	COOREGIDOR RD.	VOGT, JOHN
GRAH	2913657	50	0	401853	740319	COOREGIDOR RD.	VOGT, JOHN
GRAH	2913657	50	0	401853	740319	COOREGIDOR RD.	VOGT, JOHN
PARE	2913684	20	0	401826	740319	157 BROAD ST.	PARENT, GARY
HAND	2913688	35	4	401813	740306	118 HIGHWAY 35	KOVELESKY, S
PARE	2913673	15	0	401839	740333	RTE 35 & W. TRENTON AVE.	GRANESE, MIKE
HAND	2913688	35	8	401813	740306	118 HIGHWAY 35	KOVELESKY, S
HAND	2913688	35	8	401813	740306	118 HIGHWAY 35	KOVELESKY, S
HAND	2913688	35	8	401813	740306	118 HIGHWAY 35	KOVELESKY, S
HAND	2913688	35	8	401813	740306	118 HIGHWAY 35	KOVESLESKY, S
HAND	2913688	35	8	401813	740306	118 HIGHWAY 35	KOVESLESKY, S
PARE	2913657	25	0	401853	740319	RT. 35	GRANESE, MIKE

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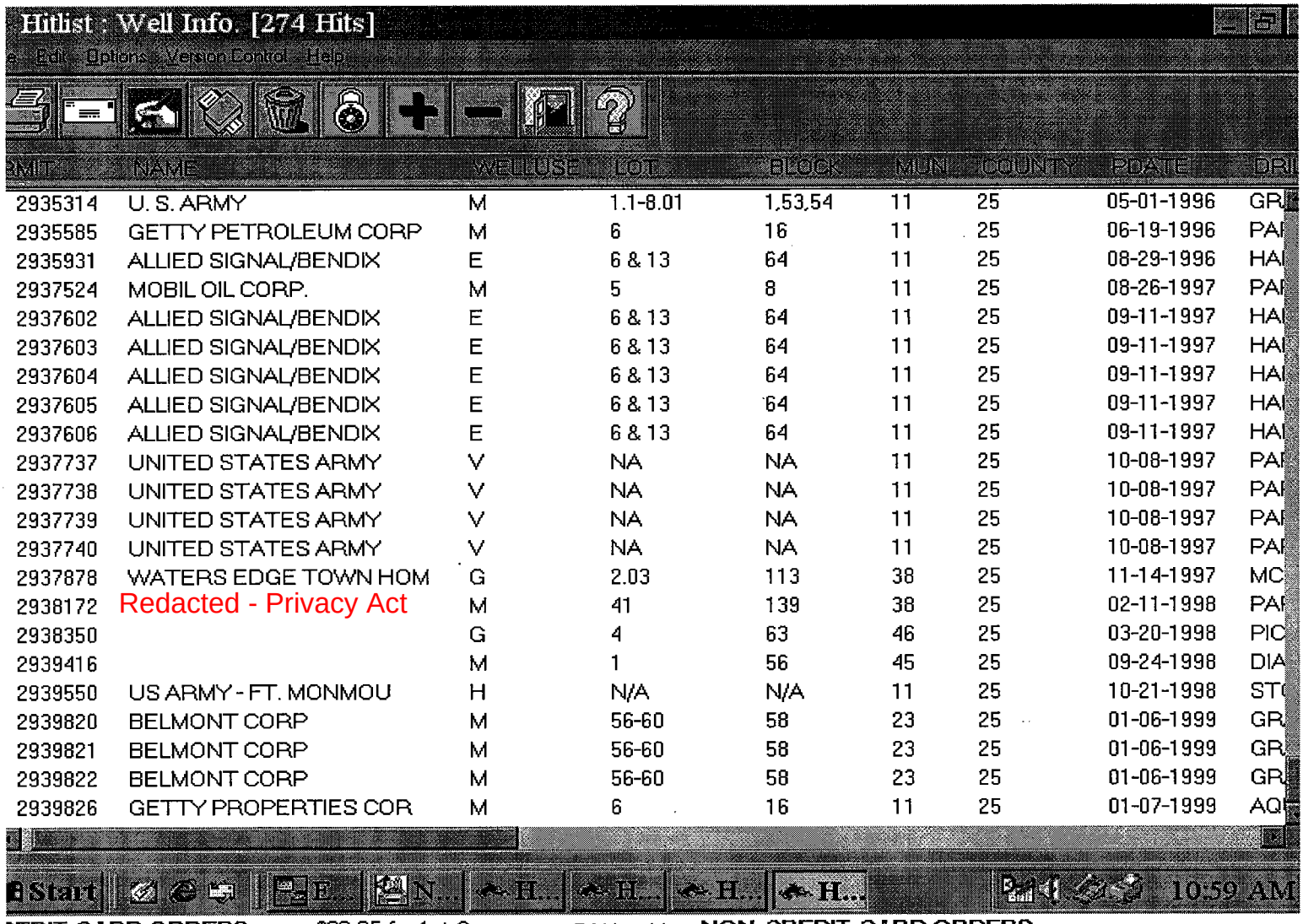

PERMIT	NAME	WELLUSE	LOT	BLOCK	MUNI	COUNTY	PDATE	DRI
2935314	U. S. ARMY	M	1.1-8.01	1,53,54	11	25	05-01-1996	GR
2935585	GETTY PETROLEUM CORP	M	6	16	11	25	06-19-1996	PA
2935931	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	08-29-1996	HA
2937524	MOBIL OIL CORP.	M	5	8	11	25	08-26-1997	PA
2937602	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HA
2937603	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HA
2937604	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HA
2937605	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HA
2937606	ALLIED SIGNAL/BENDIX	E	6 & 13	64	11	25	09-11-1997	HA
2937737	UNITED STATES ARMY	V	NA	NA	11	25	10-08-1997	PA
2937738	UNITED STATES ARMY	V	NA	NA	11	25	10-08-1997	PA
2937739	UNITED STATES ARMY	V	NA	NA	11	25	10-08-1997	PA
2937740	UNITED STATES ARMY	V	NA	NA	11	25	10-08-1997	PA
2937878	WATERS EDGE TOWN HOM	G	2.03	113	38	25	11-14-1997	MC
2938172	Redacted - Privacy Act	M	41	139	38	25	02-11-1998	PA
2938350		G	4	63	46	25	03-20-1998	PIC
2939416		M	1	56	45	25	09-24-1998	DIA
2939550	US ARMY - FT. MONMOU	H	N/A	N/A	11	25	10-21-1998	ST
2939820	BELMONT CORP	M	56-60	58	23	25	01-06-1999	GR
2939821	BELMONT CORP	M	56-60	58	23	25	01-06-1999	GR
2939822	BELMONT CORP	M	56-60	58	23	25	01-06-1999	GR
2939826	GETTY PROPERTIES COR	M	6	16	11	25	01-07-1999	AQ

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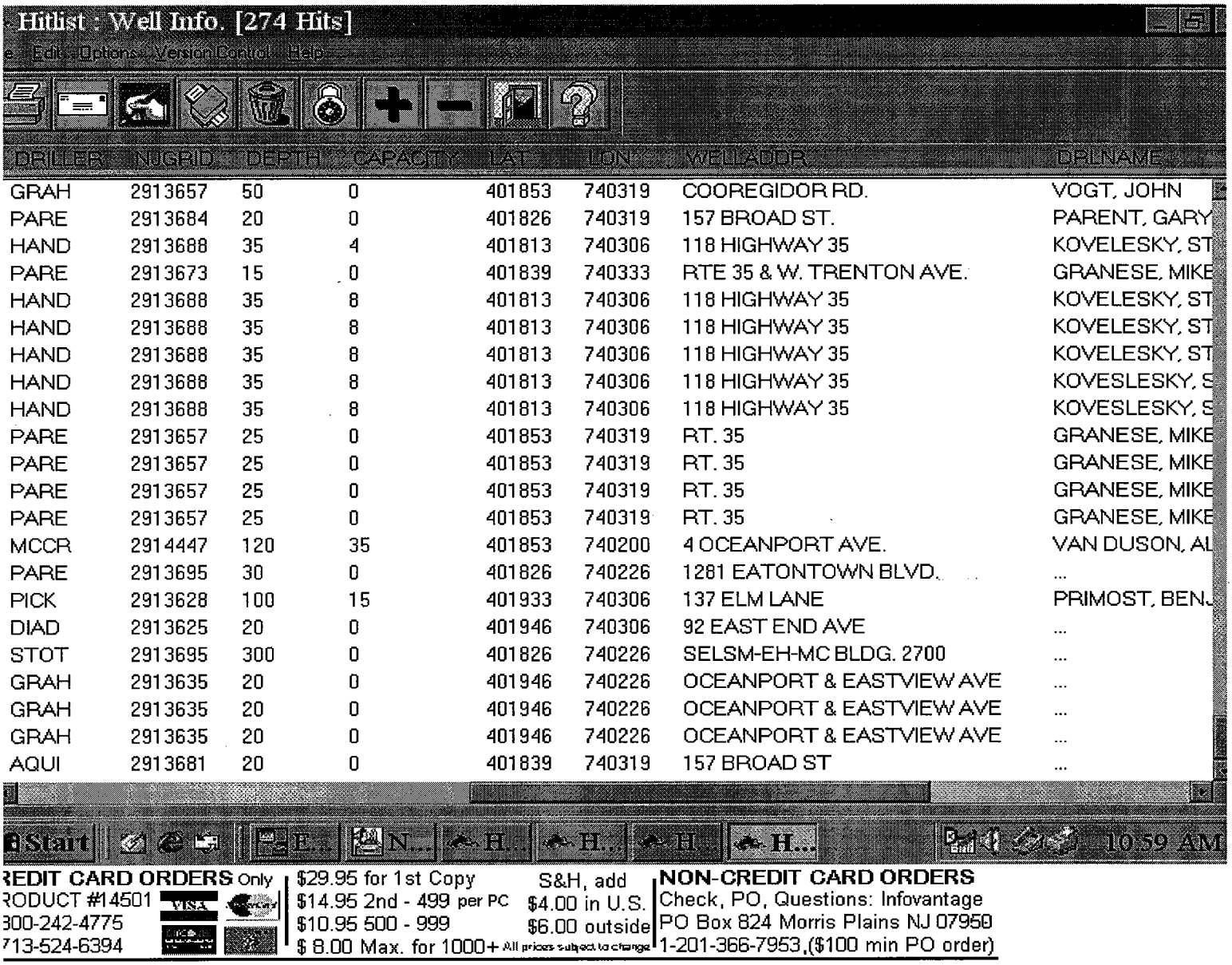

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GRAH	2913657	50	0	401853	740319	COOREGIDOR RD.	VOGT, JOHN
PARE	2913684	20	0	401826	740319	157 BROAD ST.	PARENT, GARY
HAND	2913688	35	4	401813	740306	118 HIGHWAY 35	KOVELESKY, ST
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PARE	2913657	25	0	401853	740319	RT. 35	GRANESE, MIKE
PARE	2913657	25	0	401853	740319	RT. 35	GRANESE, MIKE
PARE	2913657	25	0	401853	740319	RT. 35	GRANESE, MIKE
PARE	2913657	25	0	401853	740319	RT. 35	GRANESE, MIKE
MCCR	2914447	120	35	401853	740200	4 OCEANPORT AVE.	VAN DUSON, AL
PARE	2913695	30	0	401826	740226	1281 EATONTOWN BLVD.	...
PICK	2913628	100	15	401933	740306	137 ELM LANE	PRIMOST, BEN
DIAD	2913625	20	0	401946	740306	92 EAST END AVE	...
STOT	2913695	300	0	401826	740226	SELSM-EH-MC BLDG. 2700	...
GRAH	2913635	20	0	401946	740226	OCEANPORT & EASTVIEW AVE	...
GRAH	2913635	20	0	401946	740226	OCEANPORT & EASTVIEW AVE	...
GRAH	2913635	20	0	401946	740226	OCEANPORT & EASTVIEW AVE	...
AQUI	2913681	20	0	401839	740319	157 BROAD ST	...

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DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number
29 40210

Atlas Sheet Coordinates
29 :13 :617

OWNER SHREWSBURY BORO OF
Address 419 SYCAMORE AVE.
City SHREWSBURY State NJ Zip Code

WELL LOCATION ADDRESS 419 SYCAMORE AVE. **Owner's Well No.**
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 13 Block No. 30

WELL USE IRRIGATION

DATE WELL STARTED 4 / 19 / 99
DATE WELL COMPLETED 4 / 14 / 99

WELL CONSTRUCTION

Total Depth Drilled 76 ft.
Finished Well Depth 76 ft.
Borehole Diameter:
Top 10 in.
Bottom 6 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	50	6"	PVC	Sch40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	50	76		open hole	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	4	50		Neat Cement Bentonite	____ lbs 800 lbs

RECORD OF TEST

Test Date 4 / 19 / 99
Static Water Level 19 ft. below land surface
Water Level Measured Using tape float
Pumping Water Level 46 ft. below land surface
Well Was Pumped Using air
Well Yield 100 gpm
If Pump Tested: Discharge Rate ____ gpm
Duration of Test ____ hours

Grouting Method Pressure
Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT

Installed by Kaye Ell Reg. No. 1180M
Pump Type Submersible
Depth of Pump below land surface 40 ft.
Capacity 65 gpm Horsepower 5

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 KAYE WELL DRILLING
Well Driller (Print) Gary D. Poppe
Driller's Signature Gary D. Poppe
Registration No. 1180M Date 4 / 30 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

00-06' Hard Red Sand
06-13' Yellow Sand & Clay
13-30' Green Marl
30-34' Red Clay
34-70' Hard Green Marl
70-76 Gray 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 - 40690

Atlas Sheet Coordinates 29 : 13 624

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 92 EAST END AVE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 1 Block No. 56
Address 92 EAST END AVE

DATE WELL STARTED 7 / 1 / 99
DATE WELL COMPLETED 7 / 1 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 980430154704

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) BES Tele. # 732 223 2225

WELL CONSTRUCTION

Total depth drilled 14 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 _____ ft.

Was steel protective casing installed?
☒ Yes ☐ No

Static water level after drilling 9.0 ft.

Water level was measured using TAPE

Well was developed for 1 hours
at 1/2 gpm

Method of development PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid HSA 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	0	2	4	PVC	SCH40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	2	12	4	PVC	.010
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	8	MORIE	#1
Grout	0	1	8	Neat Cement	50 lbs.
				Bentonite	____ lbs.

Grouting Method TREMMIE / 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 DIAMOND DRILLING CO., INC.

Well Driller (Print) M.H. BRINKERHOFF

Driller's Signature [signature]

Registration No. J 1496 Date 7 / 11 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12' DARK YELLOW BROWN LOAMY MEDIUM SAND FILL

12-14' BLACK GLAUCONITIC SILT-LOAM

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 - 41989

Atlas Sheet Coordinates 29: 13 :625

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 93 EAST END AVE.
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 1
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 20 Block No. 58
Address 93 EAST END AVE.

DATE WELL STARTED 1/14/00
DATE WELL COMPLETED 1/14/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well USI Case I.D.# 99-03-11-1138-59

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Schoor DePalma Tele. # 732.577.9000

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 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

Static water level after drilling 6 ft.

Water level was measured using Tape

Well was developed for 1/2 hours at _____ gpm

Method of development Motor

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	FJT PVC	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used #020	4	14	4	FJT PVC	40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	14	12	#2 Sand	
Grout	0	3	12	Neat Cement (Bentonite)	22 lbs.

Grouting Method Pressure Grout
Drilling Method Hollow Stem Augers

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

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) Ronald Cook

Driller's Signature Ronald Cook

Registration No. 10163 Date 1/25/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12.5 Fill, brown silty, clayey SD

12.5-14 Dense clay Dk grey

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 42172

Atlas Sheet Coordinates 29 13 625

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 92 E END AVE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 3
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 1 Block No. 56
Address 92 E END AVE

DATE WELL STARTED 3/14/00
DATE WELL COMPLETED 3/14/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 98-4-30-1547-04

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) BRINKERHOFF ENV. Tele. # (732)223-2225

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 14.5 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 10.5 ft.

Water level was measured using TAPE

Well was developed for 1.5 hours at 3 gpm

Method of development PUMP

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	.33	4.5	4	PVC	Sch. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	4.5	14.5	4	PVC	Sch. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3.5	15	10	MORIE	#1
Grout	0	3.5	10	Neat Cement / Bentonite	100 lbs. / ____ lbs.

Grouting Method PRESSURE
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 DIAMOND DRILLING CO., INC.
Well Driller (Print) M.A. BRINKERHOFF
Driller's Signature _____
Registration No. 1496 Date 3/15/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-3' BROWN SILTY FINE TO MED SAND WITH TRACE CLAY
3'-8' BROWNISH ORANGE SILTY FINE SAND
8'-11' BROWN CLAYEY SILT
11'-15' GREENISH GRAY GLAUCONITE

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 42173

Atlas Sheet Coordinates 29 13 625

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 92 E END AVE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW2
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 1 Block No. 56
Address 92 E END AVE

DATE WELL STARTED 3/14/00
DATE WELL COMPLETED 3/14/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 98-4-30-1547-04

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) BRUNKERHOFF ENV. Tele. # (732)223-2225

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 14.5 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 8.5 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 5 gpm

Method of development PUMP

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	.33	4.5	10	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	4.5	14.5	10	PVC	Sch. 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15	10	MORIE	#1
Grout	0	3	10	Neat Cement / Bentonite	100 lbs. / ____ lbs.

Grouting Method PRESSURE
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 DIAMOND DRILLING CO., INC.
Well Driller (Print) M. BRUNKERHOFF
Driller's Signature _____
Registration No. J1496 Date 3/15/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-3' BROWN SILTY FINE TO MED. SAND WITH TRACE CLAY
3'-8.5' BROWNISH ORANGE SILTY FINE TO MED SAND
8.5'-11' BROWN CLAYEY SIL
11'-15' GREENISH GRAY GLAUCONITE

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42007

Atlas Sheet Coordinates 29 : 13 631

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 83 LAUREL DR
City LITTLE SILVER 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. 6 Block No. 53
Address 83 LAUREL DR

DATE WELL STARTED 1/14/00
DATE WELL COMPLETED 1/14/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 98-7-17-1156-04

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) School DePalma Tele. # 732-571-9000

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 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 2 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 1/3 gpm

Method of development Pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid NONE Type of Rig B-47

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	+2	5	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Morie	
Grout	0	3		Neat Cement	94 lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-8 SA-C BACKFILL IN EXCAVATION
8-12 BLK-GRN MF SA-C/SLT
12-15 OR-BRN CLAYEY MF SA-C

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 HAMER, INC.
Well Driller (Print) Sean Conroy
Driller's Signature Sean Conroy
Registration No. 1522 Date 1/18/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42929

OWNER IDENTIFICATION - Owner Redacted - Privacy Act Atlas Sheet Coordinates 29 : 13 634
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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY/De Watering DATE WELL STARTED 5/17/00
Regulatory Program Requiring Well Case I.D.# DATE WELL COMPLETED 5/19/00

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

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

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

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

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

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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.

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42931

OWNER IDENTIFICATION - Owner [Redacted - Privacy Act] Atlas Sheet Coordinates 29 : 13 634
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. 1407 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.

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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/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 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

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

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 top soil
2-16 clayey green orange subsoil
16-19 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. 457 Date 6/7/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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

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

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

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.

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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 Redacted - Privacy Act Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No.
County MONMOUTH Municipality Redacted - Privacy Act Lot No. 10 Block No. 72
Address Redacted - Privacy Act

TYPE OF WELL (as per Well Permit Categories) RECOVERY Dewatering
DATE WELL STARTED 5/17/00
DATE WELL COMPLETED 5/19/00
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.

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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	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 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.

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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 5/19/00

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	#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: 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 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

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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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY / Dewatering DATE WELL STARTED 5/17/00
Regulatory Program Requiring Well DATE WELL COMPLETED 5/19/00
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: ~~Dri~~ 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	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 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.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42938

OWNER IDENTIFICATION - Owner Redacted - Privacy Act Atlas Sheet Coordinates 29 : 13 634
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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering DATE WELL STARTED 5/17/00
Regulatory Program Requiring Well DATE WELL COMPLETED 5/19/00
Case I.D.# Tele. #

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Mid-Atlantic

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	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 sub soil
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.

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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

TYPE OF WELL (as per Well Permit Categories) RECOVERY
DATE WELL STARTED 3/1/99
DATE WELL COMPLETED 3/1/99
Regulatory Program Requiring Well UST Case I.D.# 98-4-1-1142-54

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) BREUKELHOFF ENV. Tele. # (732)223-222

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

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(.0
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	19	10	MORIE	#1
Grout	0	1	10	Neat Cement Bentonite	94 lbs. 2 lbs.

Grouting Method PLACED
Drilling Method AUGER

Method of development NA

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

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. 12417 Date 3/2/99

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

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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
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 5 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. / 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. Gran

Registration No. 551764 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.

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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 SLO
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. JD17F64 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.

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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.

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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 OLD Slo
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. JD 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.

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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

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

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

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
Registration No. 5D17864 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

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41416

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-6
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1.0 Block No. 73
Address 24 CONOVER PL

DATE WELL STARTED 9/24/99
DATE WELL COMPLETED 9/24/99

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	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 / 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.

0-6" 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 - 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 Water Tape

Well was developed for ½ 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	300 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 G 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' CL

COPIES: *White - DEP* *Canary - Driller* *Pink - Owner* *Goldenrod - Health Dept.*

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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 6/21/200
DATE WELL COMPLETED 6/21/200

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 99 11 18 093537

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Aguilar Ass. Tele. # 732 290 780

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	Sch40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 1)	3	13	4	PVC Sch40	.020slot
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	13	8	#2 quartz sand	
Grout	0	2	8	☒ Neat Cement ☐ Bentonite	75 lbs. 75 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 6/23/200

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-5' GrSW
5'-11' SM
11'-13' CL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42909

OWNER IDENTIFICATION - Owner Redacted - Privacy Act Atlas Sheet Coordinates 29 : 13 637
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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY DATE WELL STARTED 7 / 15 / 00
Regulatory Program Requiring Well Case I.D.# DATE WELL COMPLETED 7 / 15 / 00

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 18' ft.
Well finished to 18' ft.

Borehole diameter:
Top 4.5" in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 Epm gpm

Pump type: GODWIN

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement / Bentonite	— lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m Green Sand
10-18 F-m Green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature Douglas Walker
Registration No. 1457 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42910

OWNER IDENTIFICATION - Owner Redacted - Privacy Act Atlas Sheet Coordinates 29 : 13 637
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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY DATE WELL STARTED 7 / 15 / 00
Regulatory Program Requiring Well DATE WELL COMPLETED 7 / 15 / 00
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

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 8 / 30 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green sand
+ silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42911

Atlas Sheet Coordinates 29 : 13 637

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 7/15/00
DATE WELL COMPLETED 7/15/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No Temporary

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH 40	
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS STEEL	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	# 0
Grout	0	13	4.5	Neat Cement / (Bentonite)	lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green sand
T 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature Douglas Walker
Registration No. 1457 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42912

Atlas Sheet Coordinates 29 : 13 637

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 7/15/00
DATE WELL COMPLETED 7/15/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4-5 in.
Bottom 4-5 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface ~ ft.

Was steel protective casing installed? [ ] Yes [X] No

Static water level after drilling 6 ft.

Water level was measured using TAPE

Well was developed for 1 hours at 15 gpm

Method of development Pumping

Was permanent pumping equipment installed? [ ] Yes [X] No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

Health and Safety Plan submitted? [ ] Yes [X] 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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 LBS	#0
Grout	0	13	4.5	Neat Cement / (Bentonite)	___ lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

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
Registration No. 1457 Date 8/30/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F+M Green Sand
10-18 F-M Green Sand + Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42913

OWNER IDENTIFICATION - Owner Redacted - Privacy Act Atlas Sheet Coordinates 29 : 13 : 637
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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY DATE WELL STARTED 7/15/00
Regulatory Program Requiring Well DATE WELL COMPLETED 7/15/00
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development Pumping

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	# 0
Grout	0	13	4.5	Neat Cement (Bentonite)	lbs. 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

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
Registration No. 1457 Date 8/30/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green sand + silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42914

Atlas Sheet Coordinates 29 : 13 637

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 7 / 15 / 00
DATE WELL COMPLETED 7 / 15 / 00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	10016S	#0
Grout	0	13	4.5	Neat Cement ~~Bentonite~~	lbs. 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m Green Sand
10-18 F-m Green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature
Registration No. 1457 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42915

Atlas Sheet Coordinates 29 : 13 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY
DATE WELL STARTED 7 / 15 / 00
DATE WELL COMPLETED 7 / 15 / 00
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 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	+1	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	# 0
Grout	0	13	4.5	Neat Cement ~~Bentonite~~	— lbs. 50 lbs.

Method of development PUMPING
Grouting Method TREMIE
Drilling Method WASH

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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 8 / 30 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0 - 10 F-m Green Sand
10 - 18 F-m Green Sand + Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42916

OWNER IDENTIFICATION - Owner Redacted - Privacy Act Atlas Sheet Coordinates 29 : 13 637
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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY DATE WELL STARTED 7/15/00
Regulatory Program Requiring Well Case I.D.# DATE WELL COMPLETED 7/15/00

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 18' ft.
Well finished to 18' ft.

Borehole diameter:
Top 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH 40	
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement / (Bentonite)	— lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m Green Sand
10-18 F-m Green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature Douglas E. Walker
Registration No. 1457 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42917

Atlas Sheet Coordinates 29 : 13 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY
DATE WELL STARTED 7 / 15 / 00
DATE WELL COMPLETED 7 / 15 / 00
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 4.5' in.
Bottom 4.5' 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement	lbs.
				Bentonite	50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature Douglas Walker
Registration No. 1457 Date 8 / 30 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42918

Atlas Sheet Coordinates 29 : 13 637

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 7/15/00
DATE WELL COMPLETED 7/15/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No Temporary

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement (Bentonite)	lbs. 52 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature Douglas A Walker
Registration No. 1457 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42919

Atlas Sheet Coordinates 29 : 13 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering DATE WELL STARTED 5/17/00
Regulatory Program Requiring Well DATE WELL COMPLETED 5/19/00
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 3 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	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 sub soil
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.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -42920

Atlas Sheet Coordinates 29 : 13 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY/dewatering DATE WELL STARTED 5/17/00
Regulatory Program Requiring Well Case I.D.# DATE WELL COMPLETED 5/19/00

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	SS.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: Goodwin 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 marl. sl. silt
6-19 F-M green glauconitic sand.

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42921

Atlas Sheet Coordinates 29 : 13 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering DATE WELL STARTED 5/17/00
Regulatory Program Requiring Well Case I.D.# DATE WELL COMPLETED 5/19/00

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

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	6	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

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. 457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 sand
2-6 Clayey green sand soil
6-19 F-M green glauconite soil

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MONITORING WELL RECORD

Well Permit No. 29 - 42922

Atlas Sheet Coordinates 29 : 13 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY/Dewatering DATE WELL STARTED 5/12/00
Regulatory Program Requiring Well DATE WELL COMPLETED 5/15/00
Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) M. D. Allendic 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	Passaic	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. 12457 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 sand.

2-6 clayey green orange sandy soil

6-19 green glauconitic soil

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42923

Atlas Sheet Coordinates 29 : 13 637

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/Monitoring
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	15	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: Sedlin 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. 445 Date 6/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2 sand.

2-16 clayey green orange. subsoil

16-19 green glauconitic soil

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42924

Atlas Sheet Coordinates 29 : 13 : 637

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.

TYPE OF WELL (as per Well Permit Categories) RECOVERY
DATE WELL STARTED 7/15/00
DATE WELL COMPLETED 7/15/00
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development Pumping

Was permanent pumping equipment installed? ☐ Yes ☒ No Temporary

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid Water Type of Rig

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	15	1.5	Steel	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 1)	15	18	1.5	Stainless Steel	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement / ~~Bentonite~~	lbs. / 50 lbs.

Grouting Method Tremie
Drilling Method Wash

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-M green sand
10-18 F-M green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. Walker
Driller's Signature Douglas Walker
Registration No. 145M Date 8/30/00

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MONITORING WELL RECORD

Well Permit No. 29 - 42925

Atlas Sheet Coordinates 29 : 13 637

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 7/15/00
DATE WELL COMPLETED 7/15/

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 VPM gpm

Pump type: WOBWU

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL SCH	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS STEEL	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 LBS #0	
Grout	0	13	4.5	Neat Cement / Bentonite	lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green sand
t. 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature
Registration No. 14557 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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MONITORING WELL RECORD

Well Permit No. 29 - 42926

Atlas Sheet Coordinates 29 : 13 637

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 7/15/00
DATE WELL COMPLETED 7/15/00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5 in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development PUMPING

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: VOLUTE

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS STEEL	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout	0	13	4.5	Neat Cement (Bentonite)	lbs. 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

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 8/30/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m green sand
10-18 F-m green sand
+ silt

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42927

Atlas Sheet Coordinates 29 : 13 637

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 7 / 15 / 00
DATE WELL COMPLETED 7 / 15 / 00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5' in.
Bottom 4.5 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

Well was developed for 1 hours at 15- gpm

Method of development Pumping

Was permanent pumping equipment installed? ☐ Yes ☒ No Temporary

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL Sch	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	1.50/1.63	#0
Grout	0	13	4.5	Neat Cement / ~~Bentonite~~	___ lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-10 F-m Green Sand
10-18 F-m Green 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 M & R SOIL INVESTIGATIONS, INC.
Well Driller (Print) D. WALKER
Driller's Signature Doug Walker
Registration No. 1457 Date 8/30/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42928

Atlas Sheet Coordinates 29 : 13 637

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 7 / 15 / 00
DATE WELL COMPLETED 7 / 15 / 00

TYPE OF WELL (as per Well Permit Categories) RECOVERY
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 4.5' in.
Bottom 4.5 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

Well was developed for 1 hours at 15 gpm

Method of development Pumping

Was permanent pumping equipment installed? ☐ Yes ☒ No TEMPORARY

Pump capacity 300 GPM gpm

Pump type: Godwin

Drilling Fluid WATER Type of Rig

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	15	1.5	STEEL	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	15	18	1.5	STAINLESS	STEEL
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	13	18	4.5	100 lbs	#0
Grout				Neat Cement / ~~Bentonite~~	___ lbs. / 50 lbs.

Grouting Method TREMIE
Drilling Method WASH

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 8 / 30 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0 - 10 F-m green Sand
10 - 18 F-m Green Sand + Silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43902

Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner LITTLE SILVER BOROUGH
Address 480 PROSPECT AVENUE
City LITTLE SILVER 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. 2 Block No. 75.1
Address OCEANPORT AVE. & SYCAMORE

DATE WELL STARTED 11/6/00
DATE WELL COMPLETED 11/6/00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well MONITORING Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PMK Tele. # 908 686 0044

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 Tape

Well was developed for 1 hours
at ± gpm

Method of development Whale 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	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .10)	5	15	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15	10	SAND	600 lbs
Grout	0	3	10	Neat Cement Bentonite	60 lbs. 25 lbs.

Grouting Method GRAVITY
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15 FM SAND
SILTY
some CLAY
Dk Green

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. 30 1506 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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11/98

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43903

Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner LITTLE SILVER BOROUGH
Address 480 PROSPECT AVENUE
City LITTLE SILVER 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. 2 Block No. 75.1
Address OCEANPORT AVE. & SYCAMORE

DATE WELL STARTED 11 / 6 / 02
DATE WELL COMPLETED 11 / 6 / 02

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well MONITORING Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PMK Tele. # 908 686 0044

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 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 7 ft.

Water level was measured using Tape

Well was developed for 1 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 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	4	1½	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used . 10)	4	14	1½	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	6	SAND	300 lb.
Grout	0	2	6	Neat Cement Bentonite	60 lbs. 25 lbs.

Grouting Method GRAVITY
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 ENVIRONMENTAL REMED. CONT.
Well Driller (Print) Robert Kimley
Driller's Signature Robert Kimley
Registration No. JD 1500 Date 11/6/02

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0 - 14 Fm SAND
SILTY
SOME CLAY
DK GREEN

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43904

Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner LITTLE SILVER BOROUGH
Address 480 PROSPECT AVENUE
City LITTLE SILVER 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. 2 Block No. 75.1
Address OCEANPORT AVE. & SYCAMORE

DATE WELL STARTED 11/6/00
DATE WELL COMPLETED 11/6/00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well MONITORING Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PMK Tele. # 908 686 0044

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 7 ft.

Water level was measured using TAPE

Well was developed for 1 hours
at ± gpm

Method of development WHALE PUMP

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig MOBILE B61

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	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .10)	4	14	4	PVC	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	10	SAND	500 lbs
Grout	0	2	10	Neat Cement Bentonite	60 lbs. 25 lbs.

Grouting Method GRAVITY
Drilling Method H.S.A

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-14 FM SAND
SILTY
SOME CLAY
DK BROWN

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 1506 Date 11/6/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43905
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner LITTLE SILVER BOROUGH
Address 480 PROSPECT AVENUE
City LITTLE SILVER 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. 2 Block No. 75.1
Address OCEANPORT AVE. & SYCAMORE

DATE WELL STARTED 11 / 6 / 00
DATE WELL COMPLETED 11 / 6 / 00

TYPE OF WELL (as per Well Permit Categories)
Regulatory Program Requiring Well MONITORING Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PMK Tele. # 908 686 0044

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 7 ft.

Water level was measured using Tape

Well was developed for 1 hours
at 2 gpm

Method of development Whale 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	4	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .10)	4	14	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	10	SAND	500 lbs.
Grout	0	2	10	Neat Cement Bentonite	60 lbs. 25 lbs.

Grouting Method Gravity
Drilling Method H.S.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 1506 Date 11 / 6 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0 - 14 Fm SAND
SILTY
Some CLAY
DK Green

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 40985

Atlas Sheet Coordinates 29 : 13 : 641

OWNER PATOCK CONSTRUCTION

Address 45 GILBERT AVE.

City ~~TINTON FALLS~~ State ~~NJ~~ Zip Code

WELL LOCATION ADDRESS RT. 35 Owner's Well No.

County ~~MONMOUTH~~ Municipality ~~SHREWSBURY TWP.~~ Lot No. ~~8.01~~ Block No. ~~30~~

WELL USE IRRIGATION

DATE WELL STARTED 8/6/99

DATE WELL COMPLETED 8/6/99

WELL CONSTRUCTION

Total Depth Drilled 65 ft.

Finished Well Depth 65 ft.

Borehole Diameter:
Top 10 in.
Bottom 6 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	50	6"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole ~~or Screen~~ (No. Used)	50	65		open hole	
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout	4	50		Neat Cement Bentonite	____ lbs 800 lbs

RECORD OF TEST

Test Date 8/6/99

Static Water Level 19 ft. below land surface

Water Level Measured Using Tape Float

Pumping Water Level 50 ft. below land surface

Well Was Pumped Using Air

Well Yield 60 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method Pressure

Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT

Installed by Kaye Well Reg. No. 1180m

Pump Type Submersible

Depth of Pump below land surface 40 ft.

Capacity 30 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 ~~KAYE WELL DRILLING~~

Well Driller (Print) Gary D. Poppe

Driller's Signature [signature]

Registration No. 1180m Date 9/6/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0 - 16 Red Sand

16 - 60 Green Sandy Marl

60 - 65 Gray Clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41925

Atlas Sheet Coordinates 29 : 13 643

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 40 SILVERBROOK ROAD
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 9 Block No. 71
Address 40 SILVERBROOK ROAD

DATE WELL STARTED 12 / 29 / 99
DATE WELL COMPLETED 12 / 29 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 99-03-24-0945-50

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Schoor DePalma Tele. # 732-577-9000

WELL CONSTRUCTION

Total depth drilled ~~12~~ 11 ft.
Well finished to 11 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 2 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 6 ft.

Water level was measured using Tape

Well was developed for 1 hours at 1 gpm

Method of development VAC

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid NONE Type of Rig Hand 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	+2	6	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .030)	6	11	2	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	5	11		#1 Morie	
Grout	0	5		Neat Cement	94 lbs.
				Bentonite	5 lbs.

Grouting Method GRAVITY
Drilling Method Hand 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 HAMER, INC.
Well Driller (Print) DJ Grahamer JR
Driller's Signature DJ Grahamer JR
Registration No. M1212 Date 1 / 3 / 2000

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6" Concrete & Stone
6"-10' Rusty Brn M/F Sand TR Silt, TR clay
10-11 Rusty Brn M/F Sandy Clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41926

Atlas Sheet Coordinates 29 : 13 643

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 40 SILVERBROOK ROAD
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 9 Block No. 71
Address 40 SILVERBROOK ROAD

DATE WELL STARTED 12/29/99
DATE WELL COMPLETED 12/29/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 99-03-24-0945-50

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Schoor DePalma Tele. # 732-577-1000

WELL CONSTRUCTION

Total depth drilled 10½ ft.
Well finished to 10½ 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 2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6 ft.

Water level was measured using Tape

Well was developed for 1 hours at 1 gpm

Method of development VAC.

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	6	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .020)	6	10.5	2	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	5	10.5		#1 Morie	
Grout	0	5		Neat Cement	94 lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method Auger

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ____ gpm

Pump type: ____

Drilling Fluid NONE Type of Rig Hand Auger

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 HAMER, INC.

Well Driller (Print) DJ Grahamer JR

Driller's Signature DJ Grahamer JR

Registration No. 21212 Date 01/05/2000

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6" Concrete & Stone

6"-10' Rusty Brn m/f Sand Tr Silt, +r Clay

10-10½ Rusty Brn m/f Sandy Clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41927

Atlas Sheet Coordinates 29 : 13 643

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 40 SILVERBROOK ROAD
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 9 Block No. 71
Address 40 SILVERBROOK ROAD

DATE WELL STARTED 12 / 29 / 99
DATE WELL COMPLETED 12 / 29 / 99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 99-03-24-0945-50

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Schoor DePalma Tele. # 732-577-9000

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 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 2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6 ft.

Water level was measured using TAPE

Well was developed for 1 hours at 1 gpm

Method of development VAC

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	6	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 020)	6	12	2	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	5	12		#1 Morie	
Grout	0	5		Neat Cement Bentonite	94 lbs. 5 lbs.

Grouting Method Gravity
Drilling Method Auger

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid NONE Type of Rig Hand Auger

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 HAMER, INC.

Well Driller (Print) DJ Grahamer JR

Driller's Signature DJ Grahamer JR

Registration No. M1212 Date 1 / 3 / 2000

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-1 Top Soil
1-10 Rusty Brn MF Sand Tr Clay, Tr Silt
10-12 Rusty Brn MF Sandy Clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 41928

Atlas Sheet Coordinates 29 : 13 643

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 40 SILVERBROOK ROAD
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 9 Block No. 71
Address 40 SILVERBROOK ROAD

DATE WELL STARTED 12/29/99
DATE WELL COMPLETED 12/29/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 99-03-24-0945-50

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Schoor DePalma Tele. # 732-577-9000

WELL CONSTRUCTION

Total depth drilled 11½ ft.
Well finished to 11½ 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 2 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6 ft.

Water level was measured using Tape

Well was developed for 1 hours at ____ gpm

Method of development VAC

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	6	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .020)	6	11½	2	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	5	11½		#1 Morie	
Grout	0	5		Neat Cement	94 lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method Auger

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ____ gpm

Pump type: ____

Drilling Fluid NONE Type of Rig Hand Auger

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 HAMER, INC.

Well Driller (Print) D. Graham

Driller's Signature D. Graham

Registration No. M1212 Date 1/3/2000

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-1 Top Soil
1-10 Rusty Brn mlf SAND tr silt, tr clay
10-11½ Rusty Brn mlf Sandy clay

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 -40711

Atlas Sheet Coordinates 29 :13 :644

OWNER BRECKENRIDGE DEVEL GROUP
Address 167 AVE AT THE COMMONS
City SHREWSBURY State NJ Zip Code
WELL LOCATION ADDRESS 90 THORNBROOKE DR **Owner's Well No.** 1W-1
County ~~MONMOUTH~~ Municipality ~~SHREWSBURY BORO~~ Lot No. ~~8.03~~ Block No. ~~30~~
WELL USE IRRIGATION
DATE WELL STARTED 7/12/99
DATE WELL COMPLETED 7/12/99

WELL CONSTRUCTION

Total Depth Drilled 60 ft.
Finished Well Depth 60 ft.
Borehole Diameter:
Top 8 in.
Bottom 8 in.
Well Casing Begins:
3 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	+3	40	4	PVC	SCH 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	40	60	4	PVC	SCH 40
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	30	60	8	#2 SAND	
Grout	0	30	8	Neat Cement / Bentonite	lbs / 125 lbs

RECORD OF TEST

Test Date 7/14/99
Static Water Level 5 ft. below land surface
Water Level Measured Using TAPE
Pumping Water Level 20 ft. below land surface
Well Was Pumped Using SUB. PUMP
Well Yield 10 gpm
If Pump Tested: Discharge Rate 10 gpm
Duration of Test 4 hours

Grouting Method TREMIE
Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by MIKE GRANESE Reg. No. JD17864
Pump Type MYERS PUMP
Depth of Pump below land surface 30 ft.
Capacity 10 gpm Horsepower .5

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 9/10/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-8" TOPSOIL
8"-10' ORANGE BROWN MD SD
10'-40' GRAY GREEN MD SD TRACE GRAVEL
40'-60' GREEN SILTY CLAY

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 40631

Atlas Sheet Coordinates 29 : 13 647

OWNER IDENTIFICATION - Owner NATIONAL KEALLY DEVELOPME
Address 3 MANHATTANVILLE ROAD
City PURCHASE State NY Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW#9
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 11 Block No. 31
Address RTE. 35 & SHREWSBURY AVE.

DATE WELL STARTED 6 / 10 / 99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 6 / 10 / 99
Regulatory Program Requiring Well SPILLFUND SITE Case I.D.# 97-12-30-112608

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

Static water level after drilling 8 ft.

Water level was measured using Watertape

Well was developed for 1/2 hours
at 2 gpm

Method of development Bailed

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ____ gpm

Pump type: ____

Drilling Fluid ____ Type of Rig F6

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 Sch 40	.020slot
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	15	8	#2 well sand	Sodium
Grout	0	2	8	____ Neat Cement X Bentonite	____ lbs. 20 lbs.

Grouting Method Pressure Grout
Drilling Method Hollow Stem

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0" - 8' Clay + Sand
8' - 15' Silty 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 AQUA WELL DRILLING

Well Driller (Print) Claudio Britton

Driller's Signature

Registration No. 1391 Date 6/15/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -41633

Atlas Sheet Coordinates 29 :13 647

OWNER IDENTIFICATION - Owner NATIONAL REALTY DEV CORP
Address 3 MANHATTANVILLE RD
City PURCHASE State NY Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-10
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 11 Block No. 31
Address RT 35 & SHREWSBURY AVE

DATE WELL STARTED 12/22/99
DATE WELL COMPLETED 12/22/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 97-12-30-1126-8

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) ENVIROTACTICS Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 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 6 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 2 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	4	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	12	#2 SAND	
Grout	0	3	12	Neat Cement Bentonite	—lbs. 22 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0–5' BRN MD SD
5'–10' BRN FN SILTY SD TRC CLAY
10'–14' BRN SILTY SD & 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 GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) GARY PARENT
Driller's Signature Gary Parent
Registration No. MD 1540 Date 12/30/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 .41634

Atlas Sheet Coordinates 29 :13 647

OWNER IDENTIFICATION - Owner NATIONAL REALTY DEV CORP
Address 3 MANHATTANVILLE RD
City PURCHASE State NY Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-11
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 11 Block No. 31
Address RT 35 & SHREWSBURY AVE

DATE WELL STARTED 12/22/99
TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL COMPLETED 12/22/99
Regulatory Program Requiring Well UST Case I.D.# 97-12-30-1126-8

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) ENVIROTACTICS Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 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 6 ft.

Water level was measured using TAPE

Well was developed for .5 hours
at 2 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	2	4	PVC	SCH.40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	2	12	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	1	12	12	#2 SAND	
Grout	0	1	12	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 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. MD 1640 Date 12/30/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' BRN MD SD
5'-10' BRN FN SILTY SD TRC CLAY
10'-12' BRN SILTY SD & CLAY

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -41635

Atlas Sheet Coordinates 29 : 13 647

OWNER IDENTIFICATION - Owner NATIONAL REALTY DEV CORP
Address 3 MANHATTANVILLE RD
City PURCHASE State NY Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-12
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 11 Block No. 31
Address RT 35 & SHREWSBURY AVE

DATE WELL STARTED 12/22/99
DATE WELL COMPLETED 12/22/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 97-12-30-1126-8

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) ENVIROTACTICS 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 NA ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6 ft.

Water level was measured using TAPE

Well was developed for .5 hours at 2 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	3	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	3	13	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	2	13	12	#2 SAND	
Grout	0	2	12	Neat Cement ___ lbs. Bentonite 15 lbs.	

Grouting Method TREMIE
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 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' BRN MD SD
5'-10' BRN FN SILTY SD TRC CLAY
10'-13' BLK BRN SILTY SD & CLAY

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -41636

Atlas Sheet Coordinates 29 : 13 647

OWNER IDENTIFICATION - Owner NATIONAL REALTY DEV CORP
Address 3 MANHATTANVILLE RD
City PURCHASE State NY Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-13
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 11 Block No. 31
Address RT 35 & SHREWSBURY AVE

DATE WELL STARTED 12/27/99
DATE WELL COMPLETED 12/27/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 97-12-30-1126-8

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) ENVIROTACTICS Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 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 6 ft.

Water level was measured using TAPE

Well was developed for 1.5 hours at 2 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	4	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	4	14	4	PVC	.020 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	3	14	12	#2 SAND	
Grout	0	3	12	Neat Cement —	— lbs.
				Bentonite	22 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' BRN MD SD
5'-10' BRN FN SILTY SD TRC CLAY
10'-14' BRN SILTY SD & 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 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.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43777

Atlas Sheet Coordinates 29 : 13 : 647

OWNER IDENTIFICATION - Owner NATIONAL REALITY DEV CORP
Address 3 MANHATANVILLE RD
City PURCHASE State NY Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-14
County MONMOUTH Municipality SHREWSBURY BORO Lot No. 11 Block No. 31
Address RT 35 & SHREWSBURY AVE

DATE WELL STARTED 11 / 3 / 00
DATE WELL COMPLETED 11 / 3 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well SPILLFUND SITE Case I.D.# 97-12-30-1126-8

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 NA 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 .5 hours at 2 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	5	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used .020 SLOT	5	15	4	PVC	SCH. 40
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	4	15	12	#2 SAND	
Grout	0	4	12	Neat Cement / Bentonite	— lbs. / 30 lbs.

Grouting Method TREMIE
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 GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) GARY PARENT
Driller's Signature
Registration No. MD1540 Date 12 / 8 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15' LT BRN FN/TIGHT SD.

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 43533

Atlas Sheet Coordinates 29 13 657

OWNER CUSTOM LAWN SPRINKLER

Address 264 BRANCH PORT AVE.

City LONG BRANCH State NJ Zip Code

WELL LOCATION ADDRESS 179 AVE. AT THE COMMENS Owner's Well No.

County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 9 Block No. 70.01

WELL USE IRRIGATION

DATE WELL STARTED 09 / 01 / 00

DATE WELL COMPLETED 09 / 01 / 00

WELL CONSTRUCTION

Total Depth Drilled 145 ft.

Finished Well Depth 145 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	135	4	PVC	SCH 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 20)	134	145	4	PVC	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	130	145		#2	500
Grout	0	130		Neat ~~Cement~~ / Bentonite	_____ lbs / 450 lbs

RECORD OF TEST

Test Date 09 / 01 / 00

Static Water Level 60 ft. below land surface

Water Level Measured Using STATIC METER

Pumping Water Level 120 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/TREMI

Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by not installed by WB 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) JEFF WINKOWSKI

Driller's Signature

Registration No. 146 Date 9 / 6 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18	BROWN SAND MED TO FINE
18-25	BROWN CLAY
25-35	GRAY CLAY
35-80	GREEN CLAY
80-95	BLACK SILTY SAND
95-125	BLACK SAND FINE W/GRAY CLAY
125-135	BLACK SAND MED TO FINE W/ SEA SHELL
135-145	GREENISH GRAY SAND MED TO FINE W/SEA SHELL

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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
Grout	0	3	15	Neat Cement	20 lbs.
				Bentonite	2 lbs.

Grouting Method Pressure
Drilling Method 10" 4 V IBA

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. JH19 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.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43892

29 13 659

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH DPW Atlas Sheet Coordinates ____ : ____ : ____

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

TYPE OF WELL (as per Well Permit Categories) ____ DATE WELL COMPLETED 10/26/00

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'SHAUGHNESS

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
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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'SHAUGHNESSY
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.

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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 12 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. J149 Date 11 / 6 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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. # 7325308500

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

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

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

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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. 1419 Date 11/6/00

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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

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

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

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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 Pipe

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	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'SHAUGHNESS
Well Driller (Print) Chris O'Shaughnessy
Driller's Signature
Registration No. J1419 Date 11 / 6 / 00

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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

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 Chris O'Shaughnessy
Registration No. J1419 Date 11 / 6 / 00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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'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.

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5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number ~~29~~ - ~~39123~~

Atlas Sheet Coordinates ~~29~~ : ~~13~~ : ~~686~~

OWNER ~~BIRCHWOOD REAL ESTATE DEV~~
Address 2104 SHADOWBROOK DR.
City WALL State NJ Zip Code

WELL LOCATION ADDRESS CENTER ST. Owner's Well No. ONE
County MONMOUTH Municipality EATONTOWN BORO Lot No. 22 Block No. 46

WELL USE DOMESTIC

DATE WELL STARTED 12 / 5 / 98
DATE WELL COMPLETED 12 / 15 / 98

WELL CONSTRUCTION

Total Depth Drilled 200 ft.
Finished Well Depth 200 ft.
Borehole Diameter:
Top 8.5 in.
Bottom 8.5 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	150	4	PVC	SCH. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	150	200	4	PVC	SCH 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	175	200		NATURAL SAND	
Grout	4	175		Neat Cement Bentonite	_____ lbs 400 lbs

RECORD OF TEST

Test Date 12 / 15 / 98
Static Water Level 13 ft. below land surface
Water Level Measured Using TAPE
Pumping Water Level 120 ft. below land surface
Well Was Pumped Using AIR LIFT
Well Yield 30 gpm
If Pump Tested: Discharge Rate 12 gpm
Duration of Test 24 hours

Grouting Method PRESSURE THRU TREMIE
Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT

Installed by KARL PITTMAN ASS. Reg. No. J1054
Pump Type SUBMERSIBLE
Depth of Pump below land surface 150 ft.
Capacity 12 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 ~~KARL PITTMAN~~/JERSEY WELL DRLG.
Well Driller (Print) KARL PITTMAN PRES.
Driller's Signature [signature]
Registration No. J1054 Date 1 / 15 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 MED. TAN SAND
5-25 MED./COARSE TAN SAND
25-28 CLAY
28-120 FINE GRAY, BLACK SAND TRACES CLAY
120-170 CLAY WITH INTERBEDDED FINE SILTY SAND
170-175 FINE AND COARSE SAND TRACE SMALL
175-200 MED. COARSE LT. GRAY SAND

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DW / 138 M
11/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 43830

Atlas Sheet Coordinates 29 : 13 : 687

OWNER IDENTIFICATION - Owner GETTY PROPERTIES CORP.
Address 86 DOREMUS AVE.
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW13
County MONMOUTH Municipality EATONTOWN BORO Lot No. 8 Block No. 16
Address 30 ROSE CT

DATE WELL STARTED 11/1/00
DATE WELL COMPETED 11/1/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tyree/Sean Grexa Tele. # 609-239-003

WELL CONSTRUCTION

Total depth drilled 17 ft.
Well finished to 17 ft.

Borehole diameter:
Top 4.5 in.
Bottom 4.5 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 13 ft.

Water level was measured using M.Scope

Well was developed for .25 hours at 1 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	-3"	7	1	PVC	Sch40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or ~~Screen~~ (No. Used 010)	7	17	1	PVC	Sch40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	5	17	1	#1 Sand	150 lbs.
Grout	0	5	1	Neat Cement Bentonite	50 lbs. 5 lbs.

Grouting Method Tremie
Drilling Method Direct push

Method of development peristaltic pump

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity — gpm

Pump type: —

Drilling Fluid — Type of Rig Direct push

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 TALON DRILLING COMPANY
Well Driller (Print) Craig Jablonski
Driller's Signature Craig Jablonski
Registration No. 1582 Date 11/7/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-1' Topsoil + sand
1-3' Green silt w/fine sand
3-10' Fine sand w/gravel
10-13' Med sand - wet @ 13'
13-17' Lg sand w/gravel

00186

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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 Geeco

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	94 lbs.
				Bentonite	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.

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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.# 990324091553

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PST 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 Geffco

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 THEN 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.

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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.# 99032409,1553

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) PSI Tele. # 856-764-600

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/OT	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 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. Weigard
Driller's Signature S Weigard
Registration No. ID/517 Date 6/8/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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 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 .010 slot
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	267	290		#1 MORIE	
Grout	4	267		Neat Cement Bentonite	lbs 525 lbs

Grouting Method PRESS. THRU TREMMIE

Drilling Method MUD ROTARY

RECORD OF TEST

Test Date 9/28/99

Static Water Level 22 ft. below land surface

Water Level Measured Using ELECT. TAPE

Pumping Water Level 150 ft. below land surface

Well Was Pumped Using AIR LIFT

Well Yield 150 gpm

If Pump Tested: Discharge Rate ____ gpm

Duration of Test ____ hours

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 1 1/2

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.

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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	10 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 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 Chrstover
Driller's Signature Timothy C 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 077

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; 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 RECORDED		
		DEEP BY DRILLER		

→ Set well @ 12'

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

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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 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 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
			12" STEEL MANHOLE WITH 2x2 CONCRETE PAD	
		SPOON	CEMENT BENT. 2" SOLID CASING	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS
		COMPOSITE	10'-.010 SLOT SCREEN	
		OF	#1 WELL GRAVEL	
		BORE		
		HOLE		

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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 2 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.

Method of development SUBMERSIBLE PUMP

Grouting Method TREMMY
Drilling Method Auger

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 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 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 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' → ORANGE/TAN, CLAYEY SILTS AND SANDS
		WOOD		
		RECOVERED		
		BY DRILLER		

12'

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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 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	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

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 Weststover

Driller's Signature Timothy C Weststover

Registration No. M1444 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. 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 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 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
			12" STEEL MANHOLE with 2x2 CONCRETE PAD	
		SPOON COMPOSITE	CEMENT BENT. 1" SOLID CASING CEMENT BENT. 10'-.010 SLOT SCREEN #1 WELL GRAVER #1 WELL GRAVEL	0'-12' → GREEN/GRAY CLAYEY SILTS AND SANDS

Hitlist as of 02-16-2001

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2900871 Redacted - Privacy Act 2913648 TICE 140 10 D ... ... 40 25 07-21-1953 401853 740346 ... ... .
2901016 Redacted - Privacy Act 2913691 GREHWR10 15 D ... ... 38 25 12-24-1953 401839 740240 ... ..
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2926684 GLOBEPETROLEUM 2913679BULL65520 Redacted - Privacy Act 1B23M05808-05-1991WR1401946 740240 11-14-
2926704.KODAKA9 MERTRAL 2913630HAUK-2901151D01H62M46WR1TER-08-1989401920.740WR1 10-15-1991 N
2926706.HUNTERNWEBBCRMD2913693-WILS995 05M 18 50P21,2GARR-M8180991.401920WR1740333 09-05-1991 N
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Redacted - Privacy Act

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2931158.SHELLMOUND COMPANY 12919947 EAULBECK MICHAEL 0E38J25205-04-1994WA01853 740200 06-29-1994
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19 04-20-1995 ... ... MW-03B BLDF 167 01-09-1995 26 0 Redacted - Privacy Act J1624 ... ... WR1

Hitlist as of 02-16-2001

2932743 UNITED STATES GOVERN 2913656 UNIT 50 0 B NA NA 38 25 01-20-1995 401906 740253 03-06-19
2932925.TRME12 [illegible] 03503-1995 [illegible] 740253 10-1995...WR1.
2933063 HUNTER,ANISDIAM42 [illegible] 1995.401946 WR1 40226 06-09-1995 ..
2933064 HUNTWELLOWLDRAME2 [illegible] 1995.401946 740226 06-09-1995 ..
2933065 HUNTWELLOWLDRAME2 [illegible] 1995.401946 740226 06-09-1995 ..
2933759 US3ARMYLOWFORTYMONMO [illegible] 25.07-19-1995 401906 740200 10-02-
2933755.US.ARMY22 FORT MONMOO [illegible] 07-19-1995 401906 740200 11-08-
2933769.EATONTOWNMORGUGHMONMO [illegible] 1995.401850 740253 07-31-19
2933770.EATONTOWNOBORGUGHSORE [illegible] 07-19-1995.401 740253 07-31-19
2933771.EATONTOWNOBORGUGHSORE [illegible] 1995.401 740253 07-31-199
8933772.EATONTOWN BOROUGHTREE [illegible] 07-19-1995.401 740253 07-31-199
8933773.EATONTOWN BOROUGHTREE [illegible] 07-19-1995.401 740253 07-31-199
8933989.USMARMY21 FEWISONMONE [illegible] 25-08-18-1995 1920 740240 09-18-
2933248.GETTYMNEYROLEHEDGORP [illegible] 0826.740319 WR1 11-01-199
8934249.GEMMY2PETROBRUNDCORP [illegible] 1995.401826 740319 11-01-199
8934250.GEMMY1PETROBRUNDCORP [illegible] 1995.401826 740319 11-01-199
8934251.GEMMY0PETROBRUNDCORP [illegible] 1995.401826 740319 11-01-199
8934252.GEMMY PETROBRUNM CORP [illegible] 1995 401826 740319 11-01-199
8934566.UNMMED1STRBRIGABANE.F [illegible] 17-1995 1946 740306 01-11
2933582.WELSH [illegible] 40191M-1995 20 60 [illegible] 740333.02-WR1-1996 ...
2934031WELSH0FARMST2FRONT9SGRAH2401801M95.00 01 [illegible] 740333 WR1-28-1996 ...
2934041WELSH0FARMST2FRONT9SGRAH2401801M95.00 01 [illegible] 740333 WR1-28-1996 ...
2934051WELSH0FARMST2FRONT9SGRAH2401901M95.00 01 [illegible] 740333 WR1-28-1996 ...
2934061WELSH FARMSF2FRONT9SGRAH2401901M 5000 [illegible] 740333 WR1 02-28-1996 ...
2934021USVARMY FORT MONMOUST2914442-TRAC 30 0 [illegible] 1995.401920 WR1 40146 01-17-1
2934857 US.ARMY FORT MONMOUTM2914402SELRK2501801B955.24001KIRK,0 [illegible] 1920 740103-11-1
2935127 ALLIED.SIGNAL2BENDIX 0223623MSHAND0350I-E9613.6401KIRK,0 [illegible] 1813 740301-14-
2935128.ALLIEDWS#GNAL8BENDIXWA2913687-HAND995 34E06KOSELESKY,2 [illegible] 1813 740319 12-02-
2935129.ALLIEDWS#GNAL8BENDIXWA2913687-HAND995 34E06KOSELESKY,2 [illegible] 1813 740319 12-03-
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2935312.U..S.ARMY [illegible] 550000M-1995830101KOSELESKY,2 [illegible] 1853 740319 05-15-1
2935313 U..SMWARMYC [illegible] 50500M-1996840101VOGT,J JOHN 25 [illegible] 1853 740319 05-15-1
2935314 U..SMWARMYC [illegible] 50500M-1996816101VOGT,J JOHN 25 [illegible] 1853 740319 05-15-1
2935585 GETTYWIPETROCHEMCORP [illegible] 1826 740319 07-31-199
2935931.ALLIED3SIGNALBENDIX.2913688IHAND20504PARENT,1GARY 01545 08-29-1996 1813 740306 12-0
2935984.MOBIL.ORN CORPS [illegible] 40191M-1995 8410 [illegible] 740333.09-WR1-1997 ...
2937021ALLIED3SIGNAL/BENDIX2913689HAND195781E 6 GRANES,1MIKE 01545 1997 401813 740306 10-2
2935603.ALLIED SIGNAL/BENDIXHAN [illegible] 1995 E260&KOSELESKY,2 [illegible] 1813 740306 10-2
2935604.ALLIED SIGNAL/BENDIXHAN [illegible] 1995 E165&01ROVELESKY,2 [illegible] 1813 740306 10-2
2935605.ALLIED SIGNALBENDIXWA2913689-HAND995 32E06KOVELESKY,1S [illegible] 1813 740306 10-2
2935606.ALLIED SIGNAL/BENDIXHAN [illegible] 1995 E165&01ROVELESKY,0 [illegible] 1813 740306 10-2
2935937.UNITED STATES ARMYCHAN [illegible] 1995 [illegible] 740319.01 WR1-1998
2937738.UNITED STATES ARMY2299652PARCHASEY MAKNAJ17884 10-08-1997 1853 740319 01-09-1998
2937739.UNITED STATES ARMY2299652PARCHASEY MAKNAJ17884 10-08-1997 1853 740319 01-09-1998
2937740.UNITED STATES ARMY2299652 PARCHASE [illegible] 10-08-1997 1853 740319 01-09-1998
2937878.WAYERS EDGE3TOWN-SQM1997464U SCARE [illegible] 13.38.25 WR1-14-1997 1853 740200 04-
2938198 Redacted - Privacy Act [illegible] 1998 [illegible] 1998 [illegible] 740226.....WR1... .
2938250 CHASE3TOWNGROVEREY.B..2913628.PICK.100.15.G.4WR1 46 25 03-20-1998 1933 740306 04-23-1
2939416 Redacted - Privacy Act 2903625-DRAG 20701M PRINCE [illegible] 1946 740306 WR1... ... ...
2939592 HASBROUND-AVE..MONMOU 2913695 STOT.300.0.HWN/A N/A 11 25 10-21-1998 401826 740226 ... .
2939820.BELMONTMORPM2913695 GRAH 20.0.M.56-60.58 23.25.01-06-1999 401946 740226 ... ...
2930022ANDERMONTEAGRVI2913695.GRAH.20.0.M.56-60.58.23.25 WR1-06-1999 401946 740226 ... ...
2930022ANDERMONTEAGRVI2913695.GRAH.20.0.M.56-60.58.23.25 WR1-06-1999 401946 740226 ... ...
2930022ANGERTY&PRASERTIENSAVOR.2913681.AQUI.20.0.M.6.16.11WR1 01-07-1999 401839 740319 ... .
.. ... 157 BROAD ST WR1

29.13.648

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply

WELL RECORD

Permit No. 29-871
Application No. _____
County _____

29.13.CAB
29-871

Redacted - Privacy Act

1. OWNER _____ ADDRESS Redacted - Privacy Act
Owner's Well No. _____ SURFACE ELEVATION 1870 Feet (Above mean sea level)

2. LOCATION State Highway #33 Hamilton

3. DATE COMPLETED Aug 16/53 DRILLER Tice Brothers

4. DIAMETER: Top 4 Inches Bottom 4 Inches TOTAL DEPTH 134 Feet

5. CASING: Type Steel Diameter 4 Inches Length 128 Feet

6. SCREEN: Type None Size of Opening _____ Diameter _____ Inches Length _____ Feet
Range in Depth { Top _____ Feet Bottom _____ Feet Geologic Formation Vincentown
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 Aug 14/53 Yield 20 Gallons per minute
Static water level before pumping 24 Feet below surface
Pumping level 40 feet below surface after 4 hours pumping
Drawdown 16 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped cylinder pump How measured 5 gal & 10 gal container
Observed effect on nearby wells No

9. PERMANENT PUMPING EQUIPMENT:
Type jet pump Capacity 10 Gallons per minute
How Driven Electric Horse Power 1/2 R.P.M. 3450
Depth of pump in well _____ Feet Depth of Foot piece in well 55 Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____

10. USED FOR Home AMOUNT { Average _____ Gallons Daily Maximum _____ Gallons Daily

11. QUALITY OF WATER good - PH 8 Fe. 0.5 Sample: Yes _____ No. _____
Taste Good 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 _____

14. DATA OBTAINED BY Tice Bros DATE Aug 14 1953

(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 91

Form 87-5M

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply

Permit No. 29-1016
Application No. _____
County _____

WELL RECORD

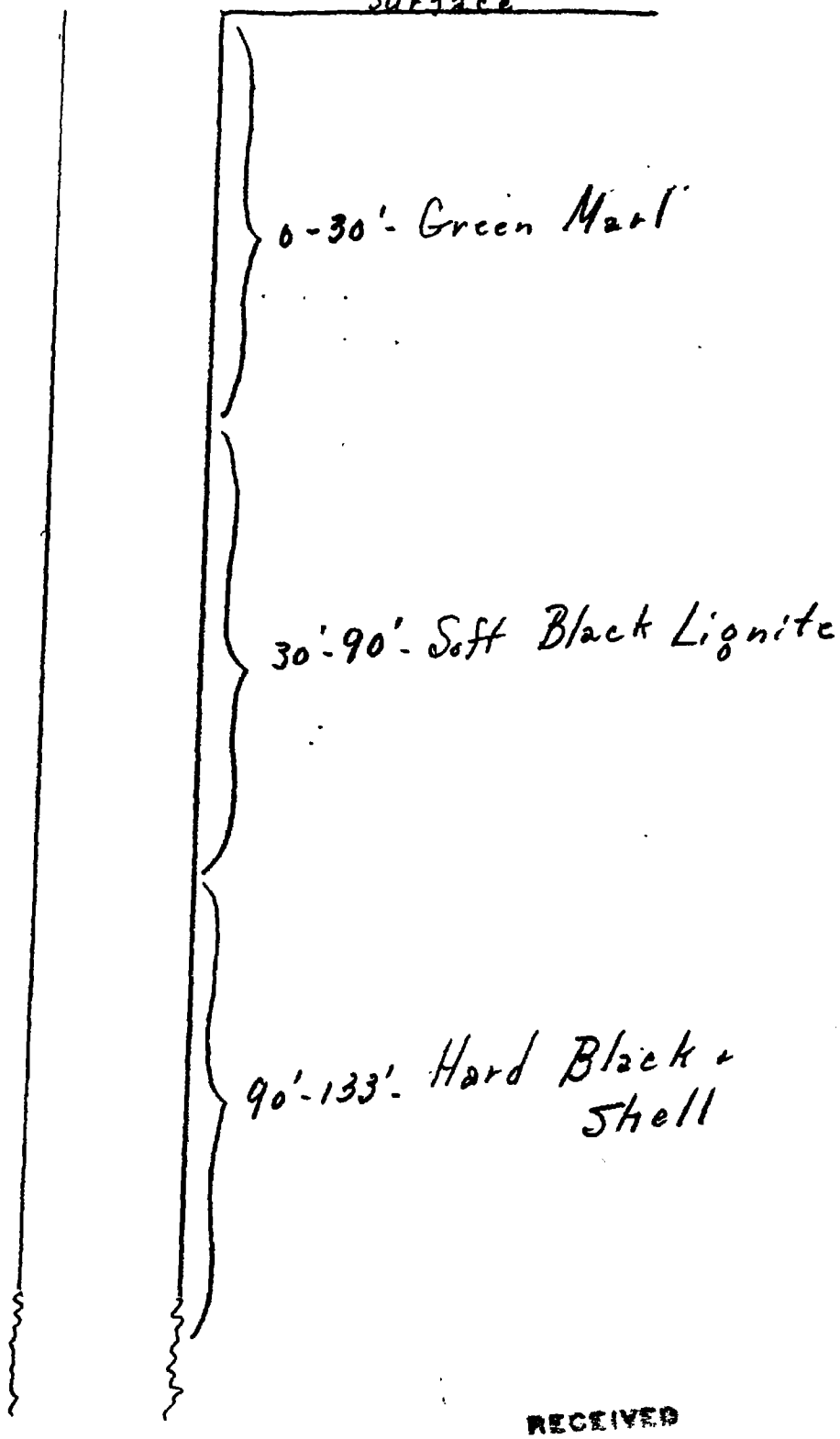
29.13.691
29-1016

Redacted - Privacy Act

1. OWNER _____ 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



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FEB 8 1954

29.13.6 84

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply
WELL RECORD

Permit No. 29-1308
Application No. _____
County 29.13.6B4
29-1308

PORT-AU-PORT-N.F.

Redacted - Privacy Act

1. OWNER _____ ADDRESS 20 MORRIS - AVE-
Owner's Well No. 29-1308 SURFACE ELEVATION 10 FT ABOVE Feet (Above mean sea level)

2. LOCATION SAME-

3. DATE COMPLETED MARCH-2-55 DRILLER BORDEN- BROS.

4. DIAMETER: Top 3 Inches Bottom 3 Inches TOTAL DEPTH 46 Feet

5. CASING: Type BLACK-STEEL PIPE Diameter 3 Inches Length 46 Feet

6. SCREEN: Type NONE Size of Opening V Diameter L Inches Length L Feet
Range in Depth { Top X Feet / Bottom X Feet Geologic Formation GRAVEL & CLAY
Tail piece. Diameter _____ Inches Length L Feet

7. WELL FLOWS NATURALLY X Gallons per Minute at L Feet above surface
Water rises to X Feet above surface

8. RECORD OF TEST: Date MARCH-2-55 Yield 5 Gallons per minute
Static water level before pumping 18 Feet below surface
Pumping level 21 feet below surface after 10 hours pumping
Drawdown 3 Feet Specific Capacity 9 Gals. per min. per ft. of drawdown
How Pumped CENTRIFICAL PUMP- How measured STEEL- TAPE & WEIGHT
Observed effect on nearby wells NONE

9. PERMANENT PUMPING EQUIPMENT:
Type NOT INSTALLED BY DRILLERS 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 HOME USE AMOUNT { Average 200 Gallons Daily / Maximum 300 Gallons Daily

11. QUALITY OF WATER VERY GOOD Sample: Yes _____ No. L
Taste O. K. Odor NONE Color CLEAR Temperature L °F

12. LOG GRAVEL & SAND & CLAY Are samples available? L
(Give details on back of sheet or on separate sheet)

13. SOURCE OF DATA TAKEN FROM F & B-

14. DATA OBTAINED BY BORDEN-BROS. DATE MARCH-2-1955

(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 48

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply
WELL RECORD

Permit No. 29-1456
Application No. _____
County _____

29.13 CA8
29.1456

Redacted - Privacy Act

1. OWNER _____ ADDRESS _____ Redacted - Privacy Act

Owner's Well No. one SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Pine Brook – ~~Township~~ Boro of New Shrewsbury

3. DATE COMPLETED June 4th 55 DRILLER William R Tice Sr

4. DIAMETER: Top 4 Inches Bottom 4 Inches TOTAL DEPTH 151 Feet

5. CASING: Type steel Diameter 4 Inches Length 136' 4½" Feet

6. SCREEN: Type No screen Size of Opening _____ Diameter _____ Inches Length _____ Feet

Range in Depth { Top _____ Feet Bottom _____ Feet Geologic Formation Vincentown

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 June 3rd-4th 55 Yield 30 Gallons per minute

Static water level before pumping 50 Feet below surface

Pumping level 56 feet below surface after 4 hours pumping

Drawdown 6 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: Deep well hand pump at present No Electric as yet.

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 garden – No house yet. AMOUNT { Average _____ Gallons Daily Maximum _____ Gallons Daily

11. QUALITY OF WATER Good P.H. 8 Fe .5 Sample: Yes _____ No. _____

Taste Good 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 _____

14. DATA OBTAINED BY Wm R Tice Sr DATE June 1955

(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

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply
WELL RECORD

Permit No. 29-1788
Application No. _____
County _____

29.13.653
29.1788

1. OWNER Redacted - Privacy Act ADDRESS 96 Pemberton Ave.
Owner's Well No. _____ SURFACE ELEVATION 40 Feet (Above mean sea level)

2. LOCATION Oceanport, New Jersey

3. DATE COMPLETED 12/5/55 DRILLER A.P.Tice & Son

4. DIAMETER: Top 4 Inches Bottom 4 Inches TOTAL DEPTH 70 Feet

5. CASING: Type Blk. steel casing Diameter 4 Inches Length 70 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 12/5/55 Yield 30 Gallons per minute
Static water level before pumping 15 Feet below surface
Pumping level 55 feet below surface after 3 hours pumping
Drawdown 25 ' 8" Feet Specific Capacity 8 Gals. per min. per ft. of drawdown
How Pumped gas motor How measured 5 gal. buckett
Observed effect on nearby wells none

9. PERMANENT PUMPING EQUIPMENT: had own pump
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 _____ AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily

11. QUALITY OF WATER _____ Sample: Yes _____ No. _____
Taste _____ Odor _____ Color _____ Temperature _____ °F

12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet)

13. SOURCE OF DATA _____

14. DATA OBTAINED BY Arthur P. Tice DATE 12/18/55

(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.)

29.13.638

29-2774

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-2774
Application No. _____
County _____

WELL RECORD

29.13.638
29-2774A

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 seperate 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.)

29-13-655

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5609
Application No. _____
County _____

WELL RECORD

29.13.655
29.5609

Redacted - Privacy Act

1. OWNER _____ ADDRESS BRADLEY AVENUE, OCEANPORT, NEW JERSEY
   Owner's Well No. ONE SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION 10 FOOT FROM BUILDING
3. DATE COMPLETED DECEMBER 5,1968 DRILLER HENRY A. PETERS (LICENSE # 156)
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 65' Feet
5. CASING: Type BLACK STEEL TYPE Diameter 4 Inches Length 61'-0" Feet
6. SCREEN: Type x none. Size of Opening ___ Diameter ___ Inches Length ___ Feet
   Range in Depth { Top 4 Feet / Bottom 4 Feet } Geologic Formation x 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 x Dec.1968 Yield 20 Gallons per minute
   Static water level before pumping 4 Feet below surface
   Pumping level 20 feet below surface after 2 hours pumping
   Drawdown 16 Feet Specific Capacity ___ Gals. per min. per ft. of drawdown
   How Pumped Gas Pump. How measured Elec.Wtr.Tester.
   Observed effect on nearby wells None.
9. PERMANENT PUMPING EQUIPMENT:
   Type Jet Pump. Mfrs. Name Myers.
   Capacity 9-10 G.P.M. How Driven Electric. H.P. 1/3 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 Dwelling. 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 9/20/70

(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.)

29.13.655
29.5609

Log.

0 to 18Ft.Layers Clay.
18 to 54Ft.Gray Pep.Clay.
54 to 58Ft.(Part Clay)Pepper Sand.
58 to 61Ft.Cream Pep.Clay.
61 to 65Ft.Same Cream Pep.Compolidated Clay.

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GEOLOGY
AND
TOPOGRAPHY

29.13.656

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-2919
Application No. _____
County _____

WELL RECORD

29.13.656
29.2919

1. OWNER Esso Standard Oil Co. ADDRESS [redacted] N. Broad St. Elizabeth, NJ
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Hwy #33 New Shrewsbury Twp.
3. DATE COMPLETED May 21 1959 DRILLER William R. Tice Sr
4. DIAMETER: top 6 Inches Bottom 4 Inches TOTAL DEPTH 95 Feet
5. CASING: Type Bethlehem Steel Diameter 4 Inches Length 91 Feet
6. SCREEN: Type Ed. E. Johnson SR Brass Size of Opening .035 Diameter 3 3/4 Inches Length 4 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 May 20 Yield 50 Gallons per minute
   Static water level before pumping 5' 6" Feet below surface
   Pumping level _____ feet below surface after _____ hours pumping
   Drawdown _____ Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped Air Compressor How measured 50 gal drum
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type Submersible Mfrs. Name Myers
   Capacity 12 G.P.M. How Driven Elect H.P. 1/2 R.P.M. _____
   Depth of Pump in well 42 Feet Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR Gas Service Station AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily
11. QUALITY OF WATER Good PH 7.4 Fe 1.4 PPM 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 May 1959

(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

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

Redacted - Privacy Act

1. OWNER ! Grant Ave. 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 188 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

29-13-6 39

FORM #7

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.)

29-13-691

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-4782
Application No. _____
County _____

29-13-691
29-4782

WELL RECORD

Redacted - Privacy Act

1. OWNER F.&S.Builders Co. ADDRESS Asbury Ave. Asbury Park,N.J. 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'-6" 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 500 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,brown 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 blasl sand clay
49'-50'-stop here

WELREC 107 0843

29-13-637

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5052
Application No. _____
County _____

WELL RECORD

29.13.637
29.5052

1. OWNER Kubert Arnold [Redacted - Privacy Act] Builder ADDRESS Sunnybank Drive, Little Silver, N.J
   Owner's Well No. one SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Sunnybank Drive, Little Silver.
3. DATE COMPLETED May 13, 1966 DRILLER William R. Tice Sr.
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 45 Feet
5. CASING: Type std. weight steel. Diameter 4 Inches Length 41 Feet
6. SCREEN: Type Johnson stainless Size of Opening .020" Diameter 3 3/4 Inches Length 4 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 May 12/66 Yield 25 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 _____ Gals. per min. per ft. of drawdown
   How Pumped submersible test pump. How measured five gallon pail.
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type submersible Mfrs. Name MYERS
   Capacity 12 G.P.M. How Driven Electric. H.P. _____ R.P.M. 3450
   Depth of Pump in well 30 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 }
11. QUALITY OF WATER PH 7.5 Iron 8 P.P.M. Water conditioner required. Hardness 7 g.p.g. Sample: Yes ____ No. ____
    Taste slightly iron 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 Driller. Date May 1966

(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.)

?.29-13-815.7

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5457-4
Application No. _____
County Monmouth
29.13.815

WELL RECORD

1. OWNER Monmouth County Hwy Dept. ADDRESS Pine Brook - New Shrewsbury Twp
Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Pine Brook - New Shrewsbury

3. DATE COMPLETED October 1967 DRILLER William R. Tice, Sr.

4. DIAMETER: top 6 Inches, Bottom 6 Inches TOTAL DEPTH 74 Feet

5. CASING: Type std. Wt. steel Diameter 6 Inches Length 69 Feet

6. SCREEN: Type Johnson stainless Size of Opening .018" Diameter 5 3/4 Inches Length 6 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 October 10, 1967 Yield 30 Gallons per minute with shallow well pump.

Static water level before pumping 13 Feet below surface

Pumping level 20 feet below surface after 4 hours pumping

Drawdown 7 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown

How Pumped Gasoline suction pump How measured 10 gallon container

Observed effect on nearby wells _____

9. PERMANENT PUMPING EQUIPMENT:

Type Submersible Mfrs. Name Myers

Capacity 16 G.P.M. How Driven Electric H.P. 1/2 R.P.M. 3450

Depth of Pump in well 42 Feet Depth of Footpiece in well _____ Feet

Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches

10. USED FOR Mon. County - Garage AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }

11. QUALITY OF WATER Iron 3 ppm Hardness 26 ppm Ph 7.8 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 Miller Date October 1967

(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 _____ ADDRESS _____

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.)

29-13-692 ✓

FORM B7

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5673
Application No. _____
County _____

WELL SEALED 8/15/89

WELL RECORD

29.13.692
29.5673

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 # 1 ,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 preasure at the head of the well.

RECEIVED
MAR 29 11 62 AM
GEOLOGY AND GEOGRAPHY

29-13692
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.

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

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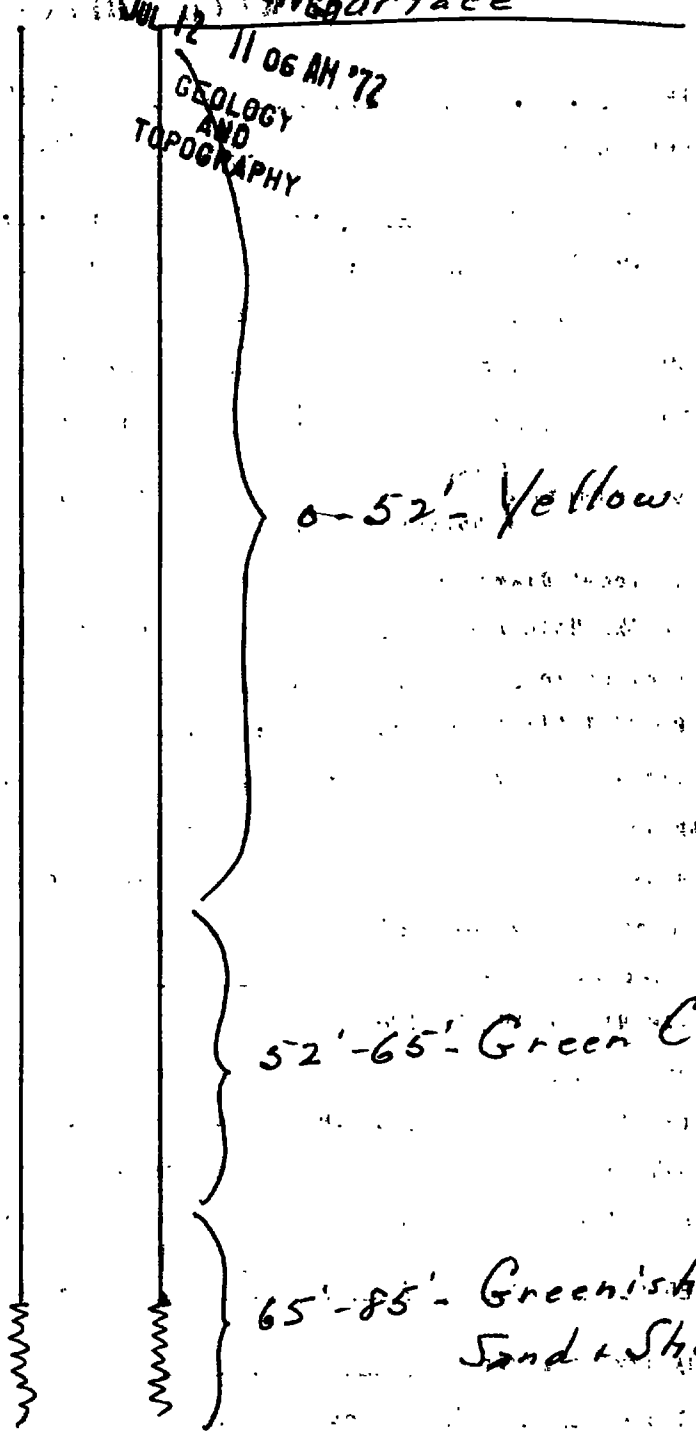
GEOLOGY AND TOPOGRAPHY



29-13-627 D

FORM 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-6861
Application No. _____
County _____

29-13-627

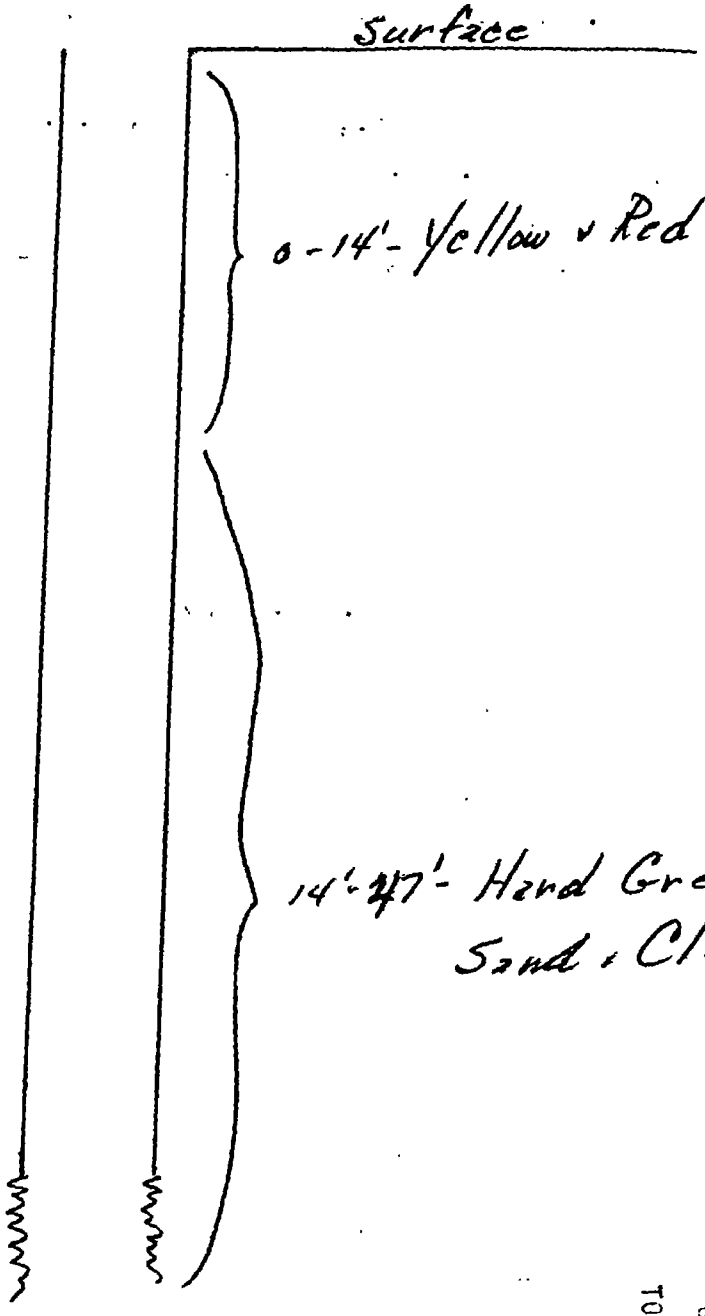
WELL RECORD

29-6861

1. OWNER Redacted - Privacy Act _____ ADDRESS Old Farm Road, Shrewsbury, N.J.
Owner's Well No. _____ SURFACE ELEVATION 40 Feet (Above mean sea level)
2. LOCATION Old Farm Rd., Shrewsbury, N.J.
3. DATE COMPLETED Feb. 27, 1973 DRILLER Kaye Well Drilling, Inc.
4. DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 47 Feet
5. CASING: Type Black Steel Diameter 4 Inches Length 25 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 Feb. 27, 1973 Yield 60 Gallons per minute
Static water level before pumping 10 Feet below surface
Pumping level 11 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 Good 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 Drillers
14. DATA OBTAINED BY Kaye Well Drilling, Inc. Date March 5, 1973

(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.)

29.13.6Cm
29.6861



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GEOLOGY AND TOPOGRAPHY

29-13-652 ☐

FORM 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-7110
Application No. _____
County _____

29.13.652

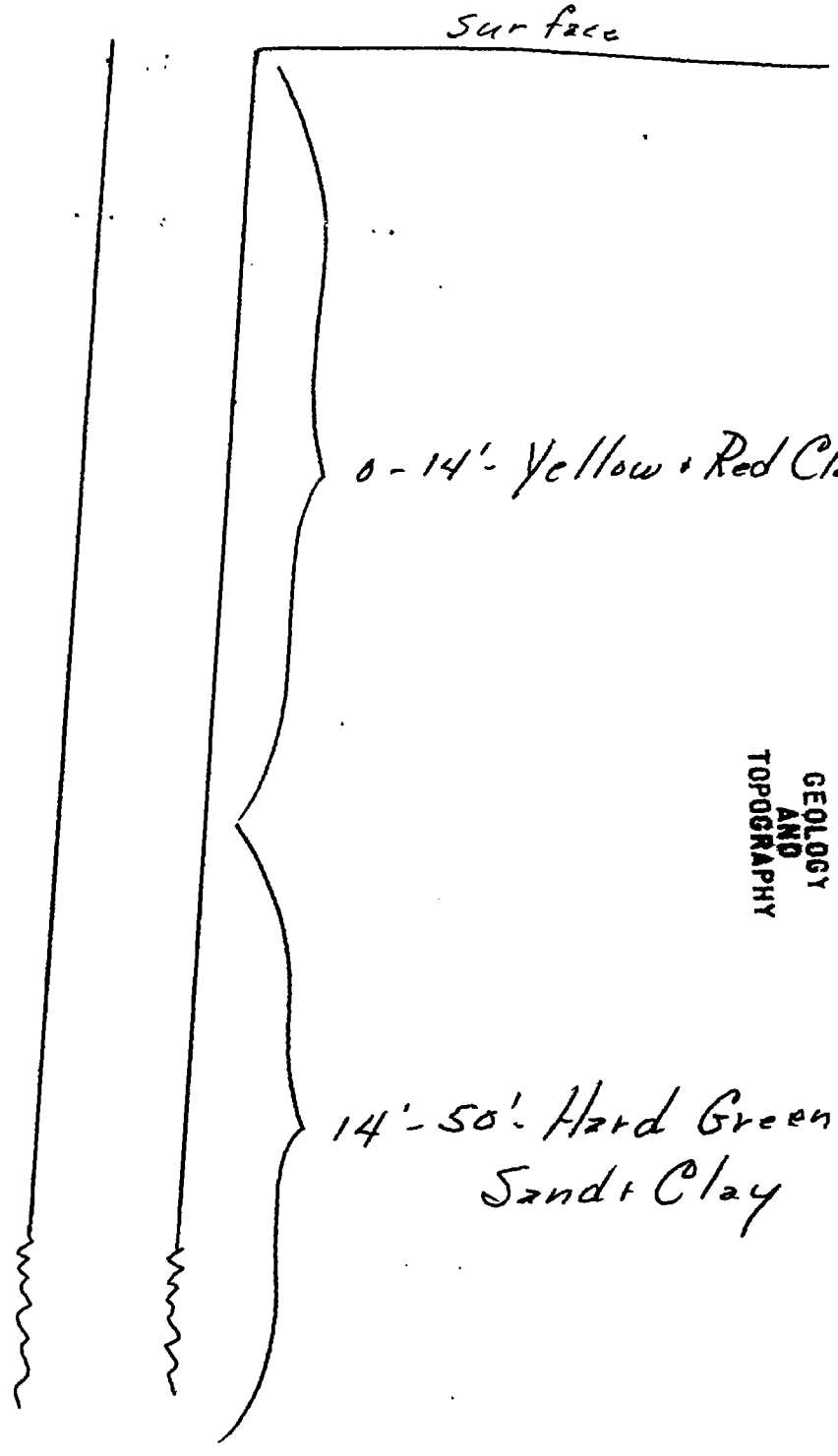
WELL RECORD

29.7110

1. OWNER Redacted - Privacy Act ADDRESS Old Farm Rd., Shrewsbury, N.J.
   Owner's Well No. _____ SURFACE ELEVATION 20 Feet (Above mean sea level)
2. LOCATION Old Farm Rd., Shrewsbury, N.J.
3. DATE COMPLETED July 27, 1973 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 27 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 July 27, 1973 Yield 50 Gallons per minute
   Static water level before pumping 12 Feet below surface
   Pumping level 19 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 Nursery AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER Good 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 Drillers
14. DATA OBTAINED BY Kaye Well Drilling, Inc. Date Aug. 20, 1973

(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.)

29-13-652
29-7110



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GEOLOGY
AND
TOPOGRAPHY

29-13-627

FORM 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-7951
Application No. _____
County _____

29.13.627

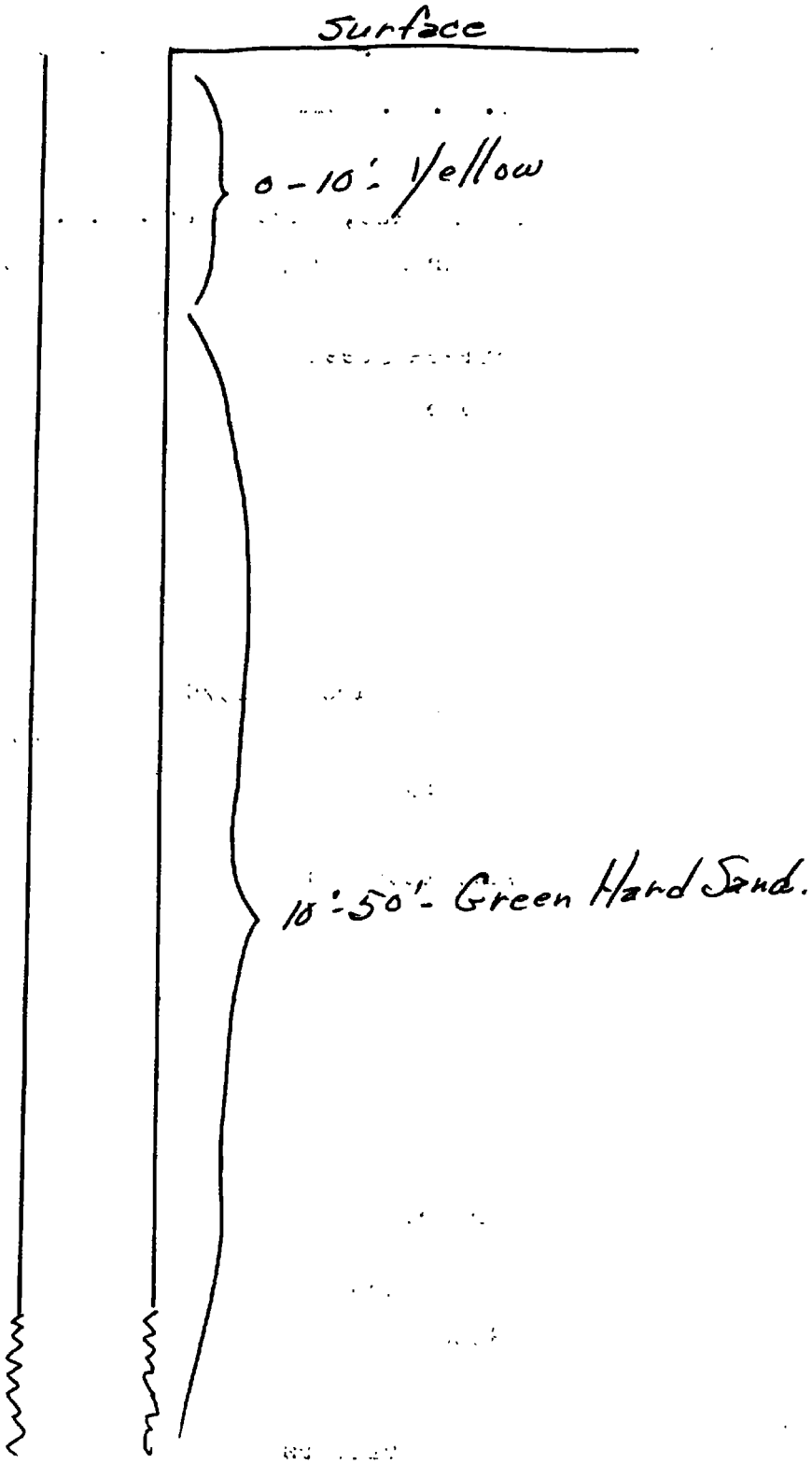
WELL RECORD

29.7951

1. OWNER Redacted - Privacy Act ADDRESS 50 Elm Lane, Shrewsbury, N.J.
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION 50 Elm Lane, Shrewsbury, N.J.
3. DATE COMPLETED March 1974 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 21 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 March 1974 Yield 50 Gallons per minute
   Static water level before pumping 10 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 Gasoline Engine 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 Nursery AMOUNT { Average _____ Gallons Daily / Maximum _____ Gallons Daily }
11. QUALITY OF WATER Good 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 Drillers
14. DATA OBTAINED BY Kaye Well Drilling, Inc. Date May 16, 1974

(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.)

29-13-527
29-MAS1



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GEOLOGY
AND
TOPOGRAPHY

FORM 87

29-14-447

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-8438
Application No. _____
County _____

29.14.AAM

WELL RECORD

29.8438

Redacted - Privacy Act

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 If electric log was made, please furnish copy)
13. SOURCE OF DATA Louis M. Bainbridge + San
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.)

29.14.AAT
29-8438

0 – 43 – BLACK CLAY

43 – 58 – BLACK SAND

29-13-648

Form 2

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Permit No. 29-8785
Application No. _____
County _____

29.13.648
29-8785

WELL RECORD

1. OWNER PHALANX DEVELOPMENT COR ADDRESS BEAVER DAM ROAD.
Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION COLTS NECK LOT 34 - BLOCK 31
3. DATE COMPLETED APR. 28-1977 DRILLER ENGINEERING DRILLING CO.
4. DIAMETER: top 4 inches Bottom 4 inches TOTAL DEPTH 150 Feet
5. CASING: Type PVC Diameter 4 inches Length 140 Feet
6. SCREEN: Type PVC Size of Opening .020 Diameter 4 inches Length 10 Feet
Range in Depth { Top 140 Feet / Bottom 150 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 APR. 28-1977 Yield 30 Gallons per minute
Static water level before pumping 21' 8" Feet below surface
Pumping level 60 feet below surface after 4 hours pumping
Drawdown 38 Feet Specific Capacity 30 Gals. per min. per ft. of drawdown
How Pumped AIR How measured ELEC.
Observed effect on nearby wells NO
9. PERMANENT PUMPING EQUIPMENT:
Type SUB. Mfrs. Name UNKNOWN
Capacity 10 G.P.M. How Driven ELEC. H.P. 1/2 G.P.M. _____
Depth of Pump in well 60 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 500 Gallons Daily / Maximum 600 Gallons Daily
11. QUALITY OF WATER GOOD Sample: Yes — No —
Taste NO Odor NO Color NO Temp. — °F
12. LOG YES Are samples available? —
(Give details on back of sheet or on separate sheet. If electric log was made, attach facsimile copy)
13. SOURCE OF DATA CUTTINGS
14. DATA OBTAINED BY Jay Brown Date APR. 28-1977

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, method of sealing abandoned wells, measurements etc.)

29·13·648

Engineering Drilling Company

29-8785

CASING BLOWS

PROJECT Phalanx Development Corp.
LOCATION Beaver Dam Road Colts Neck. NJ.
BORING Nº. Lot 34 GROUND ELEV. _____ B.M. ELEV. _____

BEGIN BORING: DATE 6/15/87 TIME _____
FINISH BORING: DATE _____ TIME _____
29·13·648
29-8785

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"

DEPTH FROM-TO	DESCRIPTION	EARTH SAMPLE NUMBER	EARTH DEPTH FROM-TO	EARTH SPOON BLOWS PER 6 INCHES	REMARKS
0-7'	Dark brown silty fine Sand				
7-15'	Dark brown medium to coarse Sand with some gravel				
15-30	Brown medium to fine Sand and layers of Clay				
30-46'	Brown coarse to medium fine Sand with layers of Iron Stone				
46-58	Dark gray silty sandy Clay				
58-70	Green silty fine Sandy Clay				
70-82'	Gray silty Clay with some sea shell				
82-89	Dark gray Clay and balck Sand				
89-94	Black medium to fine soft sand with some Clay				
94-103	Lost Water				
103-122	Dark gray silty sandy Clay and bblack sand				
122-135	Greenish gray silty fine Sand with layer of dark Clay				
135-141	Greenish gray fine Sand with Clay and wood				
141-150	Greenish gray medium to fine Sand				
150'	Greenish gray silty fine Sand with wood and Clay				
	Well completed at 150'				
	2 4"x6"x4' Rock screen				
	Pumping level 60'				
	Water level 21'8"				
	30 gallons per minute				

JOB Nº _____ RIG Nº _____ WEATHER _____ TEMP. _____
DRILLER _____ HELPER _____ SHEET _____ OF _____

WELREC 107 0666

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 piece: 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, which was placed on special cards accompanying this form.)

WELREC 107 2019

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 Krb, 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. 5" 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 SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS AND VARIAS
		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'-25' BLUE SILTY CLAY
15		
20		

TOP
SOLID
CAP
SCREEN

CAPPED @ 25'

WELREC 107 0740

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 SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0' – 1.5' BLACK TOP
		1.5' – 4' DARK BROWN SAND WITH TR GRAVEL
5		4' – 10' DARK BROWN SILTY SAND WATER AT 8 FT.
10		10' – 15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY
15		15' – 20' DARK BROWN TR GRAY CLAY
20		20' – 25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.

Top
Solid
Screen

29·13·666
29-11066
29.13.666

PROJECT Fort Monmouth
WELL NO. 6J

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 N/A 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 5 FT DARK BROWN SAND S/M GRAVEL GAS ODOR AT 10 FT.
		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' 0"-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
All Screen
CAP

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	
		1.0'-4.0' DARK BROWN F/M SAND TR M/C GRAVEL	
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 F/M GRAVEL TR/ GRAY CLAY	All Screen →
15			
20			

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. 5½ 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 SURFACE	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'-25' BLUE SILTY CLAY
15		
20		

TOP
SOLID
CAPPING
SCREEN

CAPPED @ 25'

WELREC 107 0740

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 SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0'–1.5' BLACK TOP
		1.5'–4' DARK BROWN SAND WITH TR GRAVEL
5		4'–10' DARK BROWN SILTY SAND WATER AT 8 FT.
10		10'–15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY
15		15'–20' DARK BROWN TR GRAY CLAY
20		20'–25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.

Top
Solid
Casing
Screen

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 NA 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'-20' DARK BROWN M/C SAND TR SILT
20		

TOP
SCREEN
BOTTOM

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 SUR FACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS (MAJOR VARIATIONS)
		0.0' - 1.0' BLACK TOP
		1.0' - 1.5' 8"-0 STONE
		1.5' - 6' SAND (Yellow) and F/M 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
All Screen
CAP

29.13.666
29-11068

29.13.666

PROJECT FORT HONMOUTH
WELL NO. 6

HANDEX CORPORATION
BORING LOG

DATE START: 2-27-81
DATE FINISH: 2-27-81

LOCATION FORT HONMOUTH
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	
		1.0'-4.0' DARK BROWN S/M SAND TR M/C GRAVEL	
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	TOP All SCREEN →
15			
20			CAP

29-11063 thru

Form DWR-138
11/80

FOR OBSERVATION PURPOSES ONLY

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29.13.666

WELL RECORD

PERMIT NO. 29-11068

APPLICATION NO. _____

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. 5" 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 SURFACE	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'-25' BLUE SILTY CLAY
15		
20		

Top
Solid
Casing
Screen

CAPPED @ 25'

WELREC 107 0740

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 SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS (MODIFIED)
		0.0' – 1.5' BLACK TOP
		1.5' – 4' DARK BROWN SAND WITH TR GRAVEL
5		4' – 10' DARK BROWN SILTY SAND WATER AT 8 FT.
10		10' – 15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY
15		15' – 20' DARK BROWN TR GRAY CLAY
20		20' – 25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.

Top
Solid
Screen

29·13·666
29-11066
29.13.666

PROJECT FORT MONMOUTH
WELL NO. 6J

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 N/C 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 5 FT DARK BROWN SAND S/M GRAVEL GAS ODOR AT 10 FT.
		15'-20' DARK BROWN M/C SAND TR SILT
20		

TOP
SCREEN

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 SUR FACE	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
All Screen
CAP

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' BANK TOP	Top All Screen →
		1.0'-4.0' DARK BROWN S/M SAND TR M/C GRAVEL	
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

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. _____

COUNTY Monmouth

29.13.666

WELL RECORD

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. 5" 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 SURFACE	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
Cement
Screen →

CAPPED @ 25'

WELREC 107 0740

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
		1.5'–4' DARK BROWN SAND WITH TR GRAVEL
5		4'–10' DARK BROWN SILTY SAND WATER AT 8 FT.
10		10'–15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY
15		15'–20' DARK BROWN TR GRAY CLAY
20		20'–25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.

Top
Solid
Screen

29·13·666
29-11066
29.13.666

PROJECT Fort Monmouth
WELL NO. 6J

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 NA 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'-20' DARK BROWN M/C SAND TR SILT
20		

Top
SCREEN
Bot

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' 0"-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
All Screen
CAP

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 All Screen → CAP
		1.0'-4.0 DARK BROWN S/M SAND TR M/C GRAVEL	
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			

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. _____

COUNTY Monmouth

29.13.666

WELL RECORD

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 Krb, 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. 5" 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 SURFACE	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'-25' BLUE SILTY CLAY
15		
20		

TOP
Solid
Casing
Screen →

CAPPED @ 25'

WELREC 107 0740

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 SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0' – 1.5' BLACK TOP
		1.5' – 4' DARK BROWN SAND WITH TR GRAVEL
5		4' – 10' DARK BROWN SILTY SAND WATER AT 8 FT.
10		10' – 15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY
15		15' – 20' DARK BROWN TR GRAY CLAY
20		20' – 25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.

Top
Solid
Casing
Screen

29·13·666
29-11066
29.13.666

PROJECT FORT MONMOUTH
WELL NO. 6J

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 ✓ 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 5 FT DARK BROWN SAND S/M GRAVEL GAS ODOR AT 10 FT.
		15'-20' DARK BROWN M/C SAND TR SILT
20		

TOP
SCREEN
BOTTOM

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 SUR FACE	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
Fill
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

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. 5" 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 SURFACE	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'-25' BLUE SILTY CLAY
15		
20		

TOP
Solid
Screen →
CAPPED @ 25'

WELREC 107 0740

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 SURFACE	SAMPLE NO DEPTHS	IDENTIFICATION OF SOILS REMARKS
		0.0'–1.5' BLACK TOP
		1.5'–4' DARK BROWN SAND WITH TR GRAVEL
5		4'–10' DARK BROWN SILTY SAND WATER AT 8 FT.
10		10'–15' DARK BROWN SILTY SAND M/C TR GRAVEL – CLAY
15		15'–20' DARK BROWN TR GRAY CLAY
20		20'–25' GRAY CLAY TR M/C SANDY SILT. TR GRAVEL.

Top
Soil
Cement
Screen

29·13·666
29-11066
29.13.666

PROJECT FORT MONMOUTH
WELL NO. 6J

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 SUR FACE	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 5 FT DARK BROWN SAND S/M GRAVEL GAS ODOR AT 10 FT.
		15'-20' DARK BROWN M/C SAND TR SILT
20		

TOP
SCREEN

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 F/M 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
All Screen
CAP

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 All Screen → CAP
		1.0'-4.0 DARK BROWN S/M SAND TR M/L GRAVEL	
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			

29·13·653

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-11771

APPLICATION NO. _____

COUNTY _____

29.13.653

WELL RECORD

29.11771

1. OWNER [Redacted - Privacy Act] ADDRESS 49 Gooseneck Rd.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Ocean Port, Monmouth, Lot-74 Block-29

3. DATE COMPLETED 1-19-82 DRILLER Engineering Drilling

4. DIAMETER: Top 4 inches Bottom 3x5 inches TOTAL DEPTH 190' Feet

5. CASING: Type PVC Diameter 4 Inches Length 180 Feet

6. SCREEN: Type PVC Size of Opening 20 Diameter 3x5 Inches Length 10 Feet

Range in Depth { Top 180 Feet / Bottom 190 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 1-19-82 Yield 60 Gallons per minute

Static water level before pumping 6'8" Feet below surface

Pumping level 60' feet below surface after 4 hours pumping

Drawdown 31' 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 Injection 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 Cutt Logs

14. DATA OBTAINED BY Ken DiFranco 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.)

29·13·664

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-11772

29·13·664

APPLICATION NO. _____

COUNTY _____

WELL RECORD

Redacted - Privacy Act 29·11772

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 Ken Kutawa 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.)

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. 29-12553

APPLICATION NO. 29.14.447

COUNTY Monmouth

USE monitor 29.14.447
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
5'		2'-3'6" Tan medium to fine SAND, little+ silt, slight fuel odor at 3'6"
		3'6"-10' FILL--Black cinders, wood, glass, etc.
10'		
15'		

Well Screen

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

pk

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.

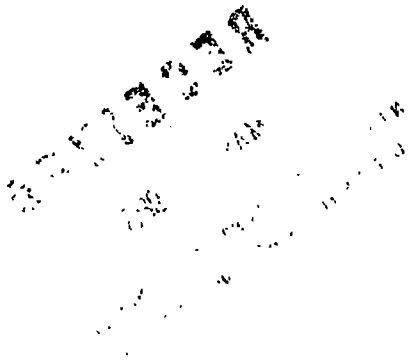
REASON FOR ABANDONMENT: well was removed when contractor removed the waste oil tank. It was within the area of the excavation.

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. 29.1AAA17

COUNTY Monmouth 29.1259A

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

29-14447

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. 29.1AAAA

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.

Handex

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
15'				NOTE: 2'6" of gasoline in well 1 hour after completion, continued to recover after bailing

29·13·635

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29·13·635

BORING LOG

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
15'				NOTE: 0.04' of gasoline in well 20 minutes after completion, 0.5' of gasoline in well 2 hours later.

Handex 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	
				3'-6' Grey green micaceous SAND and CLAY, moist, slight gasoline odor
5'	S-2	5'-7'		
	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'		6'6"-10' Brown medium SAND and CLAY, no odors
10'				
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' 4'-7'6" Grey medium SAND, some+ clay, saturated with gasoline 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
10'				
15'				

29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29·13·635

BORING LOG

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
				1'6"-5' Dark green SAND and CLAY
5'			20 Slot well screen	
				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

29·13·635

BORING LOG

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

29·13·635

BORING LOG

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'		
				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'				

20 slot well screen

Handex 29·13·635

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29·13·635

BORING LOG

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'	20 Slot well screen	3'-5' Brown SAND and CLAY, organic odor at 4'
5'	S-2	5'-7'		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

29·13·635

BORING LOG

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

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29·13·635

BORING LOG

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'		8'-10' Tight brown medium SAND and CLAY
10'				
				NOTE: Fast 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. 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'				

29.13635

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 BWR- 138
10/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-13696

APPLICATION NO. _____

29-13-635

WELL RECORD

COUNTY Monmouth

FOR MONITORING ONLY

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) 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 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

New England Pollution Control Co, Inc
7 Edgewater Place
Norwalk, CT 06855

29-13696
29.13.635
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 Feet (Above mean sea level) datum)
2. LOCATION Citgo Station - Branch Ave. Little Silver, NJ
3. DATE COMPLETED 5/15/84 DRILLER NEPCCO
4. DIAMETER: Top 12 inches Bottom 12 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. BEAHAN } 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.

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913672

PERMIT NO. 2914168

APPLICATION NO. ✓

COUNTY Monmouth

FOR IRRIGATION PURPOSES ONLY

WELL RECORD

1. OWNER Redacted - Privacy Act BLDR. ADDRESS HWY 35

Owner's Well No. #1 SURFACE ELEVATION 60 (Above mean sea level) Feet

2. LOCATION Lot: 9 Block: 70.1 Municipality: Shrewsbury Twp.

3. DATE COMPLETED SEPT 84 DRILLER Mich. Gunther Well & Pump Rep.

4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 184 Feet

5. CASING: Type BLACK STEEL Diameter 4 Inches Length 165 Feet

6. SCREEN: Type STAINLESS Size of Opening 16/14 Diameter 3"ID Inches Length 11 Feet

Range in Depth { Top 165-170 Feet ~5' / Bottom 176-182 Feet ~6' } Geologic Formation WENONAH

Tail Piece: Diameter 3"ID Inches Length 2 Feet

7. WELL FLOWS NATURALLY — Gallons per minute at — Feet above surface

Water rises to — Feet above surface

8. RECORD OF TEST: Date SEPT 84 Yield 40 Gallons per minute

Static water level before pumping 5 Feet below surface

Pumping level 70 feet below surface after 4 hours pumping

Drawdown 65 Feet Specific Capacity — Gals. per min. per ft. of drawdown

How pumped AIR COMPRESSOR How measured WATER LEVEL TESTER

Observed effect on nearby wells NONE

9. PERMANENT PUMPING EQUIPMENT:

Type SUBMERSIBLE Mfrs. Name STARITE

Capacity 35 G.P.M. How Driven ELECTRIC H.P. 3 R.P.M. 3450

Depth of Pump in well 110 Feet Depth of Footpiece in well — Feet

Depth of Air Line in well — Feet Type of Meter on Pump — Size — Inches

10. USED FOR IRRIGATION - SEASONAL AMOUNT { Average 10,000 Gallons Daily / Maximum 15,000 Gallons Daily }

11. QUALITY OF WATER GOOD Sample: Yes — No ✓

Taste — Odor NONE Color — Temp. 54 °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 ROTARY DRILL

14. DATA OBTAINED BY X Michael Gunther Date 9/84

(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.)

LOG

29.13.6M2
29.1416B

0-16 FT = BROWN HARD CLAY
16-20 FT = GREEN HARD MARL
20-29 FT = HARD GREEN ROCK
29-45 FT = GREEN ROCKY CLAY
45-75 FT = GREEN TO GREY SANDY CLAY
75-100 FT = HARD DARK GREY CLAY GRITTY
100-118 FT = GREY DARK CLAY & BLACK PEPPER
118-133 FT = LITER GREY CLAY & SHELLS
133-140 FT = HARD CLAY, FOSSILS, SHELLS & GRAVELS
140-149 FT = CONSOLIDATED, GRAVEL & PEPPER SAND (MT. LAUREL)
149-165 FT = GREY MACIOUS SILTY CLAY
165-170 FT = COARSE SALT & PEPPER SAND - MACIOUS - (WENONAH)
170-176 FT = SILTY MACIOUS CLAY
176-182 FT = FAIRLY COARSE GREY SALT & PEPPER SAND - CLAY STREAKS (WENONAH)
182-184 = GREY CLAY

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 Monthouth

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

With Riser&Packer 9'6"

Geologic Formation Englishtown/

Riser: 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 1000/2000. Gallons Daily
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 &Silt.
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.

29.13.647

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29.13.647

BORING LOG

Well No. 1 Application No. _____ Permit No. ~~29-14593~~

Date Drilled 1-25-85 County Monmouth Use monitor

Location Route 35 southbound, Eatontown, New Jersey

Owner Amoco Oil Company Address Carteret, New Jersey

Drilling Method augers Sampling Method cuttings

Hole Diameter 8" Total Depth 16'6"

Casing:

Type PVC Schedule 40 Diameter 4" Length 1'6"

Screen:

Type PVC Schedule 40 Slot 20 Diameter 4" Length 15'

Gravel Pack Size #1 Casing Seal bentonite

Static Water Level 12' Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-1' FILL--asphalt and roadstone
10'			Well Screen	1'-17'6" Green MARL (clayey silt/black fine sand)
20'				
30'				

29.13.647

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29.13.647

BORING LOG

Well No. 2 Application No. _____ Permit No. [redacted]
Date Drilled 1-25-85 County Monmouth Use monitor
Location Route 35 southbound, Eatontown, New Jersey
Owner Amoco Oil Company Address Carteret, New Jersey
Drilling Method augers Sampling Method cuttings
Hole Diameter 8" Total Depth 16'6"

Casing:
Type PVC Schedule 40 Diameter 4" Length 1'6"

Screen:
Type PVC Schedule 40 Slot 20 Diameter 4" Length 15'
Gravel Pack Size #1 Casing Seal bentonite
Static Water Level 12' Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-1' FILL--asphalt and roadstone
10'			Well Screen	1'-17'6" Green MARL (clayey silt/black fine sand)
20'				
30'				

29.13.647

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29-13-647

BORING LOG

Well No. 3 Application No. _____ Permit No. 29-14595
Date Drilled 1-25-85 County Monmouth Use monitor
Location Route 35 southbound, Eatontown, New Jersey
Owner Amoco Oil Company Address Carteret, New Jersey
Drilling Method augers Sampling Method cuttings
Hole Diameter 8" Total Depth 16'6"

Casing:
Type PVC Schedule 40 Diameter 4" Length 1'6"

Screen:
Type PVC Schedule 40 Slot 20 Diameter 4" Length 15'
Gravel Pack Size #1 Casing Seal bentonite
Static Water Level 12' Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-1' FILL--asphalt and roadstone
10'			Well Screen	1'-16' Green MARL (clayey silt/black fine sand)
20'				
30'				

29.13.647

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751 (201) 536-8500

29.13.647

BORING LOG

Well No. 4 Application No. _____ Permit No. [redacted]
Date Drilled 1-25-85 County Monmouth Use monitor
Location Route 35 southbound, Eatontown, New Jersey
Owner Amoco Oil Company Address Carteret, New Jersey
Drilling Method augers Sampling Method cuttings
Hole Diameter 8" Total Depth 16'6"

Casing:
Type PVC Schedule 40 Diameter 4" Length 1'6"

Screen:
Type PVC Schedule 40 Slot 20 Diameter 4" Length 15'
Gravel Pack Size #1 Casing Seal bentonite
Static Water Level 12' Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0'-1' FILL--asphalt and roadstone
10'			Well Screen	1'-17' Green MARL (clayey silt/black fine sand)
20'				
30'				

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

29.14980

COUNTY Monmouth

Redacted - Privacy Act

1. OWNER [redacted] ADDRESS 126 Hockhockson Rd.

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 63 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 1/1 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

29.13.6.8.9

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-15008

APPLICATION NO. _____

COUNTY Monmouth

29.13.689

WELL RECORD

29-15008

MODERATE DRIVE MGMT CO

1. OWNER Eatontown Senior Housing ADDRESS 55 Wyckoff Rd, Eatontown

Owner's Well No. _____ SURFACE ELEVATION 30 Feet (Above mean sea level)

2. LOCATION Lot # 71 Block # 2 Township: Eatontown

3. DATE COMPLETED 6/19/85 DRILLER (~~David~~) (Norman) Primost

4. DIAMETER: Top 10⅝ inches Bottom _____ inches TOTAL DEPTH 192 Feet

5. CASING: Type PVC Sched 40 Diameter 6" inches Length 177 Feet

6. SCREEN: Type PVC Size of Opening .020 Diameter 6" inches Length 10 Feet

Range in Depth { Top _____ Feet / Bottom _____ Feet Geologic Formation Kpw (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 (Air Lift w/100 cfm)

8. RECORD OF TEST: Date 6/19/85 Yield 30 Gallons per minute

Static water level before pumping 25 Feet below surface

Pumping 42 gpm/163 feet below surface after 2 hours pumping

Drawdown 138 Feet Specific Capacity 0.3 Gals. per min. per ft. of drawdown

How pumped Temporary Sub How measured Container

Observed effect on nearby wells None

9. PERMANENT PUMPING EQUIPMENT:

Type Submersible Mfrs. Name GOULDS

Capacity 45 G.P.M. How Driven Electric H.P. 5 R.P.M. 3450

Depth of Pump in well 163 Feet Depth of Footpiece in well _____ Feet

Type of Meter on Pump _____ Size _____ Inches

10. USED FOR IRRIGATION USE ONLY ~~DOMESTIC (New) (Replace)~~ ~~HEATING/COOLING~~ (Supply) ~~(Recharge)~~ { Average _____ Gallons Daily / Maximum _____ Gallons Daily

11. QUALITY OF WATER V-Good Sample: Yes X 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 Pickwick Well Drilling. DRILLER [signature]

P.O. Box 6
Farmingdale, N.J. 07727

Date 8/10/85

(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.)

29.13.689
29.15008

Log

0-15 Brownish-red med sand
15-30 Med Brown sand
30-35 Greenish-gray sandy clay
35-65 Gray clay w/ black sand & shells
65-105 Dark green clay w/ gray clay
105-165 Gray clay w/ black sand & shells
165-190 Black & gray, fine & med sand w/ shells & gray clay & green pebbles
190-195 Gray clay

RECEIVED
AUG 12 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: 2913634

PERMIT NO. ~~2916628~~

APPLICATION NO. _____

29-18634

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 }
    28° OE WL
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 Owner~~ Driller
14. DATA OBTAINED BY LOUIS ORTEN 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.) W.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	DENSITY OR CONSIST. (FT.)	PROFILE CHANGE DEPTH (FT.) ELEV.	IDENTIFICATION OF SOILS REMARKS
0		S-1							
		0-2'4"	Auger						Dark Brown Sandy Silty Clay.
		S-2						2'-4"	
		2'4-6'6"							Olive Gray Silty Clay Trace Of Fine Sand.
		S-3							
		6'6"-11'							
		S-4						6'-6"	
		11'-14'							Red Brown Silty Clay Little Fine Sand Trace Of Gravel.
10							4"x10' Screen	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 6-18-96 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
   FOR OBSERVATION PURPOSES ONLY
   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 Cloudy 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 Ohlen Date 6-18-96

(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 FT.	BLOWS PER 6" ON SAMPLER 0-6 / 6-12 / 12-18 / 18-24	DENSITY OR CONSIST CONDITION	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS REMARKS
0		S-1		4"x10' Screen		
		1'-3'			1'	Brown Sand Silt Gravel (Fill)
		S-2				
		3'-6'			3'	Gray Silty Clay Trace Of Fine Sand.
		S-3				
10		6'-9'			6'	Red Silty Clay Trace Of fine Sand (Wet) (No Product Odor)
		S-4				
		9'-12'		12'	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 Pl	Thread 1/4"
SILT & CLAY	low Pl.	Thread 1/8"
CLAY & SILT	medium Pl.	Thread 1/16"
Silty CLAY	high Pl.	Thread 1/32"
CLAY	very high Pl.	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

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913634
2916630

PERMIT NO. _____

APPLICATION NO. Monmouth

COUNTY _____

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 _____
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

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 N.J.

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. 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. DEPTHS CLK. PV.	BLOWS PER 6" OR SAMPLED FOOT 0-6	6-12	12-18	18-24	DENSITY OR CONSIST. INDICES	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS REMARKS
0		S-1							Brown Silty Clay Trace Sand And Gravel.
		0-6'						6'	
		S-2							Dark Green Silty Clay With Iron Stringers
		6'-12'						12'	
10							4"x10' Screen		
							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 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
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 17404
Atlas Sheet Coordinates 29 : 13 : 689

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address Redacted - Privacy Act
City _____ State NJ Zip Code 07753

WELL LOCATION - If not the same owner please give address. Owner's Well No. _____
Address Orchard Street
County Monmouth Municipality EATONTOWN BORO Lot No. 26 Block No. 72

WELL USE Domestic Status _____

WATER USE Potable Average _____ gals. daily Maximum _____ gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 11 / 14 / 86
Depths: Total 230 ft. Finished 230 ft.
Diameter: Top 4 in. Bottom 4 in.
Land Surface Elevation at well 36 ft. Elevation was determined using Topography Map # 29
Casing Height (stick-up) above land surface 1.75 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL Screens: Note Slot Size(s)
Casing 1			4"	PVC
Casing 2				
Casing 3				
Screen 1	205	20'	4"	.015" PVC
Screen 2				
Tail Piece				
Gravel Pack				
Grout				
Grouting Method				

WELL FLOWS NATURALLY 100 gals. per min. at _____ ft. above the land surface.
Water rises to _____ ft. above the land surface.

RECORD OF TEST Test Date 11 / 14 / 86
Static water-level before pumping 49 ft. below land surface. Water level 200 ft. below land surface after 1 hrs. of pumping.
Water level was measured using _____ Drawdown 151 ft.
Discharge rate measured using _____ Discharge Rate 100 gals. per min.
Well was pumped using Air Specific Capacity 1.51 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 Pump Type Submersible
Mfrs. Name Goulds Model _____
CAPACITY: Pump delivers 10 GPM at _____ PSI pressure.
POWER: 3/4 HP at 3450 RPM Power Source Electricity
DEPTHS: Pump _____ ft. Footpiece _____ ft. Airline _____ ft.
FLOW METER: Model _____ installed on _____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor TIGER CONSTRUCTION CORP.
Address 806 Highway 71, P.O. Box 395
City Spring Lake Heights State N.J. Zip Code 07762
Name of Driller Dennis B. Davis License No. 19871

Signature of Contractor Tiger Construction Service Corp Date 12 / 3 / 86

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

29.13.689
WELL RECORD
29.17 ADA

Well Permit No. 29-17404

29.13.689

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 _____

Aquifer/Geo. Fm. _____

LOG

0-75 Silty Fine Glauconitic Clay Silty Sand w/ interbedded thin lenses of clay

75-125 Silty, Clayey Glauconitic Sand (90% Glauconitic)

125-225 Light Green Very Fine to Fine Weathered Quartz Sand w/ Glauconitic Sand + Shell (Wenonah-Mt. Laurel)

225-230 Gray Glauconitic 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 ____ / ____ / ____

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Form DWR-13E
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

2913626
PERMIT NO. 29 17657

29.13.62C

APPLICATION NO _____

COUNTY _____

WELL RECORD

29.17657

Redacted - Privacy Act

1. OWNER _____ ADDRESS New Brunswick

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Lot 28 30 Blk 902-12 Dover

3. DATE COMPLETED 12/8/86 DRILLER Wm Endres

4. DIAMETER: Top 3 inches Bottom _____ inches TOTAL DEPTH 20 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 Driller

14. DATA OBTAINED BY Wm Endres Date 12/8/86

(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.)

0 - 1 Sw/Sm/Gw

1 - 8 Sp/Sm

8 - 20 Sw/Sm

Water 4' - 6"

29.13.626
29.17657

Dec 23 '86

DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

Form DWR-138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-17918
APPLICATION NO. —

WELL RECORD

29 13629
29-17918

COUNTY MONMOUTH

1. OWNER c/o JVD ENGINEERING INC. ADDRESS 2301 STATE HWY #37 E TOMS RIVER, NJ
   Owner's Well No. — SURFACE ELEVATION 25' ± est. Feet (Above mean sea level)
2. LOCATION CLINTON AVE., EATONTOWN N.J. SITE #1
3. DATE COMPLETED 2-8-87 DRILLER TED GILES
4. DIAMETER: Top 6 inches Bottom 6 inches TOTAL DEPTH 20 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 SOIL BORING AMOUNT { Average — Gallons Daily / Maximum — Gallons Daily }
11. QUALITY OF WATER — Sample: Yes X No —
    Taste — Odor — Color — Temp. — °F.
12. LOG SEE BACK OF SHEET Are samples available? YES
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA BY DRILLER ON JOB
14. DATA OBTAINED BY TED GILES Date 2-8-87

(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.)

SOIL BORING
SITE #1

29.13.629
29.17918

DEPTH	DESCRIPTION
0-4"	PT
4'-2'6"	SM
2'6"-6'	SM, ML
6'-7'	SP, SM, ML
7'-9'	SM, SP
9'-10'	SM
10'-11'	SM, ML
11'-13'	SM, SP
13'-16'	SM
16'-17'	SM, ML
17'-20'+	SM, ML, SC

FEB 11 '87

▽ AT 11'

Form DWR- 138
11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-17919

29.13.629

WELL RECORD

29.17919

APPLICATION NO. 291362

COUNTY MONMOUTH

1. OWNER c/o JVD ENGINEERING INC ADDRESS 2301 STATE HWY #37E TOMS RIVER, NJ
   Owner's Well No. — SURFACE ELEVATION 25± MSL Feet (Above mean sea level)
2. LOCATION CLINTON AVE, EATONTOWN, N.J. SITE #7
3. DATE COMPLETED 2.8.87 DRILLER TED GILES
4. DIAMETER: Top 6 inches Bottom 6 inches TOTAL DEPTH 20 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 SOIL BORING AMOUNT { Average — Gallons Daily; Maximum — Gallons Daily }
11. QUALITY OF WATER — Sample: Yes X No —
    Taste — Odor — Color — Temp. — °F.
12. LOG SEE BACK OF SHEET Are samples available? YES
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)
13. SOURCE OF DATA BY DRILLER ON JOB
14. DATA OBTAINED BY TED GILES Date 2-8-87

(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.)

SOIL BORING #
SITE #7

29.13.629
29.17919

DEPTH	DESCRIPTION
0-2"	LEAVES, PT
2"-1'	SP, SM
1'-2'6"	SC, SM
2'6"-4'	SC, SM, ML
4'-6'	SC, SM
6'-7'6"	SP, SM
7'6"-10'	SP, SM, ML
10'-12'	SP, SM
12'-16'	SP, SM, ML
16'-18'	SM, SC
18'-20'	SP, SM, SC

FEB 11 '87

∇ AT 12'

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings)
APPLICATION NO. ____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB #01 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 7-30-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 10 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A Mfrs. Name -----
   Capacity - G.P.M. How Driven --- H.P. - R.P.M. -
   Depth of Pump in well - Feet Depth of Footplace in well - Feet
   Depth of Air Line in well - Feet Type of Meter on Pump - Size - Inches
10. USED FOR Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings)
APPLICATION NO. _____
COUNTY MONMOUTH
COORD. 29.13.645

E

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB#02 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 7-31-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 12' Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings) 9
APPLICATION NO. _____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB#03 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 7-31-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 12 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

E

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings)
APPLICATION NO. ____
COUNTY MONMOUTH
COORD. 29.13.645

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB #04 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 7-31-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 12 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings)
APPLICATION NO. _____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB #05 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 8-3-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 6 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings) 9
APPLICATION NO. ____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB #06 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 8-3-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 6 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings) 4
APPLICATION NO. _____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB#07 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 8-3-87 DRILLER George Shearin
4. DIAMETER: Top 6 inches Bottom 8 inches TOTAL DEPTH 12 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings) 9
APPLICATION NO. _____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB#8 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 8-3-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 12 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 2919007-0 (10 Test Borings)
APPLICATION NO. ____
COUNTY MONMOUTH
COORD. 29.13.6 45

WELL RECORD

1. OWNER The Red Bank Register ADDRESS 1 Register Plaza, Shrewbury, NJ 07701
   Owner's Well No. TB #09 SURFACE ELEVATION --- Feet (Above mean sea level)
2. LOCATION Same-1 Register Plaza, Shrewbury, NJ 07701
3. DATE COMPLETED 8-4-87 DRILLER George Shearin
4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 25 Feet
5. CASING: Type N/A Diameter - Inches Length - Feet
6. SCREEN: Type N/A 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 N/A 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 N/A 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 Test Borings AMOUNT { Average - Gallons Daily / Maximum - Gallons Daily }
11. QUALITY OF WATER N/A 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 Drillers Well Log
14. DATA OBTAINED BY Moretrench American Corporation Date 12/31/92

(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.)

Form DWR-138A
10/87

#1 Test Boring

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

COORD 27-136.37
PERMIT NO. 29196 69-8
APPLICATION NO. _____
COUNTY _____

FOR MONITORING PURPOSES ONLY

29.13.637

WELL RECORD 29.19669-8

Redacted - Privacy Act

1. OWNER _____ ADDRESS Hanover Hanover NJ
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION (or Todd & Alexander (Fort Monmouth)
3. DATE COMPLETED 12/14/87 DRILLER William Anderson
4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 20 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 Driller on Site
14. DATA OBTAINED BY Wm Anderson Date 12/11/87

(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.)

Log Over

Log.

G-10-5e

Water 9'

29.13.637
29.19669-8

Dec 14 '87

FOR MONITORING PURPOSES ONLY

#2 Test Boring

Form DWR-138A
10/87

COORD: 29.136.37

PERMIT NO 2919670-1

APPLICATION NO. _____

COUNTY _____

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29.13.637

WELL RECORD 29-19670-1

Redacted - Privacy Act

1. OWNER _ ADDRESS Sandy Hook N.J.

Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Fort Monmouth

3. DATE COMPLETED 12/11/87 DRILLER William Erickson

4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 15' 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 Driller on Site.

14. DATA OBTAINED BY Wm Erickson Date 12/11/87

(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.)

Log on

Fig

0-10 Sc.

Water - 8'

29.13.637
29.1961-1

Dec 14 '87

Form DWR-138A
10/87

FOR MONITORING PURPOSES ONLY

#3 Test Boring

COORD 29.13 6.37

PERMIT NO 29967-0

APPLICATION NO. _____

COUNTY _____

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

29.13.637

WELL RECORD 29.19671-0

Redacted - Privacy Act

1. OWNER _____ ADDRESS Sandy Hook Harbor NJ
   Owner's Well No. 1 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Port Monmouth
3. DATE COMPLETED 12/11/87 DRILLER William Erickson
4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 10 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 Written on Site
14. DATA OBTAINED BY William Erickson Date 12/11/87

(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.)

Log cover

Log

0 – 10 Sa

Water 5' 6"

29.13.637

29.19671-0

DEC 14 '07

#4 test Boring

Form DWR-138A
10/87

FOR MONITORING PURPOSES ONLY

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

COORD: 29.13C.37
PERMIT NO: 29/9672-8
APPLICATION NO. _____
COUNTY _____

29.13.637

WELL RECORD 29.19672-8

Redacted - Privacy Act

1. OWNER _____ ADDRESS Tinton Harbor N.J.
   Owner's Well No. 4 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Fort Monmouth
3. DATE COMPLETED 12/11/87 DRILLER William Anderson
4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 20' 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 Driller & Site
14. DATA OBTAINED BY Wm Anderson Date 12/11/87

(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.)

Log Over

WELREC 107 0609

Fig

0 – 11 Sc

11 – 20 Gl

Water 4'

29.13.631

29.19.612-8

Dec 14 '87

#5 Test Boring

Form DWR-138A
10/87

FOR MONITORING PURPOSES ONLY

COORD. 29136.37

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29.19673-6

APPLICATION NO. _____

29.19.6377

COUNTY _____

WELL RECORD

Redacted - Privacy Act

29.19673-6

1. OWNER ADDRESS Sandy Hook NJ.

Owner's Well No. ✓ SURFACE ELEVATION _____ Feet (Above mean sea level)

2. LOCATION Fort Monmouth

3. DATE COMPLETED 12/11/87 DRILLER William Endresson

4. DIAMETER: Top 3 inches Bottom 3 inches TOTAL DEPTH 20 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 Driller on Site

14. DATA OBTAINED BY Wm Endresson Date 12/11/87

(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.)

Log Over

Log

29.13.637
29 19673-6

0 – 8 · SC
8 - 13 - SW/SM/GW
13 15 - SP/SM
15 - 17 · SW/SM
17 – 18 · SC
18 – 20 · OH
Water 4' 9"

DEC 14 '67

DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-20626-0
APPLICATION NO. _____ E
COUNTY _____
COORD. 29: 13.676
29.20626-0

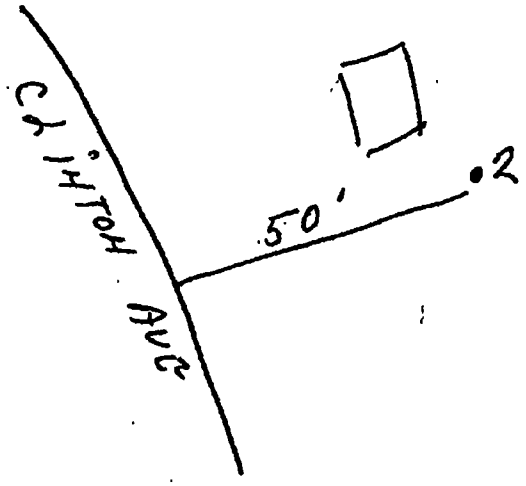
WELL RECORD

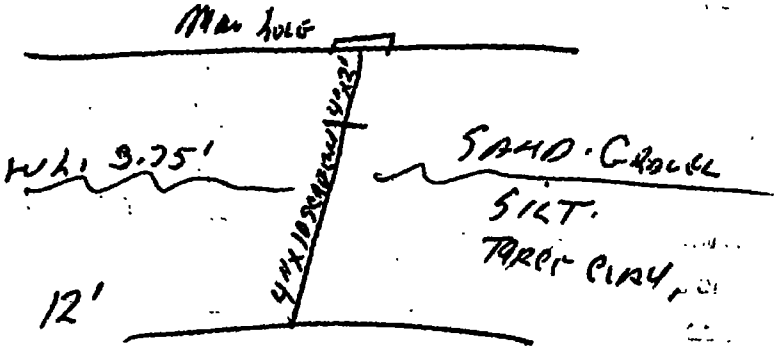
1. OWNER Hildebrandt's Cabinets ADDRESS 105 Clinton Ave.
Owner's Well No. 2 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Eatontown N. J. 07724
3. DATE COMPLETED 6-5-88 DRILLER Diamond Drilling Co, Inc.
4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 12' Feet
5. CASING: Type PVC 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 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 O Thru's Yield _____ Gallons per minute
Static water level before pumping 3.75' 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 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 Lou Ontko Date 6-5-88

(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.)

YR

29·13·6M6
29 20G26





DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-20627
APPLICATION NO. _____
COUNTY _____
COORD. 29-13-676

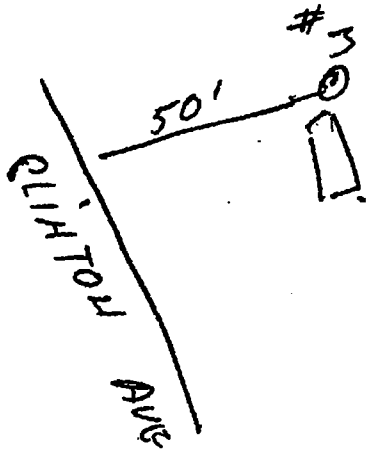
WELL RECORD

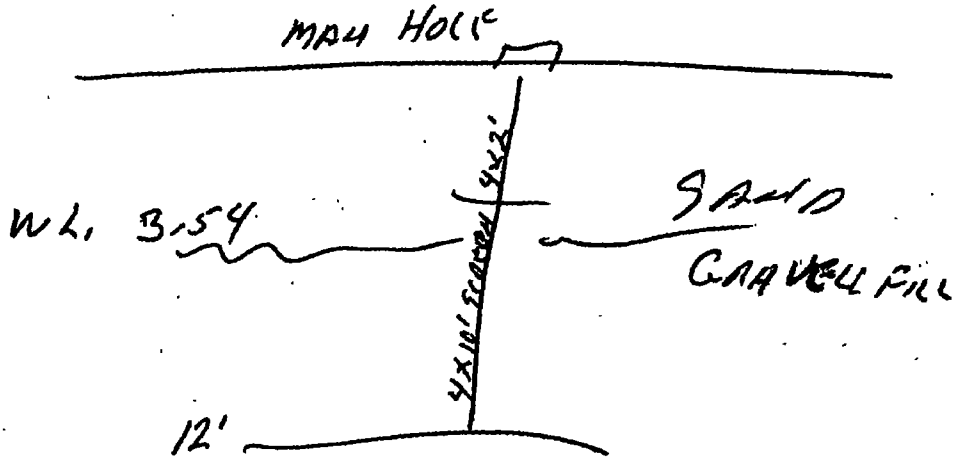
1. OWNER Hudebrande Cabinets ADDRESS 105 Clinton Ave.
   Owner's Well No. 3 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Eatontown N.J. 07724
3. DATE COMPLETED 6-5-88 DRILLER Diamond Drilling Co Inc
4. DIAMETER: Top 4 inches Bottom 4 inches TOTAL DEPTH 12' Feet
5. CASING: Type PVC 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 Sand Gravel
   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 3.54 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 Others
9. PERMANENT PUMPING EQUIPMENT:
   Type Home 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 Lou Ontek Date 6-5-88

(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 0785

29.19.676
29.20627





DWR-138A
1/88

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

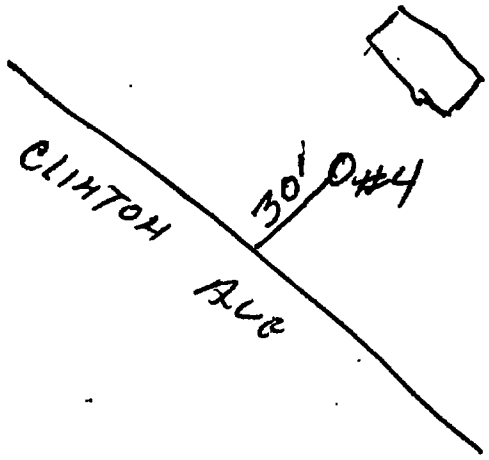
PERMIT NO. 29-20628
APPLICATION NO. _____
COUNTY _____
COORD. 29·13·676
29.20628

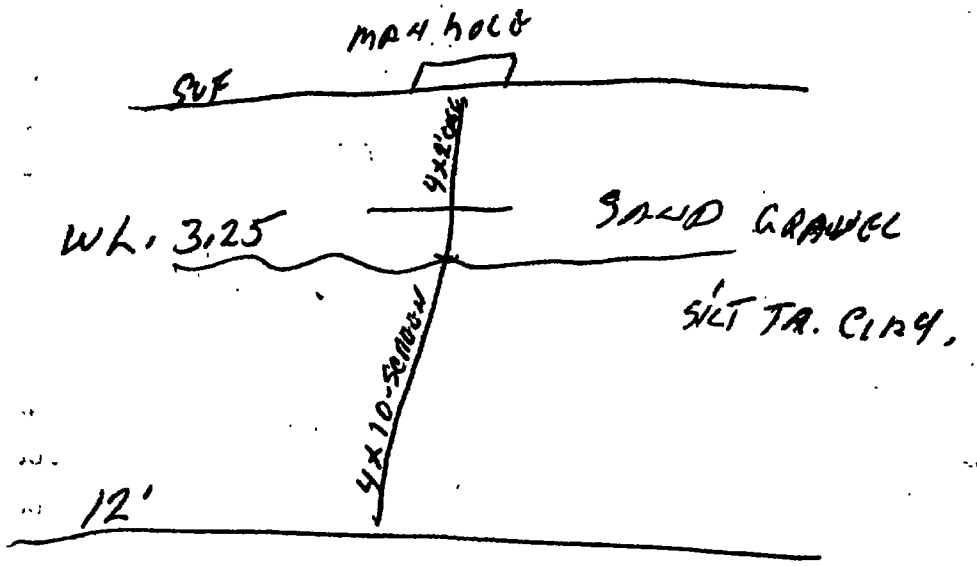
WELL RECORD

1. OWNER HILDEBRANDS CABINETS ADDRESS 105 CLINTON AVE
Owner's Well No. 4 SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION EATONTOWN N.J.
3. DATE COMPLETED 6-5-88 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 SAND GRAVEL
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 OTHER Yield — Gallons per minute
Static water level before pumping 3.25' 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 MOHC 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 CLOUDY 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 LOU ONTCK Date 6-5-88

(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.)

29·13·676
29.20628





Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 21172
Atlas Sheet Coordinates 29 : 13 : 858

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 213 BORDEN CT.
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address
County Monmouth Municipality EATONTOWN BORO Lot No. 32 Block No. 68

WELL USE Irrigation Status
WATER USE Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 10 / 20 / 88
Depths: Total 200 ft. Finished 200 ft.
Diameter: Top 8 in. Bottom 8 in.
Land Surface Elevation at well 46 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		180	4	sch 40 PVC
Casing 2				
Casing 3	180	15	4	.012" PVC
Screen 1				PVC
Screen 2		5	4	
Tail Piece	190	30	8	1000# of 1#
Gravel Pack	4	min. 50		hole plug
Grout		drop		
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 8 / 8 / 88
Static water-level before pumping 25 ft. below land surface. Water level 115 ft. below land surface after hrs. of pumping.
Water level was measured using dropline/M-scope Drawdown 90 ft.
Discharge rate measured using bucket Discharge Rate 52 gals. per min.
Well was pumped using air Specific Capacity 1.73 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 submersible
Mfrs. Name Red Jacket Model 7GC
CAPACITY: Pump delivers 15 GPM at 40 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source electricity
DEPTHS: Pump 175 ft. Footpiece ft. Airline ft.
FLOW METER: Model 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 (W) Date 10 / 30 / 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 - 21172
29.13.658

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 CF-15

Aquifer/Geo. Fm. Mt. Laurel

LOG

0-35	red orange silty sandy clay and sand
35-60	black and brown clays
60-85	black and green sandy clays
85-171	green sandy clay with and sand and glauconite
171-173	hardpan
173-196	fine to medium silty grey sand
196-197	hardpan
197-200	stiff grey 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 ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 22571
Atlas Sheet Coordinates 29 : 13 : 653

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 54 TRAFALGER PLACE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address Trafalgar Place
County Monmouth Municipality SHREWSBURY TWP. Lot No. 4 Block No. 69.01

WELL USE Irrigation Status In Use

WATER USE Irrigation Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 4 / 24 / 89
Depths: Total 50 ft. Finished 55 ft.
Diameter: Top 8 in. Bottom 4 in.
Land Surface Elevation at well 30 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		50	4	Black Steel
Casing 2				
Casing 3				
Screen 1	None			
Screen 2				
Tail Piece				
Gravel Pack				
Grout				Ben 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 4 / 24 / 89
Static water-level before pumping 5 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 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.) Irony

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 KAYE WELL DRILLING
Address R.D.1. Box 75
City Jackson State N.J. Zip Code
Name of Driller Gary Poppe License No. 1180

Signature of Contractor Mary Lechner Sec. + Treas. Date 5 / 16 / 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

WELL RECORD

Well Permit No. 29 - 22 571
29 13 653

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. Manasquan

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 - 5' - Yellow			
5' - 15' - Hard Light Green			
15' - 30' - Hard Dark Grayish Green Marl			
30' - 45' - Sandy Dark Green Rock			
45' - 55' - Gray 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 ____ / ____ / ____

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

E

WELL RECORD

11

Well Permit No. 29 - [illegible]
Atlas Sheet Coordinates 29 : 13 : 672

OWNER IDENTIFICATION - Owner NEW JERSEY NATURAL GAS CO
Address 1415 WYCKOFF RD, PO BOX 1464
City WALL State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address MAIN ST. TO FORT MONMOUTH
County MONMOUTH Municipality OCEANPORT BORO Lot No. 1 Block No. 115

WELL USE CATHODIC PROTECTION Status

WATER USE CATHODIC PROTECTION Average — gals. daily Maximum — gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 7 / 24 / 89
Depths: Total 220 ft. Finished 220 ft.
Diameter: Top 8¼ in. Bottom 8¼ in.
Land Surface Elevation at well 50 ft. Elevation was determined using TOPO #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		32'	8"	SCH 40 PVC
Casing 2				
Casing 3				
Screen 1				
Screen 2				
Tail Piece				
Gravel Pack				
Grout	30'	190'		3200# CLOSE BRAND
Grouting Method	PRESSURE 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 N/A 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 N/A GPM Power Source
DEPTHS: Pump ft. Footpiece ft. Airline ft.
FLOW METER: Model installed on in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor TIGER CONSTRUCTION CORP.
Address 906 Hwy 71
City Spring Lake Hts State NJ Zip Code 07762
Name of Driller Dennis Buchanan License No. 1393

Signature of Contractor Dennis Buchanan/Tiger Date 8 / 4 / 89

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 23076

29·13·672

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 CE-1500 Failing

Aquifer/Geo. Fm. N/A (Cathodic Protection)

LOG

0-28 Yellow Sandy Soil w/Clay
28-36 Brown Clay
36-147 Gray Green Clay w/ Limestone
147-186 Fine To Med Calcareous Sand w/Hard Layers of Shell
186-220 Gray 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 ____ / ____ / ____

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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 JOHNSON
Screen 2	-			
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 8CC
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 29 Maxim 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 13638

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 Pan Layers, Redish 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			
53-66 Gray Clay			
66-90 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. ~~TAXEXEMPT~~ 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 DeMino 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
29236M-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.	
3			Orange-tan-brown medium to fine SAND, little clay.	PHC odor, slightly moist
4				
5			Dark green fine SAND, trace silt alternating with orange brown	
6			medium to fine SAND.	PHC odor, saturated
7				
8				
9			CLAY Gray-orange: CLAY, trace fine sand	
10			SAND Orange-brown medium to fine SAND some clay, trace silt. Changing	
11			to Dark green-orange-medium to fine sand, little clay at 11.0'	
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

2

MONITORING WELL RECORD

Well Permit No. 29 - 23678
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. 2
County Monmouth Municipality ~~OCEANPORT BORO~~ Lot No. ~~TAXEXEMP~~ Block No. ~~TAX~~
Address Bldg 694, 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.)	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Sch40 PVC FJT Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	1.5	17	4	Sch40 PVC FJT .02
Tail Piece	—	—		
Gravel Pack	1.5	17		#2 Morie Gravel
Annular Seal/Grout	.5	1.5		Bentonite Pellets
Method of Grouting	0 — 1.5 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: 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 B.L. MYERS BROS., INC.
Name of Drilling Company _____

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.

GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coordinates - 29 13 665

Sketch Map

29.13.665
2923678-9

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		0	SAND	Dark green to black fine SAND, little silt, trace clay.	Slightly moist, no odor.
5					
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 Srvcs, 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 Flush
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	15	4	Sch 40 PVC .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.)	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Sch40 PVC Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	20	4	Sch40 PVC .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 - 23690
Atlas Sheet Coordinates 29 : 13 : 689

Redacted - Privacy Act

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address Redacted - Privacy Act
City _____ State NJ Zip Code _____

WELL LOCATION - If not the same owner please give address. Owner's Well No. _____
Address Orchard Street Eatontown, NJ
County Monmouth Municipality ~~EATONTOWN BORO~~ Lot No. ~~36~~ Block No. ~~73~~

WELL USE Withdrawal Status In Use

WATER USE Domestic Average 2000 gals. daily Maximum 4000 gals. daily

WELL CONSTRUCTION Date well completed 90 / 04 / 05
BOREHOLE DIMENSIONS Depths: Total 67 ft. Finished Same ft.
Diameter: Top 8.5" in. Bottom Same in.
Land Surface Elevation at well 30 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		52	4.0"	Schedule 40 PVC
Casing 2				
Casing 3				
Screen 1	51	10	4	Schedule 40 PVC/.020
Screen 2	~~61~~			
Tail Piece	~~61~~	5'	4"	
Gravel Pack	~~46~~	25'	8.5"	.025 Blended
Grout	Surface	41		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 90 / 04 / 05
Static water-level before pumping 16 ft. below land surface. Water level 45 ft. below land surface after 1 hrs. of pumping.
Water level was measured using Estimated Drawdown 29 ft.
Discharge rate measured using Measured Container Discharge Rate 30 gals. per min.
Well was pumped using Air Lift Specific Capacity 1.0 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 18E07422
CAPACITY: Pump delivers 20 GPM at 40 PSI pressure.
POWER: 3/4 HP at 3450 RPM Power Source Electric
DEPTHS: Pump 50 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. 1407
Allen Primost J1407

Signature of Contractor Norman Primost Date 6 / 1 / 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 - 23690
29 13689

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. Red Bank Sands.

LOG

0-15 Clayey med. & fine Ochre-Green Sand

15-50 Clayey Med. Reddish-Brown Sand

50-67 Fine & Med. Greenish-Brown Sand / Brown Silt

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 ____ / ____ / ____

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6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 23732
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner EXXON COMPANY, USA
Address 1100 US RT. 1, PO BOX 66
City LINDEN State NJ Zip Code 07036

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. 1,2,3 Block No. 66
Address Branch & Sycamore Ave, Little Silver, NJ 07739

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 11/15/89
Regulatory Program Requiring Well Test purpose only Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater Environmental Svc, 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			4	Sch, 40 PVC
Outer Casing (Not Protective Casing)			—	
Screen (Note slot size)			1020	
Tail Piece				
Gravel Pack	↓	↓		
Annular Seal/Grout				
Method of Grouting	See Attached Drill Logs			

Static water level after drilling — ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using submerge pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NAF 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: 7/472 B.L. MYERS BROS., INC.
Name of Drilling Company

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 Philip I Ball FOR GREG MYERS Date 12/21/89

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29-23732
29.13.635

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 29-23732-7

Well Number 1 Total Depth 15' Diameter 4"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L. Myers Log By N. Fatherly Date Drilled 11/15/89

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			FILL Gravels and Sands	
2				
3			SAND and clay, medium green, medium to fine	
4				
5				
6			CLAY Green and brown clay, with sand and silt	
7				
8				
9			medium brown clay	
10			w/medium grained sand	
11			moist, product odor	
12				
13				
14				END 14.5 AUGER REFUSAL
15				
16			CLAY Dark green, blue/gray	
17			light very dense, little fine sand	
18				
19				
20				
21				
22				
23				
24				
25				

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6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 23733
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner [redacted] COMPANY, USA
Address [redacted] 1100 US RT. 1, PO BOX 68
City [redacted] State NJ Zip Code 07036

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW#2
County Monmouth Municipality [redacted] LITTLE SILVER B Lot No. 1,2,3 Block No. 56
Address Branch Sycamore Ave, Little Silver, NJ 07739

TYPE OF WELL (as per Well Permit Categories) [redacted] MONITORING Date well completed 11/15/89
Regulatory Program Requiring Well Test Purpose Only Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater & Environmental 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			4	Sch 40 PVC
Outer Casing (Not Protective Casing)			—	
Screen (Note slot size)			.020	
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	See Attached Drill Logs			

Static water level after drilling — ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using submersible pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NA Type of Rig CME-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. 31472
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 Philip Bartlett For Gregg Myers Date 12/21/89

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0595

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29-23733
29.13.635

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 29-23733-5

Well Number 2 Total Depth 15' Diameter 4"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L. Myers Log By N. Fatherly Date Drilled 11/15/89

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			FILL Road gravels, pea gravels, crushed gravel fragments; pebble to cobble	
2				Old tank field area filled in with gravel
3				
4				
5				
6				
7				
8				
9				
10			- moist	
11				
12				
13				
14				
15				END HOLE 15'
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

MONITORING WELL RECORD

Well Permit No. 29 - 23734
Atlas Sheet Coordinates 29 : 13 : 636

OWNER IDENTIFICATION - Owner EXXON COMPANY, USA
Address 1100 US RT. 1, PO BOX 66
City LINDEN State NJ Zip Code 07036

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. 1,2,3 Block No. 58
Address Branch of Sycamore Ave, Little Silver, NJ 07739

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 11 / 15 / 89
Regulatory Program Requiring Well Test purpose only Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater Environmental Svc, 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			4	Sch 40, PVC
Outer Casing (Not Protective Casing)			—	
Screen (Note slot size)			020	
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	See Attached Drill Logs			

Static water level after drilling — ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using submersible pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NA 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. 11472 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 Philip Ballard For Gregg Myers Date 12/21/89

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29-23734

29.13.635

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No. 29-23734-3

Well Number 3 Total Depth 15' Diameter 4"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L. Myers Log By N. Fatherly Date Drilled 11/15/89

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			FILL Gravels and Sands	
2			SAND Dark green sand w/clay some pebbles; increasing clay w/depth; medium to fine	
3				
4				
5				
6				
7			- medium brown mixed w/dark green areas	
8				
9				
10				
11				
12				
13			CLAY with sand, medium brown and sand brown medium to fine	Moist
14				
15				END HOLE 15'
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

MONITORING WELL RECORD

Well Permit No. 29 - 23735
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner [redacted]
Address 1100 US RT. 1, PO BOX 66
City LINDEN State NJ Zip Code 07036

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW#4
County Monmouth Municipality [redacted] Lot No. 1,2,3 Block No. 56
Address Branch & Sycamore Ave, Littlestree, NJ 07739

TYPE OF WELL (as per Well Permit Categories) [redacted] Date well completed 11/16/89
Regulatory Program Requiring Well Resp. Purpose Only Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater & Environmental Svc, Inc Tele. # 201-560-4787

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			4	Sch 40, PVC
Outer Casing (Not Protective Casing)			—	
Screen (Note slot size)			1020	
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	See Attached Drill Logs			

Static water level after drilling — ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using submer pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: _____
Drilling Method Auger
Drilling Fluid — 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. 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 [signature] for Gregg Myers Date 12/21/89

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29-23735

29·13·635

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 29-23735-1

Well Number 4 Total Depth 15' Diameter 4"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L Myers Log By N. Fatherly Date Drilled 11/16/89

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			FILL Gravels and Sands	
2				
3			SAND medium to fine, brown, some clay and silt	
4				
5				
6				
7				
8				
9				
10				
11			CLAY dark green blue, little fine sand very dense, moist	
12				
13				
14				
15				END HOLE 15'
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

MONITORING WELL RECORD

Well Permit No. 29 - 23808
Atlas Sheet Coordinates 29 : 13 : 629

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. 5
County Monmouth Municipality Lot No. Block No.
Address Bldg 699, Saltzman Ave, Fortmonmouth, NJ OCEANPORT BORO TAX 07703 EXEMPT

TYPE OF WELL (as per Well Permit Categories) Date well completed 11/30/89
Regulatory Program Requiring Well MONITORING 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.)	Diameter (inches)	Type and Material
Inner Casing	0	3	4	PVC Sch 40 FJT Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	3	15	4	Sch 40 PVC FJT .02
Tail Piece	—	—		
Gravel Pack	3	15		#2 Morie Gravel
Annular Seal/Grout	1	3		Bentonite Pellets
Method of Grouting	0 - 1 Slurry			

Static water level after drilling ft.
Water level was measured using interface probe
Well was developed for 1 hours at 2 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 [redacted] Anthony Kull
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J1372
Name of Drilling Company ANTHONY A. KULL

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 Teresa Delfino for [redacted] Anthony Kull Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coor. 29-13-629

Sketch Map

29.13.629
29 23808-1

Project Fort Monmouth Owner E-Systems, Inc.

Location Fort Monmouth Eatontown Permit No 2923808-1

Well Number 5 Total Depth 15' Diameter 10"

Casing Elevation Water Level: Initial 5.0' Static

Screen Diameter 4" Length 12' Slot Size .020"

Casing Diameter 4" Length 3' Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush mount, with manhole cover, Inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 11/30/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT	
2			SILT Dark Brown-Black SILT, some clay, trace fine sand	No odor or sheen
3			SAND Dark green-orange fine SAND, little(-) clay	Blows 3,4,4,10 No odor or sheen
4				
5				Groundwater encountered @ 5'
6				
7				
8				Blows 2,4,4,5
9				
10				
11			Black coarse (-) to fine SAND	No odor
12				Blows 4,4,6,8
13			SAND Dark green fine SAND, some (-) clay	
14				
15				
16			END HOLE @ 15'	
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

4

Well Permit No. 29-23000
Atlas Sheet Coordinates 29 : 13 : 629

OWNER IDENTIFICATION - Owner _____
Address US ARMY
City 167 RIVERSIDE DR. FORT MONMOUTH State NJ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. 6
County Monmouth Municipality _____ Lot No. _____ Block No. _____
Address Bldg 699, Saltzman Ave CRANFORT BORO, Fort Monmouth TAX NJ EXEMPT

TYPE OF WELL (as per Well Permit Categories) _____ Date well completed 12/1/89
Regulatory Program Requiring Well MONITORING Case I.D. # _____
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Groundwater & 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.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Sch 40 PVC FLT Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	15	4	Sch 40 PVC FLT .020
Tail Piece	—	—		
Gravel Pack	1	15		#2 Morie Gravel
Annular Seal/Grout	15	1		Bentonite Pellets
Method of Grouting	Slurry 0-.5			

Static water level after drilling _____ ft.
Water level was measured using interface probe
Well was developed for 1 hours at 1 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 [redacted] Anthony A. Kull
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 13 12
Name of Drilling Company ANTHONY A. KULL

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 Anthony A. Kull Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Coor. 29-13-G29

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29.13.629
2923809-9

Project Fort Monmouth Owner E-Systems, Inc.

Location Fort Monmouth Eatontown Permit No 2923809-9

Well Number 6 Total Depth 15' Diameter 10"

Casing Elevation Water Level: Initial 4.5' Static

Screen Diameter 4" Length 14' Slot Size .020"

Casing Diameter 4" Length 1' Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush mount, with manhole cover, Inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 12/1/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT	
2			FINE Dark green fine SAND, little clay	
3			SAND Dark green fine SAND, some clay	PHC odor water contacted at 4.5' Blows 7,4,4,5
4				
5				
6				
7				
8			Light green-brown med (-) to fine SAND, trace clay	
9				
10				
11				
12				
13			Dark green-Black fine SAND little clay	Blows 5,4,5,8
14				
15				
16			END HOLE @ 15'	
17				
18				
19				
20				
21				
22				
23				
24				
25				

MAR 15 '90

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6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29-23810
Atlas Sheet Coordinates 29 : 13 : 629

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. 7
County Bldg 699 Municipality Lot No. Block No.
Address Saltzman Ave, OCEANPORT BORO Fort Monmouth NJ 07703 TAX EXEMPT

TYPE OF WELL (as per Well Permit Categories) Date well completed 12/1/89
Regulatory Program Requiring Well MONITORING 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.)	Diameter (inches)	Type and Material
Inner Casing	0	3	4	Sch 40 PVC FJ Solid
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	3	15	4	Sch 40 PVC FJ Solid
Tail Piece	—	—		
Gravel Pack	3	15		#0 Morie Gravel
Annular Seal/Grout	1.5	3		Bentonite Pellets
Method of Grouting	Slurry 0-1.5			

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: NA
Drilling Method Auger
Drilling Fluid None Type of Rig TH-10
Name of Driller [redacted] Anthony Kull
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 1317
Name of Drilling Company ANTHONY A. KULL

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 DeSimone for Anthony A. Kull Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coor. 29-13-629

Sketch Map

29 13.629
29 23810-2

Project Fort Monmouth Owner E-Systems, Inc.

Location Fort Monmouth Eatontown Permit No 2923810-2

Well Number 7 Total Depth 15' Diameter 10"

Casing Elevation Water Level: Initial 3' Static

Screen Diameter 4" Length 12' Slot Size .020"

Casing Diameter 4" Length 3' Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush mount, with manhole cover, Inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 12/1/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT	
2			SILT & SAND — Black SILT & Fine SAND, Some gravel, trace cobbles	Blows 7,8,7,8 Water @ 3'
3			Fine SAND — Dark-green-black fine SAND, Trace Clay fine (-) gravel	
4				
5				
6			Fine SAND — Light gray to orange med (-) to fine SAND, little clay	Blows 3,3,4,4, Saturated PHC odor
7			Green fine SAND, some clay	
8				
9				
10				
11				
12				
13				
14				
15			END HOLE @ 15'	
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

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New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 23811
Atlas Sheet Coordinates 29 : 13 : 629

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. 8
County Monmouth Municipality OCEANPORT BORO Lot No. TAX Block No. EXEMPT
Address Bldg 699 Sathman Ave, Fort Monmouth NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 12/1/89
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	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	1	2		Bentonite Pellets
Method of Grouting	Slurry 0-1'			

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: NA
Drilling Method Auger
Drilling Fluid None Type of Rig TH-10
Name of Driller Anthony A. Kyll
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 13317
Name of Drilling Company ANTHONY A. KILL

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 Anthony Kill Date 2/15/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Coor: 29-13-629

Sketch Map

29.13.629
2923811-1

Project Fort Monmouth Owner E-Systems, Inc.

Location Fort Monmouth Eatontown Permit No 2923811-1

Well Number 8 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

Completion Details Flush mount, with manhole cover, inner locking cap

Driller B.L. Myers Log By J. Gallagher Date Drilled 12/1/89

Depth (Ft)	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT	
2			Fine SAND — Light brown coarse (-) to fine SAND, little coarse to fine gravel, trace cobbles	
3				
4			Fine SAND — Light brown-green Fine SAND, little Silt, trace clay	PHC odor Blows 8,8,4,5
5				
6			Dark green-gray med to fine SAND	
7				water encountered @ 4'
8			Light brown-orange Fine SAND, trace clay	
9				odor
10				
11				odor
12				
13			SAND — Dark green-orange med to fine SAND, some clay.	
14				
15				
16			END HOLE @ 15'	
17				
18				
19				
20				
21				
22				
23				
24				
25				

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751

BORING LOG

Well No. W-21 Permit No. 29-23955 (29.13.61) Coordin. 29.13.618

Date Drilled December 12, 1989 County Monmouth Use Monitoring

Location Former Star Enterprise Service Station, Broad St and White Rd, Shrewsbury, NJ

Owner Star Enterprise Address 303 Fellowship Rd, Moorestown, NJ

Drilling Method Auger Sampling Method Drill Cuttings

Hole Diameter 12" Total Depth 15'

CASING: Type Flush Joint PVC Schedule 40 Diameter 4" Length 1'

SCREEN: Type Flush Joint PVC Slot 20 Diameter 4" Length 14'

Gravel Pack Size #1 morie Casing Seal bentonite Static Water Level 4.14'

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0" - 4" ASPHALT
				4" - 8' Coarse to Fine GRAVEL, some fine sand and silt
5				
			WELL	
				8' - 15' Dark Olive Medium to Fine SAND, some silt and clay
10				
			SCREEN	
15				
20				

Handex

HANDEX CORP., 703 Ginesi Drive, Morganville, New Jersey 07751

BORING LOG

Well No. W-22 Permit No. 29-13-619 29-23956 Coordin-29.13.619

Date Drilled December 12, 1989 County Monmouth Use Monitoring

Location Former Star Enterprise Service Station, Broad St and White Rd, Shrewsbury, NJ

Owner Star Enterprise Address 303 Fellowship Rd, Moorestown, NJ

Drilling Method Auger Sampling Method Drill Cuttings

Hole Diameter 12" Total Depth 15'

CASING: Type Flush Joint PVC Schedule 40 Diameter 4" Length 1'

SCREEN: Type Flush Joint PVC Slot 20 Diameter 4" Length 14'

Gravel Pack Size #1 morie Casing Seal bentonite Static Water Level 4.82'

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0" - 4" ASPHALT
				4" - 1' GRAVEL
				1' - 2' Black Coarse to Fine SAND, SILT and CLAY (Moderate to strong product odor)
				2' - 6' Olive Medium to Fine SAND, little(+) silt and clay (Strong product odor)
5				
				6' - 7' Black Medium to Fine SAND, some organic silt and clay (Moderate to strong product odor)
			WELL	7' - 11' Dark Brown Medium to Fine SAND, some(+) clayey silt and organic material
10				
			SCREEN	11' - 13' Olive Medium to Fine SAND, little(+) silt and clay
				13' - 15' Brown Medium to Fine SAND, some silt and clay
15				
20				

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New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD 4

Well Permit No. 29 - 24138
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner EXXON COMPANY USA
Address 1100 US RT 1 PO BOX 66
City LINDEN 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. 1,2,3 Block No. 56
Address Branch Ave & Sycamore Ave

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/16/90
Regulatory Program Requiring Well UST Case I.D. # 89 09 18 1524
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	0	5	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size) .020	5	10	4	Sch 40 PVC
Tail Piece				
Gravel Pack	5	10		#2 Morie Gravel
Annular Seal/Grout	3	5	3/4	Bentonite Pellets
Method of Grouting	Slurry 0-3'			

Static water level after drilling 8 ft.
Water level was measured using Interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using Submer pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NAD Type of Rig TH-10
Name of Driller ~~Dennis Hoppe~~ Anthony A. Kull
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 13317
Name of Drilling Company ANTHONY A. KULL

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 Anthony A Kull Date 2/9/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29.13.637
2924138-3

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 2924138-3 Coor.29.13.637

Well Number 5 Total Depth 15' Diameter 8"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L. Myers Log By N. Fatherly Date Drilled 1/16/90

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT & FILL	
2		0	CLAY & SILT — Brown-green with some red and black layers	
3				
4				
5				
6			Some medium Sand, little silt	
7				
8			Wet @ 10'	
9				
10				
11			CLAY — Dark blue/green, little fine sand	
12				
13		5		
14				
15				END 14.5 AUGER REFUSAL Tight clay
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

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New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 24139
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner EXXON COMPANY USA
Address 1100 US RT 1 PO BOX 68
City LINDEN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW#6
County Monmouth Municipality Lot No. Block No.
Address Branch Ave & Sycamore Ave LITTLE SILVER B 1,2,3 56

TYPE OF WELL (as per Well Permit Categories) Date well completed 1/16/90
Regulatory Program Requiring Well MONITORING UST Case I.D. # 89 09 18 1524
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	0	5	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen 0.10" (Note slot size)	5	10	4	Sch 40 PVC
Tail Piece				
Gravel Pack	5	10		#2 Morie Gravel
Annular Seal/Grout	3	5	3/4	Bentonite Pellets
Method of Grouting	Slurry 0-3'			

Static water level after drilling ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using submersible pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NA Type of Rig TH-10
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. J1317
Name of Drilling Company ANTHONY A. KILL

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 Anthony A. Kill Date 2/9/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0615

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29 13 637
29 24139-1

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 2924139-1 Coor. 29.13.637

Well Number 6 Total Depth 14' Diameter 8"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 4" Type Sch 40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L Myers Log By N. Fatherly Date Drilled 1/16/90

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT & FILL	
2			CLAY & SILT — Medium brown to yellow brown; little fine gravel	
3		50-		
4		80		
5				
6			Increasing Clay some fine sand, no gravel	
7				
8				
9				
10		30	CLAY — Dark green to black	
11		50	Wet @ 12'	
12				
13				
14		10-		
15		20		END 14. AUGER REFUSAL
16				Tight clay
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 - 24140
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner
Address EXXON COMPANY USA
City LINDEN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW#7
County Monmouth Municipality Lot No. Block No.
Address Branch Ave & Sycamore Ave LITTLE SILVER B 1,2,3 56

TYPE OF WELL (as per Well Permit Categories) Date well completed 1/17/90
Regulatory Program Requiring Well MONITORING UST Case I.D. # 89 09 18 1524
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	0	5	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen .020" (Note slot size)	5	10	4	Sch 40 PVC
Tail Piece				
Gravel Pack	5	10		#2 Morie Gravel
Annular Seal/Grout	3	5	3/4	Bentonite Pellets
Method of Grouting	Slurry 0-3'			

Static water level after drilling ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using Submer pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NA Type of Rig TH-10
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. J 1317
Name of Drilling Company ANTHONY A. KULL

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 Anthony A. Kull Date 2/9/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29.13.637
2924140-5

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 2924140-5 Coor. 29.13.637

Well Number 7 Total Depth 15' Diameter 8"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L Myers Log By N. Fatherly Date Drilled 1/17/90

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT & FILL	
2		0	CLAY & SILT — light brown CLAY & SILT, little fine sand	
3				
4				
5			damp, little fine gravels	
6				
7				
8				
9				
10				
11			Wet @ 11'	
12				
13		5	CLAY — Light gray-black, trace fine sand	
14				
15				END 15. AUGER REFUSAL Tight clay
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

MONITORING WELL RECORD

Well Permit No. 29 - 241141
Atlas Sheet Coordinates 29 : 13 : 632

OWNER IDENTIFICATION - Owner Exxon Co. U.S.A.
Address 1100 US Rt 1 P.O. Box 600
City Linden State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW #8
County Monmouth Municipality Little Silver Lot No. 2.3 Block No. 56
Address Branch Ave & Sycamore Ave

TYPE OF WELL (as per Well Permit Categories) Monitoring Date well completed 1/17/90
Regulatory Program Requiring Well bst Case I.D. # 89-09 18 1504

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	0	5	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size) 1/020	5	10	4	Sch 40 PVC
Tail Piece				
Gravel Pack	5	10		#2 Morie Gravel
Annular Seal/Grout	3	5	3/4	Bentonite Pellets
Method of Grouting	Slurry 0-3			

Static water level after drilling ft.
Water level was measured using interface probe
Well was developed for — hours at — gpm
Method of development 3 well volumes using submersible pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Auger
Drilling Fluid NA Type of Rig TH-10
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: J 1317
Name of Drilling Company Anthony A. Kill

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 Anthony G. Kill Date 2/9/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES GROUNDWATER AND ENVIRONMENTAL SERVICES, INC.

Sketch Map

29.13.637
29.2414-3

Project Exxon Company USA Owner Exxon Company USA

Location Little Silver Permit No 2924141-3 Coor. 29.13.637

Well Number 8 Total Depth 15' Diameter 8"

Casing Elevation Water Level: Initial Static

Screen Diameter 4" Length 10' Slot Size .020"

Casing Diameter 4" Length 5" Type Sch .40 PVC

Drilling Method Auger Sample Method Split Spoon

Completion Details Flush w/grade manhole, locking inner cap

Driller B.L. Myers Log By N. Fatherly Date Drilled 1/17/90

Depth Ft	Well Constr	HNu ppm	Lithological Description	Comments
1			ASPHALT & FILL	
2		0	SILTY CLAY little very fine sand moist, medium green-brown micaceous flakes	
3				
4				
5				
6			little medium gravels, little medium sand	
7				
8				
9				
10				
11				
12			Damp @ 12'	
13				
14			Bluer (now dk gray blue) some very fine sand	
15		0		END 15 AUGER REFUSAL Tight clay
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

JAN 12 '90

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		PORTLAND I 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 Valerie J. Giuseppe 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 2

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.) [From land surface]	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 Salem J. Giuseppe Date 5/3/90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0737

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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 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. GTO1
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. 001328 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
12" MS

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

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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. # 587-0300

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 Scape
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.

WELREC 107 1928

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) MONITORING Date well completed 7/12/90
Regulatory Program Requiring Well UST Case I.D. # [illegible]
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GTF Tele. # 587-0300

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.)	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

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MONITORING WELL RECORD

Well Permit No. 29 - 24956
Atlas Sheet Coordinates 29 : 14 : 44'

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. GTO4
County Municipality LAWRENCE 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 CORTELYOU
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. ~~88~~
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.) [From land surface]	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

Let's protect our earth

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26116
Atlas Sheet Coordinates 29 : 13 : 672

OWNER IDENTIFICATION - Owner NJ BELL
Address 650 PARK AVE.
City E. ORANGE 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. 22 Block No. 13
Address 77 Throckmorton Avenue

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 4/30/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex of NJ Tele. # 908 5316-8500

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 NA 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)	0	5'	4"	PVC Schedule 40
Screen (Note slot size)	5'	20'	4"	PVC Schedule 40
Tail Piece				
Gravel Pack	0.5'	20'	12"	#1 Morie
Annular Seal/Grout	0	0.5'	12"	Bentonite
Method of Grouting				

Static water level after drilling 8' ft.
Water level was measured using probe
Well was developed for NA hours at NA gpm
Method of development bail
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 mobile
Name of Driller Vincent Jardot
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J1533
Name of Drilling Company HANDEX CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

See attached log

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 6/2/95

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Handex®

CL

BORING LOG

HANDEX OF NEW JERSEY, INC., 500 Campus Drive, P.O. Box 451, Morganville, New Jersey 07751-0451 (201) 536-8500

Well No. W-1 Permit No. 29-26116 Coordinate No. 29.13.672

Date Drilled 4-30-91 County Monmouth Use Monitoring

Location New Jersey Bell, 77 Throckmorton Avenue, Eatontown, New Jersey

Owner New Jersey Bell Address 650 Park Avenue, East Orange, New Jersey

Drilling Method augers Sampling Method split spoon

Hole Diameter 12" Total Depth 20'

CASING: Type PVC Schedule 40 Diameter 4" Length 5'

SCREEN: Type PVC Schedule 40 Slot 20 Diameter 4" Length 15'

Gravel Pack Size #1 Morie Casing Seal Bentonite Static Water Level 8'

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
			CASING	0'-0'6" SOD and Topsoil 0'6"-3' Brown fine to coarse SAND, little clayey silt 3'-5' Dark brown fine to coarse SAND, little clayey silt 5'-7' Light brown fine to coarse SAND, little (+) silt 7'-20' Brown fine to coarse SAND, little clayey silt, occasional fine gravel
5'				
			WELL	
10'				
			SCREEN	
15'				
20'				NOTE: 1) HNU readings at background throughout drilling 2) B - bentonite seal 3) G - gravel pack

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Well Permit No. 29 - 26147
Atlas Sheet Coordinates 29 : 13 : 627

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address ~~296 SYCAMORE AVE.~~
City ~~SHREWSBURY~~ State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address ~~Sycamore Ave.~~
County Monmouth Municipality ~~SHREWSBURY BORO~~ Lot No. 6 Block No. 61

WELL USE Irrigation Status

WATER USE Irrigation Average 500 gals. daily Maximum 3000 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 5 / 7 / 91
Depths: Total 265 ft. Finished 265 ft.
Diameter: Top 8 1/2 in. Bottom 8 1/2 in.
Land Surface Elevation at well 30 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		230	4	Sch. 40 PVC
Casing 2				
Casing 3				
Screen 1	230	30	4	.015" slot PVC
Screen 2				
Tail Piece		5	4	
Gravel Pack	220	40	8 1/2	1600# of #1 packing gravel
Grout	5	220		Neat cement
Grouting Method	Pressure 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 5 / 7 / 91
Static water-level before pumping 24 ft. below land surface. Water level 160 ft. below land surface after 1 hrs. of pumping.
Water level was measured using dropline/M-scope Drawdown 136 ft.
Discharge rate measured using bucket+watch Discharge Rate 100 gals. per min.
Well was pumped using air Specific Capacity .735 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 Dennis B. Davis Pump Type Submersible
Mfrs. Name GOULDS Model 25EL
CAPACITY: Pump delivers 25 GPM at 40 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source electricity
DEPTHS: Pump 80 ft. Footpiece _____ ft. Airline _____ ft.
FLOW METER: Model _____ installed on _____ in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor ~~[illegible] CONSTRUCTION CORP.~~ 394
Address
City Spring Lake Heights State N.J. Zip Code 07762
Name of Driller Dennis B. Davis License No. H987

Signature of Contractor _____ Date 5 / 17 / 91

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 - 26147
29 13627

Driller: Please use the space below for the log description. Note water bearing zones or geological formation. XX

Are samples available? ☐ Yes ☐ No

Drilling Method Mud Rotary

Type of Rig Failing CF-15

Aquifer/Geo. Fm. Englishtown

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.
0-3	Reddish brown sandy clay			
3-13	Green glauconitic sandy clay with hardpan lenses			
13-16	Green-gray glauconitic clay			
16-55	Obdurated green glauconitic sand with trace of shell			
55-85	Silty fine green clayey sand			
85-128	Greenish-gray glauconitic clay with trace of shell			
128-144	Weathered fine-medium green glauconitic sand			
144-222	Gummy glauconitic gray sandy clay			
222-260	Fine to medium weathered gray quartz sand with lignite and mica (ENGLISHTOWN)			
260-265	Hard gray 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 ____ / ____ / ____

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26684
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 634

OWNER IDENTIFICATION - Owner GLOBE PETROLEUM
Address 9 CENTRAL AVENUE
City RED BANK State NJ Zip Code 07701

WELL LOCATION - If not the same as owner please give address. Owner's Well No. #65
County MONMOUTH Municipality LITTLE SILVER B Lot No. 142.03 Block No. 30.01
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 09 04 , 91
Regulatory Program Requiring Well DWREF Case I.D. # NJ0071978-DGW
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) — Tele. #

WELL CONSTRUCTION

Total depth drilled 11 ft.
Well finished to 10.88 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	GL	10.88	4	PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	.88	10.88	4	PVC
Tail Piece			—	—
Gravel Pack	.75	10.88	—	MORIE BLEND
Annular Seal/Grout	GL	.75	—	NEAT CEMENT (ANNULAR) BENTONITE PELLETS
Method of Grouting	HALLIBURTON			

Static water level after drilling 6.43 ft.
Water level was measured using M-SCOPE
Well was developed for 2.5 hours at 2 gpm
Method of development SURGE/BLOCK
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method HOLLOW STEM AUGER
Drilling Fluid — Type of Rig ROTARY
Name of Driller W. HOLM
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 599
Name of Drilling Company HOLM WELL DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-.3' ⇒ ASPHALT
.3'-4' ⇒ BROWN MED, COARSE GRAVEL
4'-5'5" ⇒ LT BROWN MED. SAND
5'5"-8' ⇒ GREEN MARL CLAY W/SAND
8'-11' ⇒ LT BROWN CLAY
12" I.T.

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 10/29/91

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0564

Form DWR-138
11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

W

Well Permit No. 29 - 26704
Atlas Sheet Coordinates 29 : 13 : 653

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 65 SUNNYBANK DRIVE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address 63 Sunnybrook Drive
County Monmouth Municipality SHREWSBURY TWP. Lot No. 1 Block No. 68

WELL USE Withdrawal Status In Use

WATER USE Domestic Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 8 / 28 / 91
Depths: Total 250 ft. Finished 250 ft.
Diameter: Top 8 in. Bottom 4 in.
Land Surface Elevation at well 20 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		210	4	Black Steel
Casing 2		42	3	" "
Casing 3				
Screen 1		6	4	Stainless Steel - Slot #12
Screen 2				
Tail Piece				
Gravel Pack	to Surface			
Grout	From top of Screen			Bch 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 8 / 28 / 91
Static water-level before pumping 8 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 Calibrated 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.) Good

PERMANENT PUMPING EQUIPMENT Installed by Kaye Well Drilling Inc. Pump Type Sub.
Mfrs. Name Model
CAPACITY: Pump delivers 15 GPM at 50 PSI pressure.
POWER: 1 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
Address KAYE WELL DRILLING
City R.D.1, Box 95 Jackson State N.J. Zip Code
Name of Driller Gary Poppe License No. 1186

Signature of Contractor Mary Lechner, Sec. & Treas. Date 9 / 5 / 91

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

29.13.653
WELL RECORD
29 26704

Well Permit No. 29 - 26704

29 13 653

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. Englishtown

LOG

Thick.	Lith.	Fm.	
			0 - 16': Red Gravel
			16' - 25': Gray Clay
			25' - 80': Gray Clay & Black Sand
			80' - 150': Course Green Sand & Shell
			150' - 195': Gray Clay
			195' - 215': Fine Gray Sand & Wood
			215' - 230': Dense Clay
			230' - 250': Course Sand

DEP USE ONLY

Storet Hydrogeo Code _____

USGS Hydrogeo Code _____

Depth to Bedrock _____ ft.

Bedrock Lith. Code _____

Bedrock Fm. Code _____

Completed by _____

Date ____ / ____ / ____

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 -26706
Atlas Sheet Coordinates 29 : 13 : 643

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 333 WILLOW DRIVE
City LITTLE SILVER 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. ~~42~~ Block No. ~~54~~
Address Same

TYPE OF WELL (as per Well Permit Categories) ~~MONITORING~~ Date well completed 8 / 23 / 91
Regulatory Program Requiring Well UST Case I.D. # ~~UST 0124788~~
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) G.E.S. Tele. # 389-6500

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	0	5	2	Sch.40 PVC
Outer Casing (Not Protective Casing)	none			
Screen (Note slot size)	5	15	2	Sch40PVC.020 slot
Tail Piece	none			
Gravel Pack	4.5	15		#2 well gravel
Annular Seal/Grout	0	4.5		bentinite/cement powder
Method of Grouting	Gravity Placement			

Static water level after drilling 7 ft.
Water level was measured using steel tape
Well was developed for ½ 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~~ solid Stem Auger
Drilling Fluid none Type of Rig DR-200
Name of Driller Allen Wilson
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1278
Name of Drilling Company ~~WILSON DRILLING~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-11' brown sandy soil
11'-15' green clay
WL @ 7 ft.

10' 2 92

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 Allen J. Wilson Date 8/27/91

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 26707
Atlas Sheet Coordinates 29 : 13 : 643

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 333 WILLOW DRIVE
City LITTLE SILVER 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. 42 Block No. 54
Address Same

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 8 / 23 / 91
Regulatory Program Requiring Well UST Case I.D. # UST 0124788
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) G.E.S. Tele. # 389-6500

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	Sch.40PVC
Outer Casing (Not Protective Casing)	none			
Screen (Note slot size)	5	15	4	Sch.40PVC.020slot
Tail Piece	none			
Gravel Pack	4.5	15		#2 well gravel
Annular Seal/Grout	0	4.5		Bentinite/cement powder
Method of Grouting	Gravity Placement			

Static water level after drilling 7 ft.
Water level was measured using steel tape
Well was developed for ½ 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 D-50
Name of Driller Allen Wilson
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1278
Name of Drilling Company WILSON DRILLING

GEOLOGIC LOG

(Copies of other geologic logs and/or geophysical logs should be attached.)

0-11' brown,sandy soil
11'-15' green clay
WL @ 7 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 Allen J. Wilson Date 8/27/91

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) MONITORING Date well completed 9/13/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

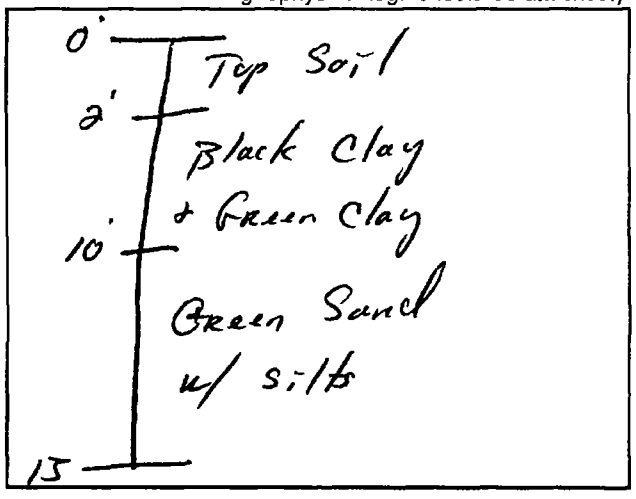
WELL CONSTRUCTION

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 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 Augers
Drilling Fluid N/A Type of Rig B-61
Name of Driller Charles Hildebrandt
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 Hildebrandt 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 UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

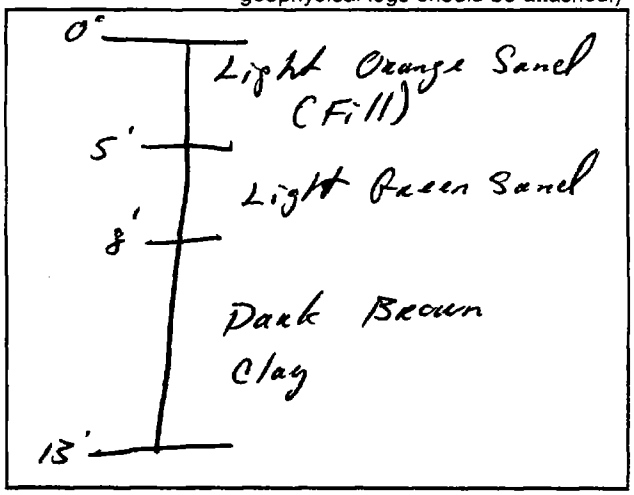
WELL CONSTRUCTION

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 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 Centr. 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 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. 10666
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 1902

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 26827
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 10/1/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

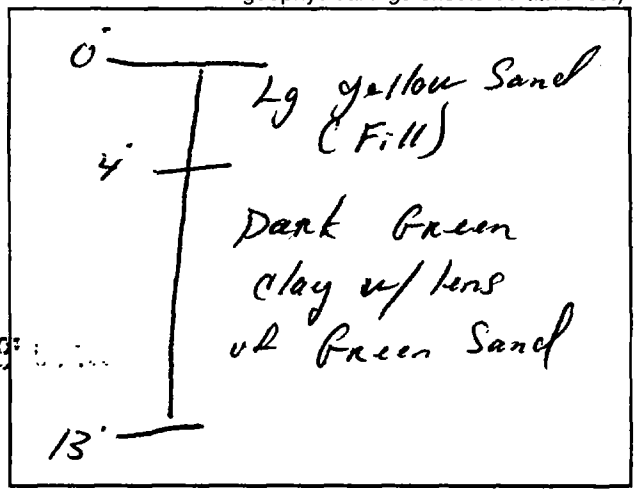
WELL CONSTRUCTION

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 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. 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 Hitzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1903

DWR-138 M
6/89

Let's protect our earth

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. #

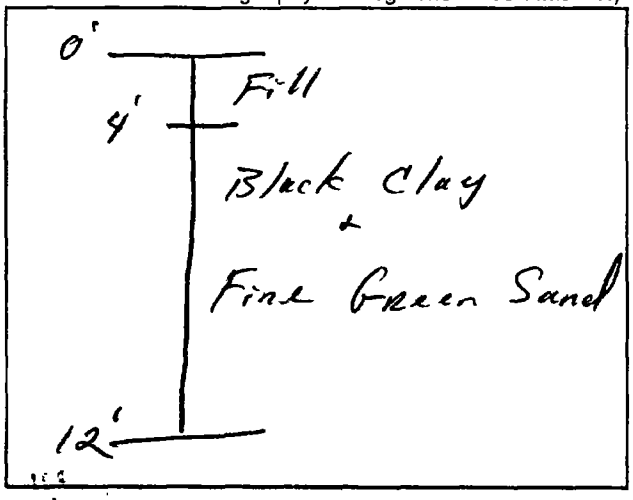
WELL CONSTRUCTION

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.) [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	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 .5 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 -26829
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 10/3/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

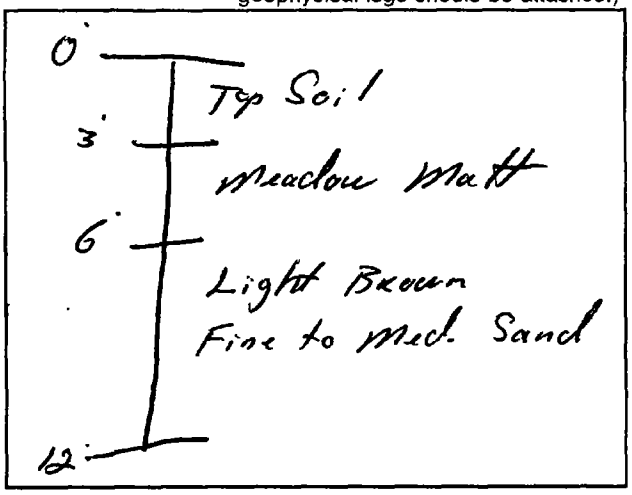
WELL CONSTRUCTION

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.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	2	4	Flush Thr. 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 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 Hitzelbugen
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 Hitzelbugen Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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 10/21/91
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

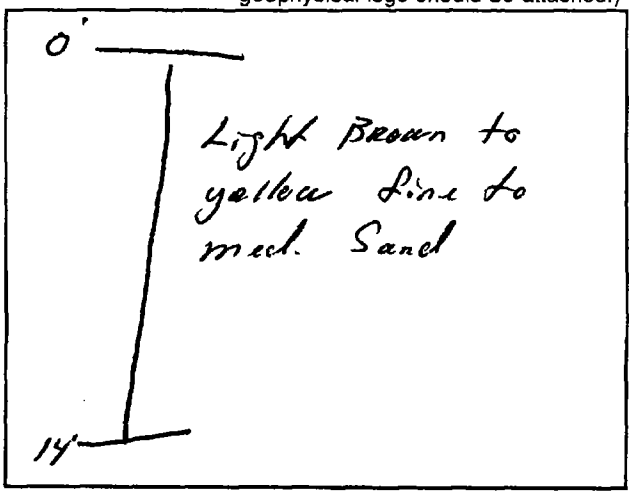
WELL CONSTRUCTION

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. 31066
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 1906

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. #

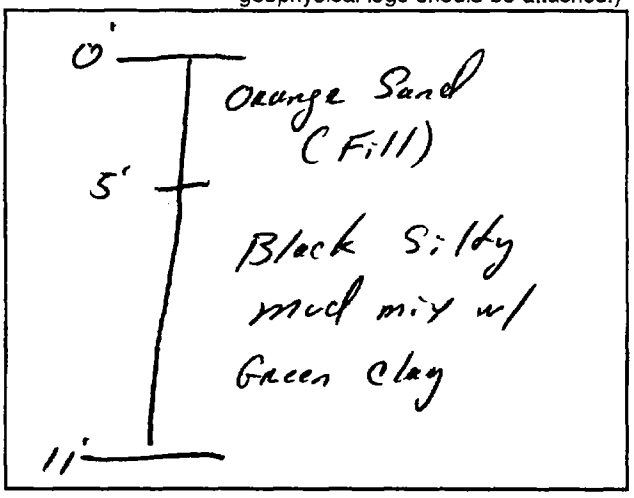
WELL CONSTRUCTION

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. 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 9/10/91

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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 Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

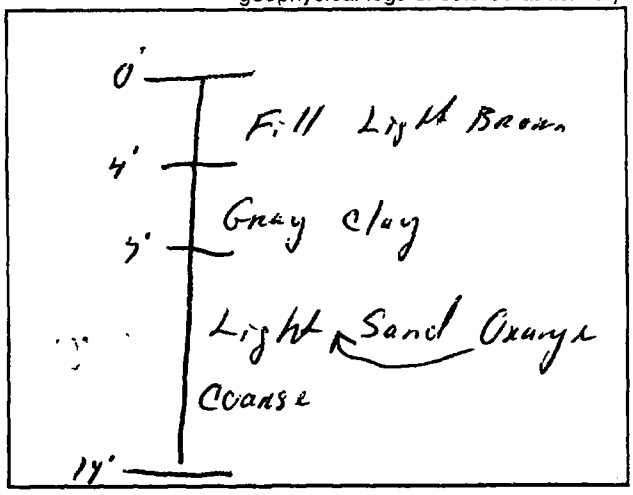
WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.
Borehole diameter.
Top 16 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	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 Auger
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. #

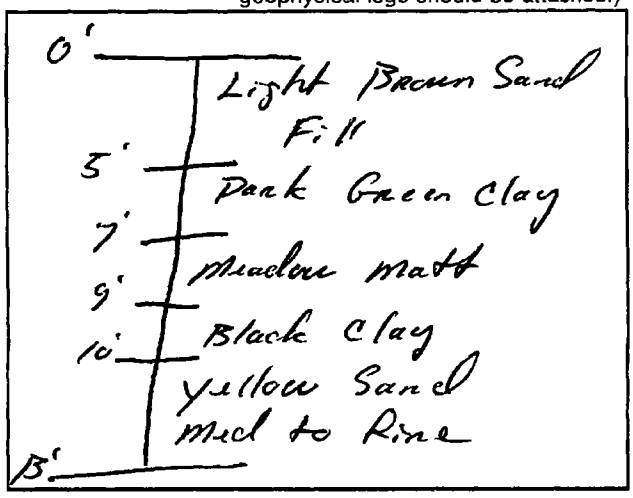
WELL CONSTRUCTION

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 Thd 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 mark			

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 Augen
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) Date well completed 10/7/91
Regulatory Program Requiring Well MONITORING UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

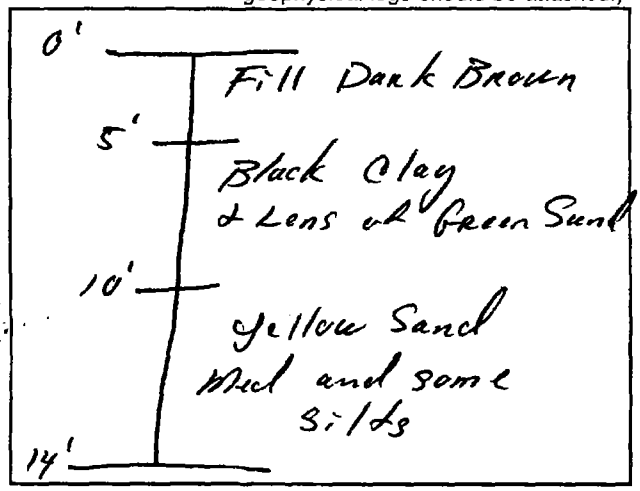
WELL CONSTRUCTION

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 Thd. 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 Case I.D. #
UST
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

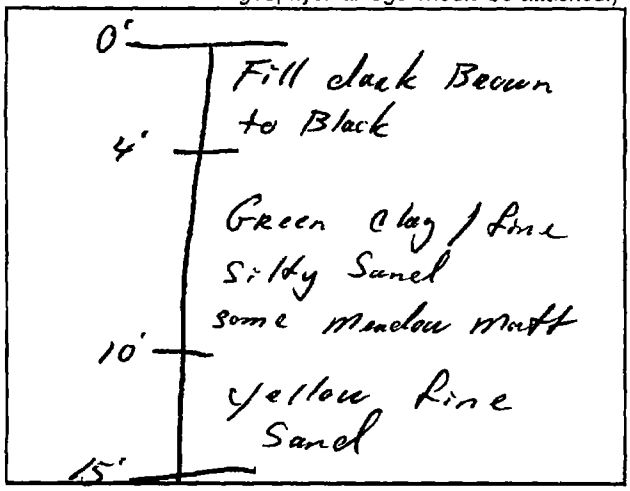
WELL CONSTRUCTION

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. Hitzelberger Date 10/9/91

COPIES White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1910

DWR-138 M
6/89 - --

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 - 27072
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner EXXON CO. USA
Address 1100 RT. 1 N./P.O. BOX 66
City LINDEN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW #9
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1,2,3 Block No. 58
Address EXXON S/S #3-2046, BRANCH & SYCAMORE AVES., LITTLE SILVER, NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 02 / 06 /92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GROUNDWATER ENV. SERVICES Tele. # (908) 389-6500

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 2X2 CONCRETE PAD

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	GRADE	5'	4"	PVC SCH 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5'	20'	4"	SLOT .020 PVC SCH 40
Tail Piece				
Gravel Pack	3'	20'	ANNULUS	#1 MORIE/BAGGED
Annular Seal/Grout	GRADE	3'	ANNULUS	BENTONITE/CEMENT
Method of Grouting	GRAVITY			

Static water level after drilling APRX. 7 ft.
Water level was measured using STEEL TAPE
Well was developed for 1 hours at < 1 gpm
Method of development BAILING
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 MOBILE B-57
Name of Driller MARK LAURA
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1486
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 all applicable State rules and regulations.

Driller's Signature Matt Laura Date 2-10-92

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

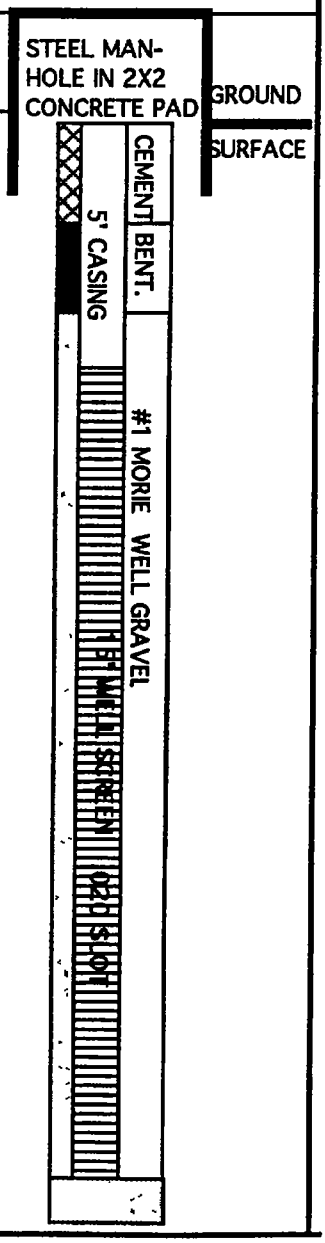
LUTZ ENVIRONMENTAL CO., INC. 2020 CLINTON STREET, LINDEN, NJ 07036
(908)862-6633

BORING LOG

PROJECT: EXXON S/S #3-2046	DATE DRILLED: 02/06/92		COORDINATE: 29 13 637
LOCATION: BRANCH & SYCAMORE AVES., LITTLE SILVER, NJ	PERMIT #: 29-27072	WELL NO: MW #9	DEPTH: 20'
	STATIC WATER LEVEL: APPROX. 7'		HOLE DIA: 12"
OWNER: EXXON CO. U.S.A.	ADDRESS: 1100 RT. 1 NORTH, LINDEN, NJ		COUNTY: MONMOUTH
DRILLING RIG: MOBILE B-57	DRILLER: MARK LAURA		DRILL FLUID/METHOD: H.S.A.
CASING TYPE: PVC SCH 40	DIA: 4"	SLOT: N/A	LENGTH: 5'
SCREEN TYPE: PVC SCH 40	DIA: 4"	SLOT: .020	LENGTH: 15'
SAMPLING METHOD: COMPOSITE	FORMATION: UNCONSOLIDATED		
GRAVEL PACK SIZE: #1 MORIE/BAGGED	SEAL: BENTONITE/CEMENT		

DEPTH	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	
		N	0" - 2' SAND & TOPSOIL WITH SOME GRAVEL
		O	
		S	2' - 15' BROWN/ORANGE MEDIUM SANDY CLAY
		P	
		O	
		O	
		N	
		S	
			15' - 20' GREEN SANDY CLAY & SILT

WELL DESIGN



WELL FINISHED TO 20'

DWR-138 M
6/89

New Jersey Department of Environmental Protection
Division of Water Resources

MONITORING WELL RECORD

Well Permit No. 29 .27073
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner EXXON CO. USA
Address 1100 RT. 1 N./P.O. BOX 66
City LINDEN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW #10
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1,2,3 Block No. 56
Address EXXON S/S #3-2046, BRANCH & SYCAMORE AVES., LITTLE SILVER, NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 02 / 06 /92
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GROUNDWATER ENV. SERVICES Tele. # (908) 389-6500

WELL CONSTRUCTION

Total depth drilled 17 ft.
Well finished to 17 ft.
Borehole diameter:
Top 12 in.
Bottom 12 in.
Well was finished: [ ] above grade
[X] flush mounted
If finished above grade, casing height (stick up) above land surface N/A ft.
Was steel protective casing installed?
[X] Yes [ ] No STEEL MANHOLE SET IN 2X2 CONCRETE PAD

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	GRADE	5'	4"	PVC SCH 40
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5'	17'	4"	SLOT .020 PVC SCH 40
Tail Piece				
Gravel Pack	3'	17'	ANNULUS	#1 MORIE/BAGGED
Annular Seal/Grout	GRADE	3'	ANNULUS	BENTONITE/CEMENT
Method of Grouting	GRAVITY			

Static water level after drilling APRX. 7 ft.
Water level was measured using STEEL TAPE
Well was developed for 1 hours at < 1 gpm
Method of development BAILING
Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method H.S.A.
Drilling Fluid N/A Type of Rig MOBILE B-57
Name of Driller MARK LAURA
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. 1486
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 all applicable State rules and regulations.

Driller's Signature Date 2-10-92

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

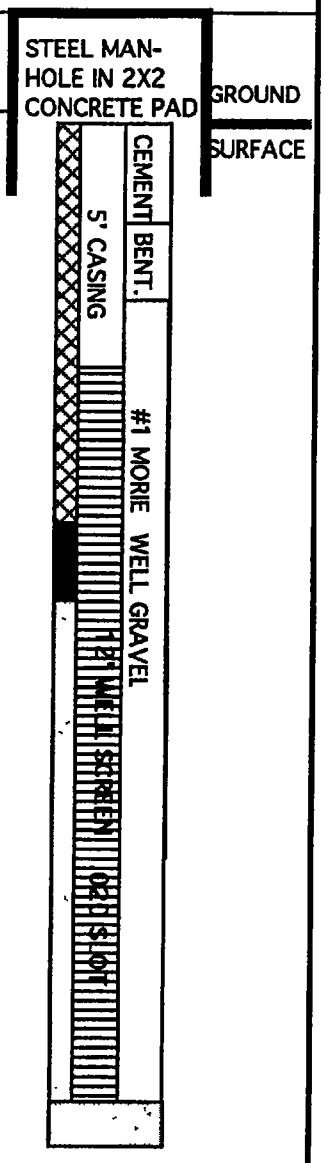
LUTZ ENVIRONMENTAL CO., INC. 2020 CLINTON STREET, LINDEN, NJ 07036
(908)862-6633

BORING LOG

PROJECT: EXXON S/S #3-2046	DATE DRILLED: 02/06/92	COORDINATE: 29 13 637	
LOCATION: BRANCH & SYCAMORE AVES., LITTLE SILVER, NJ	PERMIT #: 29-27073	WELL NO: MW #10	DEPTH: 17'
	STATIC WATER LEVEL: APPROX. 7'		HOLE DIA: 12"
OWNER: EXXON CO. U.S.A.	ADDRESS: 1100 RT. 1 NORTH, LINDEN, NJ		COUNTY: MONMOUTH
DRILLING RIG: MOBILE B-57	DRILLER: MARK LAURA		DRILL FLUID/METHOD: H.S.A.
CASING TYPE: PVC SCH 40	DIA: 4"	SLOT: N/A	LENGTH: 5'
SCREEN TYPE: PVC SCH 40	DIA: 4"	SLOT: .020	LENGTH: 12'
SAMPLING METHOD: COMPOSITE	FORMATION: UNCONSOLIDATED		
GRAVEL PACK SIZE: #1 MORIE/BAGGED	SEAL: BENTONITE/CEMENT		

DEPTH	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	
		N	0" - 5' BROWN/ORANGE MEDIUM SANDS WITH SOME CLAY
		O	
		S	5' - 15' GREEN/BROWN SANDY CLAY
		P	
		O	
		O	
		N	
		S	
			15' - 17' GREEN SANDY CLAY

WELL DESIGN



WELL FINISHED TO 17'

DWR-138
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29-27755
Atlas Sheet Coordinates 29 : 27755 : 29 : 13 : 643

OWNER IDENTIFICATION - Owner V.J. RUSSO REALTY
Address 179 AVENUE OF COMMONS
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same owner please give address. Owner's Well No.
Address 170 Avenue of Commons
County Monmouth Municipality SHREWSBURY BORO Lot No. 4-5 Block No. 70-2

WELL USE Withdrawal Status In Use

WATER USE Irrigation Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 6 / 17 / 92
Depths: Total 250 ft. Finished 250 ft.
Diameter: Top 8 in. Bottom 4 in.
Land Surface Elevation at well 10 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		235	4	PVC.
Casing 2		10	3	PVC.
Casing 3				
Screen 1		10	4	PVC. Slot #16
Screen 2				
Tail Piece				
Gravel Pack				
Grout	From Top of Screen to Surface			Bch 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 6 / 17 / 92
Static water-level before pumping 4 ft. below land surface. Water level ft. below land surface after hrs. of pumping.
Water level was measured using Tape Measure Drawdown ft.
Discharge rate measured using Calibrated Pail Discharge Rate 40 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 40 GPM at PSI pressure.
POWER: 3 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 75
City Jackson State N.J. Zip Code
Name of Driller Gary Poppe License No. 1180 M

Signature of Contractor Mary Lehrer, Sec. + Treas Date 7 / 28 / 92

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 - 27755

29.13.643

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. Englishtown

LOG

0-40' - Hard Gray Clay
40'-150' - Coarse Green Sand, Shell
150'-220' - Grey Clay + Clay
220'-230' - Dark Green Hard
230'-250' - Coarse Sand + Wood

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 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 27770
Atlas Sheet Coordinates 29 : 13 : 676

OWNER IDENTIFICATION - Owner MOBIL OIL CORP.
Address 1200 ROUTE 22 EAST
City BRIDGEWATER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW1
County Municipality EATONTOWN BORO Lot No. 5 Block No. 8
Address

TYPE OF WELL (as per Well Permit Categories) recovery Date well completed 4/2/92
Regulatory Program Requiring Well UST Case I.D. # 90-10-01-1200
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 23 ft.
Well finished to 23 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	6	PVC Sch 40
Outer Casing (Not Protective Casing)	—			
Screen (Note slot size)	3	23	6	SS 22 slot
Tail Piece	—			
Gravel Pack	3	23	12	#1 Morie
Annular Seal/Grout	0	3	12	Cement/Bentonite
Method of Grouting	gravity displacement			

Static water level after drilling 8 ft.
Water level was measured using M-Scope
Well was developed for 1/2 hours at 10 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Mud Rotary
Drilling Fluid None Type of Rig F-7
Name of Driller Chris Warren
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1546
Name of Drilling Company M & R SOIL INVESTIGATIONS, INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-18' F-m lt. green silty sand with glauconite trace green clay

18'-23' lt. green F-M silty sand with glauconite trace green 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 Date 4-20-92

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 - 27771
Atlas Sheet Coordinates 29 : 13 : 676

OWNER IDENTIFICATION - Owner MOBIL OIL CORP.
Address 1200 ROUTE 22 EAST
City BRIDGEWATER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW2
County Municipality RARITAN BORO Lot No. 5 Block No. 8
Address

TYPE OF WELL (as per Well Permit Categories) recovery Date well completed 4/21/92
Regulatory Program Requiring Well UST Case I.D. # 90-10-01-1200
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 — 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	6	PVC Sch 40
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	5	18	6	SS 22 slot
Tail Piece	—	—		
Gravel Pack	3	18	12	#1 Morie
Annular Seal/Grout	0	3	12	cement/Bentonite
Method of Grouting	gravity displacement			

Static water level after drilling 8 ft.
Water level was measured using M-Scope
Well was developed for 1/2 hours at 10 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Mud Rotary
Drilling Fluid — Type of Rig F-7
Name of Driller Chris Warren
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 1546
Name of Drilling Company M & R SOIL INVESTIGATIONS, INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-18' Lt. green silty F-M sand with glauconite trace green 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 Chris Warren Date 4/20/92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0790

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 27772
Atlas Sheet Coordinates 29 : 13 : 676

OWNER IDENTIFICATION - Owner MOBIL OIL CORP.
Address 1200 ROUTE 22 EAST
City BRIDGEWATER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW3
County Municipality EATONTOWN BORO Lot No. 5 Block No. 8
Address

TYPE OF WELL (as per Well Permit Categories) recovery Date well completed 4/3/92
Regulatory Program Requiring Well UST Case I.D. # 90-10-01-1200
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 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	6	PVC Sch 40
Outer Casing (Not Protective Casing)	—			
Screen (Note slot size)	5	18	6	SS 20 slot
Tail Piece	—			
Gravel Pack	3	18	12	#1 Morie
Annular Seal/Grout	0	3	12	cement/Bentonite
Method of Grouting	gravity displacement			

Static water level after drilling 8 ft.
Water level was measured using m-scope
Well was developed for ½ hours at 10 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Mud Rotary
Drilling Fluid — Type of Rig F-7
Name of Driller Chris Warren
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 1546
Name of Drilling Company M & R SOIL INVESTIGATIONS, INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-18' lt. green F-M silty sand with glauconite trace green 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 Date 4-20-92

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 - 27773
Atlas Sheet Coordinates 29 : 13 : 676

OWNER IDENTIFICATION - Owner MOBIL OIL CORP.
Address 1200 ROUTE 22 EAST
City BRIDGEWATER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW4
County Municipality ~~EATONTOWN BORO~~ Lot No. ~~5~~ Block No. ~~8~~
Address

TYPE OF WELL (as per Well Permit Categories) ~~recovery~~ Date well completed 4/13/92
Regulatory Program Requiring Well ~~UST~~ Case I.D. # ~~90-10-01-1200~~
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 — 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	6	PVC Sch 40
Outer Casing (Not Protective Casing)	—	—		—
Screen (Note slot size)	5	18	6	SS 22 slot
Tail Piece	—	—		—
Gravel Pack	3	18	12	#1 Morie
Annular Seal/Grout	0	3	12	Cement/Bentonite
Method of Grouting				

Static water level after drilling 8 ft.
Water level was measured using m-scope
Well was developed for ½ hours at 10 gpm
Method of development pumping
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Mud Rotary
Drilling Fluid — Type of Rig F-7
Name of Driller Chris Warren
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) ~~None~~ D C B A
N.J. License No. 1546
Name of Drilling Company M & R SOIL INVESTIGATIONS, INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-18' lt. green F-M silty sand with glauconite trace green 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 Date 4-20-92

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 - 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 .020 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 PLUMMER
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 DIEDRICH D-120
Name of Driller WILLIAM SHINN
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1289
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 (MARL)

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
8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29 - 28144
Atlas Sheet Coordinates 29 : 13 : 637

OWNER IDENTIFICATION - Owner EXXON COMPANY U.S.A.
Address 1100 ROUTE 1 NORTH, P.O. BOX 66
City LINDEN State NJ Zip Code 07036

WELL LOCATION - If not the same owner please give address. Owner's Well No. DW #1
Address EXXON S/S, SYCAMORE & BRANCH
County MONMOUTH Municipality LITTLE SILVER Lot No. 1,2,3 Block No. 56

WELL USE DEWATERING WELL Status

WATER USE Average gals. daily Maximum gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 06 / 10 / 92
Depths: Total 16.5 ft. Finished 16.5 ft.
Diameter: Top 12 in. Bottom 12 in.
Land Surface Elevation at well ft. Elevation was determined using
Casing Height (stick-up) above land surface N/A ft. FLUSHMOUNT

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1	GRADE	3'	8"	BEDROCK FLUSHMOUNT
Casing 2				
Casing 3				
Screen 1	3'	16.5'	8"	BEDROCK FLUSHMOUNT, .020 SLOT
Screen 2				
Tail Piece				
Gravel Pack	1.5'	16.5'	ANNULUS	#1 MORIE / BAGGED
Grout	GRADE	1.5'	ANNULUS	BENTONITE/CEMENT
Grouting Method	GRAVITY			

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.) (NOT PUMPED AT TIME OF INSTALLATION - THIS WELL IS A TEMPORARY DEWATERING WELL THAT MAY NOT ACTUALLY BE USED FOR DEWATERING.)

PERMANENT PUMPING EQUIPMENT Installed by Pump Type
Mfrs. Name Model
CAPACITY: Pump delivers GPM at PSI
POWER: HP at RPM Power Source
DEPTHS: Pump ft. Footpiece ft. Airline ft.
FLOW METER: Model NO PERMANENT PUMPING EQUIPMENT INSTALLED. in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor LUTZ ENVIRONMENTAL CO., INC.
Address 2020 CLINTON STREET, P.O. BOX 1247
City LINDEN State NJ Zip Code 07036
Name of Driller TIMOTHY WESTOVER License No. 1444

Signature of Contractor Timothy Westover Date 06/16/92

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

29.13.637

WELL RECORD

Well Permit No. 29 – 28144

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.

Are samples available? ☐ Yes ☑ No

Drilling Method DRIVE CASING

Type of Rig CANTERRA CT450

Aquifer/Geo. Fm. CRETACEOUS FORMATION

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" CONCRETE			
6" - 12.5' PEA GRAVEL WITH SOME GREEN FINE SANDS AND SILTS			
12.5' - 16.5' DARK GREEN CLAYEY SILTS WITH SOME FINE SAND; VERY GUMMY MATERIAL (PLASTIC)			

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 ____ / ____ / ____

LUTZ ENVIRONMENTAL CO., INC. 2020 CLINTON STREET, LINDEN, NJ
(908)862-6633 WELL LOG 07036

PROJECT: EXXON S/S	DATE DRILLED: 06/10/92		COORDINATE: 29 13 637
LOCATION: SYCAMORE & BRANCH LITTLE SILVER, NJ	PERMIT #: 29-28144	WELL NO: DW #1	DEPTH: 16.5'
	STATIC WATER LEVEL: APPROX. 5'		HOLE DIA: 12"
OWNER: EXXON CO. U.S.A.	ADDRESS: 1100 ROUTE 1N, LINDEN, NJ		COUNTY: MONMOUTH
DRILLING RIG: CT-450	DRILLER: TIMOTHY WESTOVER		DRILL FLUID/METHOD: DRIVE CASING
CASING TYPE: BEDROCK FLUSHMOUNT	DIA: 8"	SLOT: N/A	LENGTH: 3'
SCREEN TYPE: BEDROCK FLUSHMOUNT	DIA: 8"	SLOT: .020	LENGTH: 13.5
SAMPLING METHOD: COMPOSITE	FORMATION: UNCONSOLIDATED		
GRAVEL PACK SIZE: #1 MORIE/BAGGED	SEAL: BENTONITE/CEMENT		

DEPTH	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	
		N	0" - 6"	CONCRETE
		O	6" - 12.5'	PEA GRAVEL WITH SOME GREEN FINE SANDS AND SILTS
		S		
		P		
		O		
		O		
		N		
		S		
			12.5' - 16.5'	DARK GREEN CLAYEY SILTS WITH SOME FINE SAND, VERY GUMMY MATERIAL

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 28236
Atlas Sheet Coordinates 29 : 13 : 676

OWNER IDENTIFICATION - Owner EATONTOWN, BOROUGH OF
Address 47 BROAD STREET
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County Municipality EATONTOWN BORO Lot No. 17 Block No. 14
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 6/18/92
Regulatory Program Requiring Well UST Case I.D. # C-92-0678

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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	10	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	10	20	4	PVC.020
Tail Piece				
Gravel Pack	8	20		Reed #2
Annular Seal/Grout	6	8		Pellets
Method of Grouting	Tremie grout Portland #1			

Static water level after drilling 12.1 ft.
Water level was measured using Electric tape
Well was developed for 1 hours at .5 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 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. J-1530 TABASCO DRILLING CORP.
Name of Drilling Company

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'
Clay and silts
green to dark
grey in color
20'

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 7/1/92

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 Surge
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. Hitzeberger
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-330
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 Categories) 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 ~~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 GRAY
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.

WELREC 107 1892

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.) [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 BCI 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

MONITORING WELL RECORD

Well Permit No. 29 - 29158
Atlas Sheet Coordinates 29 : 13 : 673

OWNER IDENTIFICATION - Owner EATONTOWN BOROUGH OF
Address 47 BROAD STREET
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-2
County Municipality EATONTOWN BORO Lot No. 17 Block No. 14
Address

TYPE OF WELL (as per Well Permit Categories) Date well completed 12/9/92
Regulatory Program Requiring Well MONITORING UST Case I.D. # C-92-0678
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Active Oil 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	10	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	10	20	4	PVC .020
Tail Piece				
Gravel Pack	8	20	10	Rice #2
Annular Seal/Grout	6	8	10	Pellets
Method of Grouting	Tremie pumped + Bent			

Static water level after drilling 11.7 ft.
Water level was measured using Electric tape
Well was developed for 1 hours at 2 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 B-61
Name of Driller Karl D. Hitzberger
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) ~~None~~ D C B A
N.J. License No. 5-1530
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'
Tight silty SANDS
Grey to Green in
color more like
Clay as deeper
20'

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. Hitzberger Date 12/31/92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0758

573 DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

4

MONITORING WELL RECORD

Well Permit No. 29 - 29159
Atlas Sheet Coordinates 29 : 13 : 673

OWNER IDENTIFICATION - Owner ~~EATONTOWN BOROUGH OF~~
Address ~~47 BROAD STREET~~
City ~~EATONTOWN~~ State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County Municipality ~~EATONTOWN BORO~~ Lot No. 17 Block No. 14
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 12/9/92
Regulatory Program Requiring Well ~~UST~~ Case I.D. # ~~C-92-0078~~
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 18 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	8	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	8	18	4	PVC .020
Tail Piece				
Gravel Pack	6	18	10	Rice #2
Annular Seal/Grout	4	6	10	Pellets
Method of Grouting	Tremie Pumped & Bent			

Static water level after drilling 10.1 ft.
Water level was measured using Electric Tape
Well was developed for .5 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 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. J7530
Name of Drilling Company TABASCO DRILLING CORP.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'
Tight silty sands grey to green in color more like clay as deeper.
18'

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. Hitz Date 12/31/92

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0759

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

4

MONITORING WELL RECORD

Well Permit No. 29 - 29208
Atlas Sheet Coordinates 29 : 13 : 634

OWNER IDENTIFICATION - Owner EXXON COMPANY USA
Address 357 JEFFERSON ROAD
City PARSIPPANY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-11
County MONMOUTH Municipality LITTLE SILVER B Lot No. N/A Block No. N/A
Address BRANCH + SYCAMORE AVENUES LITTLE SILVER, N.J.

TYPE OF WELL (as per Well Permit Categories) Date well completed 1/9/93
Regulatory Program Requiring Well MONITORING LIST 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 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"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	3'	16'	4"	PVC .020
Tail Piece				
Gravel Pack	2'	16'		MORIE #2
Annular Seal/Grout	0'	2'		B. PELLETS/PORTLAND
Method of Grouting	GRAVITY			

Static water level after drilling 6 ft.
Water level was measured using TAPE
Well was developed for 45 Min hours at 2 gpm
Method of development PUMP
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid N/A Type of Rig B-57
Name of Driller MATT RAAB
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J1577
Name of Drilling Company SUMMIT WELL DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

SEE ATTACHED LOG

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 Matt Raab Date 1-13-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

GES

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E

MONITORING WELL RECORD

Well Permit No. 29 - 29627
Atlas Sheet Coordinates 29 : 13 : 681

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP.
Address 86 DORENUS AVE.
City NEWARK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 1
County Municipality EATONTOWN BORO Lot No. 216 Block No. 24
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5/7/93
Regulatory Program Requiring Well UST Case I.D. # 89-12-12-0952
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 10 ft.
Well finished to 10 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	6"	1½'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	1½'	10'	4"	20 Slot
Tail Piece				
Gravel Pack	1	10		#2
Annular Seal/Grout	6"	1'		bentonite
Method of Grouting	bentonite pellets/gravity feed			

Static water level after drilling 6.22 ft.
Water level was measured using Sonic tape
Well was developed for hours at N/A gpm
Method of development
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity gpm
Pump type:
Drilling Method Air
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. 12121
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0 – 6" black Top
6" – 1' brown, med to coarse sand.
1' – 10' Gray green 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 5/21/93

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

VE

MONITORING WELL RECORD

Well Permit No. 29 - 29628
Atlas Sheet Coordinates 29 : 13 : 681

OWNER IDENTIFICATION - Owner ~~GETTY PETROLEUM CORP.~~
Address ~~86 DOREMUS AVE.~~
City ~~NEWARK~~ State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW2
County Monmouth Municipality ~~EATONTOWN BORO~~ Lot No. ~~218~~ Block No. ~~24~~
Address 157 Broad St.

TYPE OF WELL (as per Well Permit Categories) Date well completed 5/7/93
Regulatory Program Requiring Well ~~MONITORING~~ UST Case I.D. # ~~89-12-12-0952~~
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 10 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	6"	1½'	4"	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	1½'	10'	4"	20 slot
Tail Piece				
Gravel Pack	1'	10'		#2
Annular Seal/Grout	6"	1'		bentonite
Method of Grouting	bentonite pellets/gravity feed			

Static water level after drilling 4.0 ft.
Water level was measured using Sonic tape
Well was developed for ____ hours at N/A gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Air
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 - 6" black top.
6" - 1' brown med. to coarse sand.
1' - 10' gray/green 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 5/24/93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0823

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 29629
Atlas Sheet Coordinates 29 : 13 : 681

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP.
Address 86 DORMUS AVE.
City NEWARK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW3
County Monmouth Municipality EATONTOWN BORO Lot No. 218 Block No. 24
Address 157 Broad St.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5/7/93
Regulatory Program Requiring Well UST Case I.D. # 89-12-12-0952
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 10 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.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	6"	1½'	4"	PVC
Outer Casing (Not Protective Casing)	~~1½'~~	~~10'~~	~~4"~~	
Screen (Note slot size)	1½'	10'	4"	20 slot
Tail Piece				
Gravel Pack	1'	10'		#2
Annular Seal/Grout	6'	1'		bentonite
Method of Grouting	bentonite pellets/gravity feed.			

Static water level after drilling 5.39 ft.
Water level was measured using sonic tape
Well was developed for hours at N/A gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Air
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 - 6" black top
6" - 10' Gray/green 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 5/21/93

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

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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.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0'	3'	4"	Sch40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size) .010	3	13	4"	" " "
Tail Piece	T&P	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 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 6/14/93
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 MAINE
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? ☒ 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.)

0-5' - 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-01-2844
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)				
.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 Tape
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? [✓] Yes [ ] No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. 10514
Name of Drilling 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' - gry 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 Robert M. Hesse Date 1-26-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
12/94

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

E

MONITORING WELL RECORD

Well Permit No. 29 - 30139
Atlas Sheet Coordinates 29 : 13 : 619

OWNER IDENTIFICATION - Owner STAR ENTERPRISE
Address 303 FELLOWSHIP RD.
City MOORESTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-24
County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 7 Block No. 35
Address Broad & White

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 8/25/93
Regulatory Program Requiring Well UST Case I.D. # 84-10-25-12
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 908 536 8500

WELL CONSTRUCTION

Total depth drilled 17 ft.
Well finished to 17 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	½	2	4	PVC Sch 40
Outer Casing (Not Protective Casing)	—	—		
Screen (Note slot size)	2	17	4	" " (.20)
None Tail Piece	—	—	—	—
Gravel Pack	1	17	12	#1 Morie
Annular Seal/Grout	½	1	12	Cement/Bentonite
Method of Grouting	Pressure			

Static water level after drilling 5 ft.
Water level was measured using Interface probe
Well was developed for ½ hours at 1 gpm
Method of development Bail/Surge
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Hollow stem Auger
Drilling Fluid _____ Type of Rig B-47
Name of Driller Robert Brown
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-1575
Name of Drilling Company HANDEX CORP./STEVE QUATRO

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8" Asphalt
8"-3½' Light brown m-f SAND, some Silt + Clay
3½-5' Dark green m-f SAND, some (-) Silt, trace Clay
5'-12' Light brown m-f SAND, little Silt, trace Clay
12'-17' Rusty brown m-f SAND, little Silt (+), trace (-) 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 Robert Brown Date 9-10-93

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 - 30282
Atlas Sheet Coordinates 29 : 13 : 634

OWNER IDENTIFICATION - Owner EXXON CO. U S A
Address 359 JEFFERSON ROAD
City PARSIPPANY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MWVP-1
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1,2,3 Block No. 58
Address Branch + Sycamore

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/11/93
Regulatory Program Requiring Well UST Case I.D. # 89-09-18-1524
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. # 908-919-0100

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	.5	2	4	PVC Sch 40
Outer Casing (Not Protective Casing)	—			
Screen (Note slot size)	2	15	4	PVC .020
Tail Piece	—			
Gravel Pack	1.5	15		Morie #1
Annular Seal/Grout	0	.5		Portland Pellets
Method of Grouting		Gravity		

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 N/A gpm
Pump type:
Drilling Method Auger
Drilling Fluid — Type of Rig B-80
Name of Driller Don Gerhamer Jr
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. M-1212
Name of Drilling Company SUBMIT WELL DRILLING

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 all applicable State rules and regulations.

Driller's Signature Don Gerhamer Jr Date 10-19-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

JR

SUMMIT DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

489 Union Avenue
Bridgewater, NJ 08807
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (908) 356-1009

2544D Morningside Dr.
West Columbia, SC 29169
Telephone: (803) 739-9853
Toll Free: (800) 242-6648
FAX: (803) 796-9698

WELL LOG 29.13.634

WELL: MWVP1 DATE DRILLED: 10/11/1993 COORD #: 29.13.634 PERMIT #: 29-30282 COUNTY: Monmouth
SITE: Exxon Service Station, Branch & Sycamore Aves., , Little Silver, NJ 07739 XSTREET:
OWNER: Exxon Company USA, 359 Jefferson Road, , Parsippany, NJ 07054 USE: Vent Well

INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE:	PVC	DRILLING METHOD:	Auger
DIAMETER:	4"	DIAMETER:		DIAMETER:	4"	SAMPLING METHOD:	Cuttings
LENGTH:	1.5'	LENGTH:		LENGTH:	13'	HOLE DIAMETER:	10"
				SLOT SIZE:	.020	TOTAL DEPTH:	15'

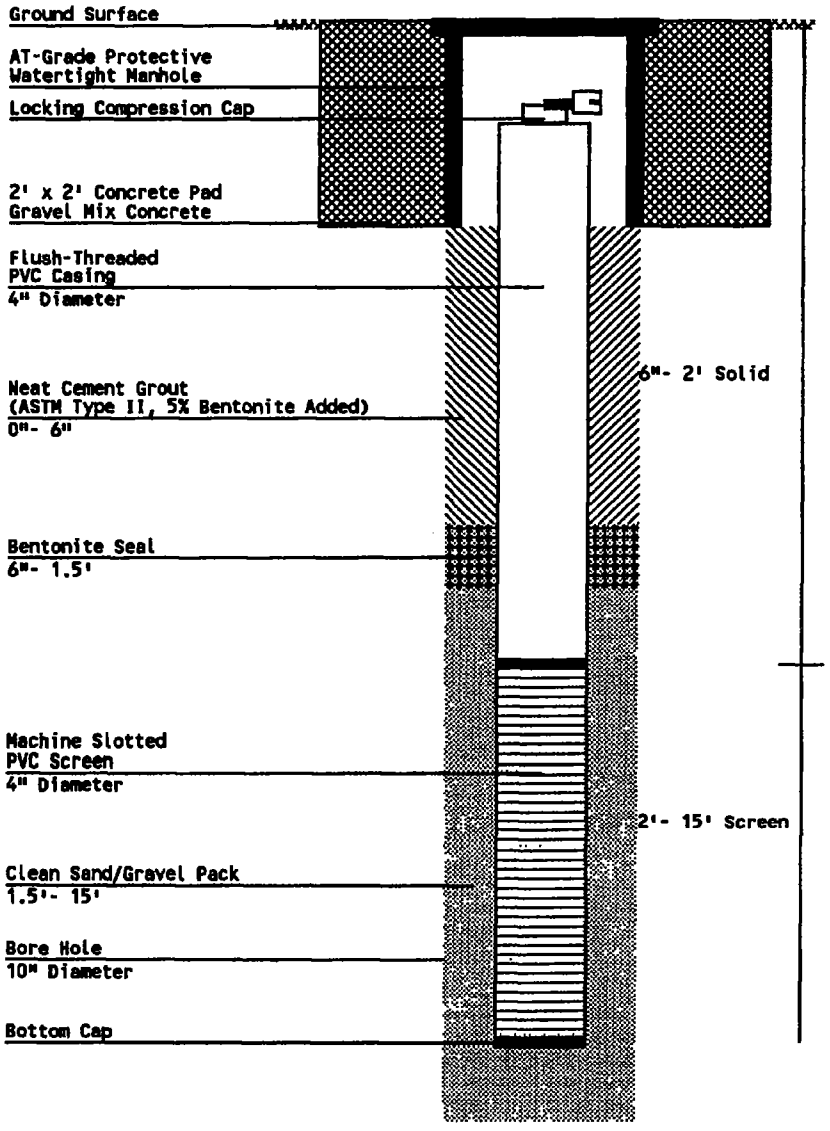
SET WELL: 15' GAL PER MIN: 2 OPEN HOLE:
GRAVEL PK SZ: Morie #1 STAT H2O LVL: 7' CASING SEAL: Portland/Pellets
DRILLER: Don Grahamer, Jr. DEVELOPMENT METHOD: Pump DEVELOPMENT TIME: 1 Hour
SURFACE COMPLETION: M GEOLOGIC FORMATION:

REMARKS / SOILS IDENTIFICATION

0' - 1' Topsoil.
1' - 15' Grey green fine sandy clay.

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER

PVC Well with Manhole



Summit DRILLING CO., INC.
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FAX: (803) 796-9698

WELL LOG

29.13.634

Well # MW - 11 Date Drilled 1/9/93 Coordinate # 29.13.634 Permit # 29-29208 County Monmouth
Use Monitor Owner Exxon Company, USA, 359 Jefferson Road, Parsippany, NJ 07054
Site Exxon Service Station, Branch & Sycamore Avenues, Little Silver, NJ
Drilling Method HSA Sampling Method N/A Hole Diameter 10" Total Depth 16'
Gravel Pack Size Morie #2 Static Water Level 6' Casing Seal Portland & Pellets Open Hole
Inner Casing PVC Diameter 4" Length 3' Outer Casing Diameter Length
Screen Type PVC Slot .020 Diameter 4" Length 13' Geologic Formation

Depth Below Surface	Sample Number	Blows per 6" on Sampler
10'		
20'		
30'		
40'		

Well Design

0'- 1'	GROUT	
0'- 3'	IN. CASING	
	OUT CASING	
1'- 2'	PELLETS	
2'- 16'	GRAVEL	
3'- 16'	SCREEN	
	OPEN HOLE	
16'	SET WELL	
2	GPM	
rig pump	DEVELOPMENT	
45 mins.	TIME	
	STANDPIPE	
X	FLUSHMOUNT	
	VAULT	

Identification of Soils / Remarks

0'- 1'	Asphalt
1'- 2'	Dk gray f/m sand & balast
2'- 5'	Br silty sand, little clay
5'- 7'	Br green clayey sand
7'- 13'	Br orange clayey sand
13'- 16'	Green glauconitic clay

Drilled by: Matthew Raab

DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

489 Union Avenue
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West Columbia, SC 29169
Telephone: (803) 739-9853
Toll Free: (800) 242-6648
FAX: (803) 796-9698

WELL LOG

WELL: RW1 DATE DRILLED: 10/11/1993 COORD #: 29.13.634 PERMIT #: 29-30283 COUNTY: Monmouth
SITE: Exxon Service Station, Branch & Sycamore Aves., , Little Silver, NJ 07739 XSTREET:
OWNER: Exxon Company USA, 359 Jefferson Road, , Parsippany, NJ 07054 USE: Recovery

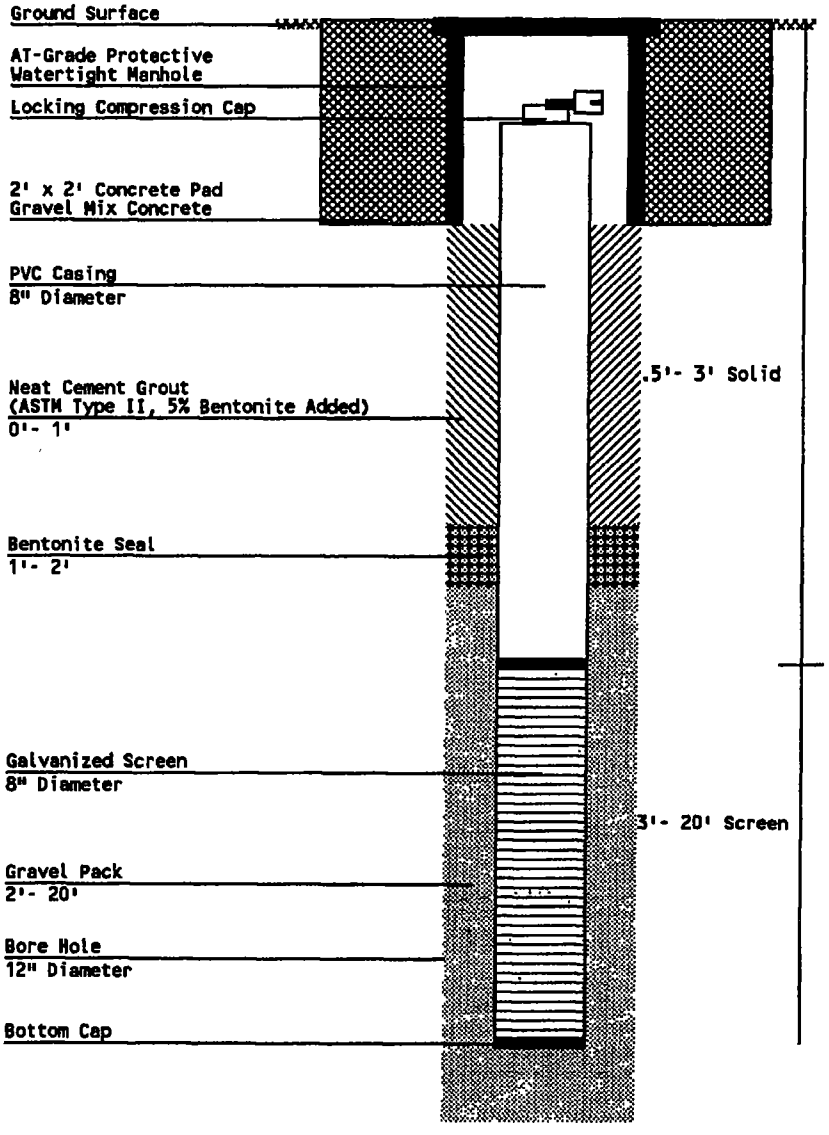
INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE:	Galvanized	DRILLING METHOD:	Water Rotary
DIAMETER:	8"	DIAMETER:		DIAMETER:	8"	SAMPLING METHOD:	Cuttings
LENGTH:	2.5'	LENGTH:		LENGTH:	17'	HOLE DIAMETER:	12"
				SLOT SIZE:	.020	TOTAL DEPTH:	23'

SET WELL: 20' GAL PER MIN: 4 OPEN HOLE:
GRAVEL PK SZ: Morie #1 STAT H2O LVL: 7' CASING SEAL: Portland/Pellets
DRILLER: Don Grahamer, Jr. DEVELOPMENT METHOD: Pump DEVELOPMENT TIME: 3 Hours
SURFACE COMPLETION: M GEOLOGIC FORMATION:

DEPTH BELOW SURFACE FROM - TO | BLOWS PER 6" ON SAMPLER

REMARKS / SOILS IDENTIFICATION

0' - 1' Topsoil.
1' - 23' Grey green fine sandy clay.
Drilled to 23' set well at 20'.



DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30283
Atlas Sheet Coordinates 29 : 13 : 634

OWNER IDENTIFICATION - Owner EXXON CO. U.S.A.
Address 359 JEFFERSON ROAD
City PARSIPPANY State NJ Zip Code

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. ~~1,2,3~~ Block No. ~~56~~
Address Beach & Sycamore

TYPE OF WELL (as per Well Permit Categories) recovery Date well completed 10/11/93
Regulatory Program Requiring Well UST Case I.D. # ~~89-09-18-1524~~
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. #908-919-0100

WELL CONSTRUCTION

Total depth drilled 23 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 — 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	.5	3	8	PVC Sch 40
Outer Casing (Not Protective Casing)	—			
Screen (Note slot size)	3	20	8	Galv. .020
Tail Piece	—			
Gravel Pack	2	20		Morie #1
Annular Seal/Grout	0	2		Portland-Pellets
Method of Grouting	Gravity			

Static water level after drilling 7 ft.
Water level was measured using Tape
Well was developed for 3 hours at ____ gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Water Rotary
Drilling Fluid — Type of Rig B-80
Name of Driller Don Grahamer Jr
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. M-1212
Name of Drilling Company SUMMIT WELL DRILLING

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 all applicable State rules and regulations.

Driller's Signature Don Graham Jr Date 10-19-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

KED

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30284
Atlas Sheet Coordinates 29 : 13 : 634

OWNER IDENTIFICATION - Owner EXXON CO. U S A
Address 359 JEFFERSON ROAD
City PARSIPPANY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW-2
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1,2,3 Block No. 56
Address Branch & Sycamore

TYPE OF WELL (as per Well Permit Categories) recovery Date well completed 10/11/93
Regulatory Program Requiring Well UST Case I.D. # 89-09-18-1524
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. # 908-919-0100

WELL CONSTRUCTION

Total depth drilled 23 ft.
Well finished to 23 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	.5	3	8	PVC Sch 40
Outer Casing (Not Protective Casing)	—			
Screen (Note slot size)	3	20	8	Galv. .020
Tail Piece	—			
Gravel Pack	2	20		Morie #1
Annular Seal/Grout	0	2		Portland-Pellets
Method of Grouting	Gravity			

Static water level after drilling 7 ft.
Water level was measured using Tape
Well was developed for 3 hours at 4 gpm
Method of development Pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method Water Rotary
Drilling Fluid — Type of Rig B-80
Name of Driller Don Graham Jr
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 24-1212
Name of Drilling Company SUMMIT WELL DRILLING

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 all applicable State rules and regulations.

Driller's Signature Don Graham Jr. Date 10-19-93

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0571

SUMMIT DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

489 Union Avenue
Bridgewater, NJ 08807
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (908) 356-1009

2544D Morningside Dr.
West Columbia, SC 29169
Telephone: (803) 739-9853
Toll Free: (800) 242-6648
FAX: (803) 796-9698

WELL LOG

WELL: RW2 DATE DRILLED: 10/11/1993 COORD #: 29.13.634 PERMIT #: 29-30284 COUNTY: Monmouth
SITE: Exxon Service Station, Branch & Sycamore Aves., , Little Silver, NJ 07739 XSTREET:
OWNER: Exxon Company USA, 359 Jefferson Road, , Parsippany, NJ 07054 USE: Recovery

INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE:	Galvanized	DRILLING METHOD:	Water Rotary
DIAMETER:	8"	DIAMETER:		DIAMETER:	8"	SAMPLING METHOD:	Cuttings
LENGTH:	2.5'	LENGTH:		LENGTH:	17'	HOLE DIAMETER:	12"
				SLOT SIZE:	.020	TOTAL DEPTH:	23'

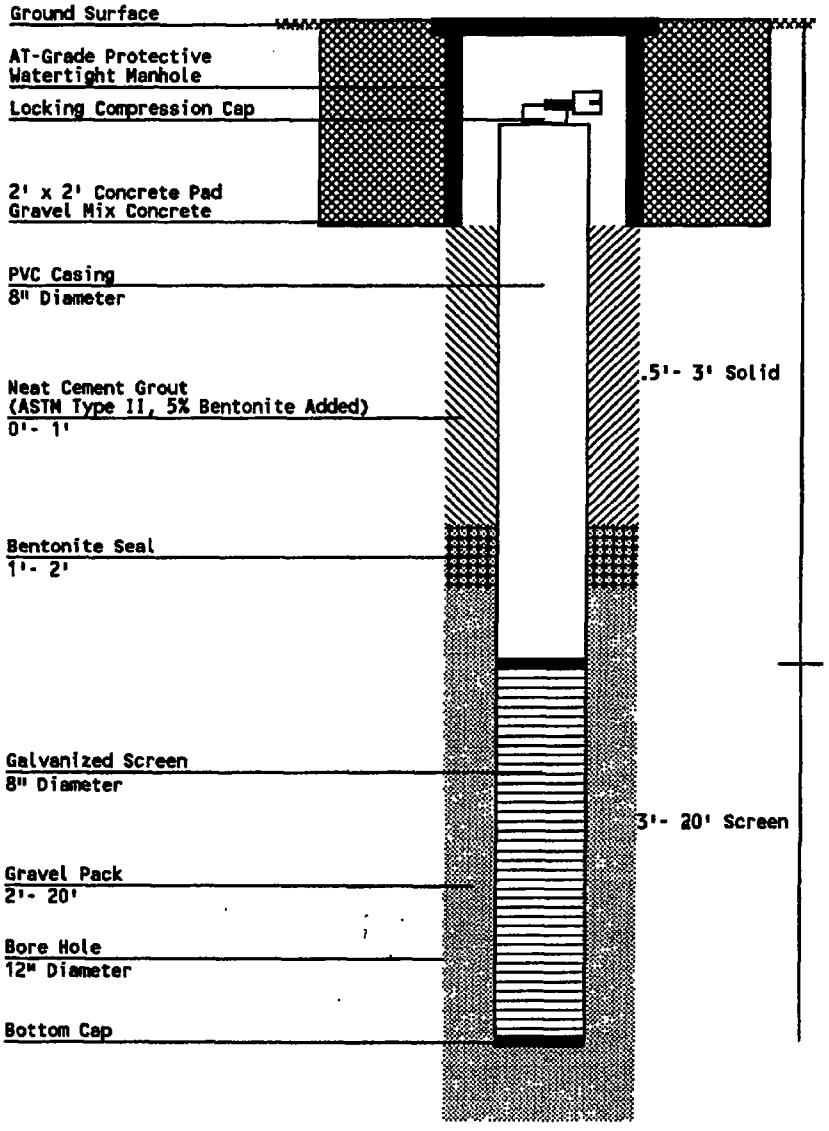
SET WELL: 20' GAL PER MIN: 4 OPEN HOLE:
GRAVEL PK SZ: Morie #1 STAT H2O LVL: 7' CASING SEAL: Portland/Pellets
DRILLER: Don Grahamer, Jr. DEVELOPMENT METHOD: Pump DEVELOPMENT TIME: 3 Hours
SURFACE COMPLETION: M GEOLOGIC FORMATION:

DEPTH BELOW SURFACE FROM - TO | BLOWS PER 6" ON SAMPLER

-

REMARKS / SOILS IDENTIFICATION

0' - 1' Topsoil.
1' - 23' Grey green fine sandy clay.
Drilled to 23' set well at 20'.



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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

PAGE 1 OF 2

E
LP

WELL RECORD

Well Permit No. 29 - 30388
Atlas Sheet Coordinates 29 : 13 : 683

Redacted - Privacy Act

OWNER IDENTIFICATION - Owner _____
Address 126 S. PEMBERTON AVE.
City OCEANPORT State NJ Zip Code _____

WELL LOCATION - If not the same owner please give address. Owner's Well No. W-1
Address 126 S. Pemberton Ave
County MONMOUTH Municipality OCEANPORT BORO Lot No. 10 Block No. 139

WELL USE Irrigation only Status _____

WATER USE Irrigation Average 500 gals. daily Maximum 1000 gals. daily

WELL CONSTRUCTION Date well completed Jan / 12 / 95
BOREHOLE DIMENSIONS Depths: Total 25 ft. Finished 25 ft.
Diameter: Top 12 in. Bottom 12 in.
Land Surface Elevation at well 20 ft. Elevation was determined using Topo Map
Casing Height (stick-up) above land surface 22 ft.

	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL *Screens: Note Slot Size(s)*
Casing 1		10	4	PVC
Casing 2		NA		
Casing 3		NA		
Screen 1	10	15	4	PVC (.020)
Screen 2	NA			
Tail Piece		NA		
Gravel Pack	8	17	12	#2 SAND
Grout	0	8		Bensea1
Grouting Method	Tremie / Pressure			

WELL FLOWS NATURALLY NA 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 / 12 / 95
Static water-level before pumping 8 ft. below land surface. Water level 10 ft. below land surface after 2 hrs. of pumping.
Water level was measured using Tape Drawdown 2 ft.
Discharge rate measured using 1 gallon pail Discharge Rate 8 gals. per min.
Well was pumped using Hayso Specific Capacity 8 gals. per min. per ft. of drawdown
Observed effects on nearby wells none
Water Quality (taste, odor, color, etc.) good, slight iron taste

PERMANENT PUMPING EQUIPMENT Installed by NA 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 GARY PARENT/SHORE DRILLING, INC
Address 23 Branch Ave
City Oceanport State NJ Zip Code 07757
Name of Driller Gary License No. 1275

Signature of Contractor Gary Parent Date 2 / 26 / 95

COPIES: White - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29 - 30388
29 13 683

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 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

0-1' Top soil
1'-4' Brn Fr-md SAND Trace of Clay
4'-12' Greenish brown Fr SAND
12'-25' Reddish brown & brown Fr-md Sand, Trace Fr gravel

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 ____ / ____ / ____

WATER ALLOCATION
82 FEB 18 AM 11:08

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8/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

WELL RECORD

Well Permit No. 29 - 30781
29 13629

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 MAYHEW 500 (TABLE DRIVE)

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

Depth	Soil Texture	Thick.	Lith.	Fm.
0 - 3'	TOP SOIL			
3' - 12'	SP, ML			
12' - 25'	CL (green), SM			
25' - 50'	CL (green), SM, wood chips			
50' - 65'	CL (green), GP, ML			
65' - 75'	SP, CL, ML			
75' - 85'	SP, CL (layers)			
85' - 103'	CL, SW (layers)			
103' - 119'	CL (green)			
119' - 130'	CL (green), SP			
130' - 140'	CL (gray), shell (traces)			
140' - 160'	CL (green), SP, shells			
160' - 220'	CL (green), SP, shell (traces)			
220' - 240'	CL (HARD), GP			
240' - 260'	SP, wood chips (trace), ML (trace)			
260' - 270'	SP, CL (layers)			
	- END OF DRILLING -			

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 ____ / ____ / ____

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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WELL RECORD

Well Permit No. 29 – 30781
Atlas Sheet Coordinates 29 : 13 : 629

Redacted - Privacy Act

OWNER IDENTIFICATION - Owner
Address 171 DORCHESTER WA
City SHREWSBURY State NJ Zip Code 07702

WELL LOCATION - If not the same owner please give address. Owner's Well No. —
Address 171 DORCHESTER WAY, SHREWSBURY, NJ 07702
County MONMOUTH Municipality SHREWSBURY BORO Lot No. 5 Block No. 69.4

WELL USE IRRIGATION Status EXCELLENT

WATER USE IRRIGATION Average 1200 gals. daily Maximum 2400 gals. daily

WELL CONSTRUCTION
BOREHOLE DIMENSIONS
Date well completed 4 / 15 / 94
Depths: Total 270 ft. Finished 260 ft.
Diameter: Top 8½ in. Bottom 8½ in.
Land Surface Elevation at well 15 ft. Elevation was determined using Topographic Series
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		239	4	PVC, SCH 40
Casing 2				
Casing 3				
Screen 1	240	20	4	PVC, SCH 40, .015" SLOT
Screen 2				
Tail Piece				
Gravel Pack	238	22	⅛	#2 MORIE
Grout	1	237		Baroid Bentonite clay
Grouting Method	Pressure Tremmie 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 4 / 15 / 94
Static water-level before pumping 5 ft. below land surface. Water level 21 ft. below land surface after 4 hrs. of pumping.
Water level was measured using TAPE Drawdown 16 ft.
Discharge rate measured using 5 gal pail Discharge Rate 40 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 DAN WALLACE Pump Type Submersible
Mfrs. Name STA-RITE Model Signature 2000, 20SP4E02T
CAPACITY: Pump delivers 20 GPM at 40 PSI pressure.
POWER: 1 HP at 3450 RPM Power Source electric
DEPTHS: Pump 125 ft. Footpiece — ft. Airline — ft.
FLOW METER: Model — installed on — in. diameter pipe.

CONTRACTOR - Name of Drilling Contractor MARK GILES / BEST EMERGENCY
Address 316 GRAND CENTRAL PARKWAY
City BAYVILLE State NJ Zip Code 08721
Name of Driller MARK GILES License No. J1626

Signature of Contractor Mark Giles Date 4 / 16 / 94

COPIES: White - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30857
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 TECHNOLOGY

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 red 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.)	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	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-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'-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.) [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'		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-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.)

0-1' 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 - 30863
Atlas Sheet Coordinates 29 : 14 :

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.) [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"	20slot PVC
Tail Piece				
Gravel Pack	1'	15'		#2
Annular Seal/Grout	6"	1'		Gemwite
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

707

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'		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
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.)

0-1' 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 - 30966
Atlas Sheet Coordinates 29 : 13 : 656

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 689 AiB 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. # 93-11-17-175933
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 6 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 TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8" ASPHALT
8"-6' Yellow-Brown Sand med
6'-10½' Green Clay + Sand Coarse
10½'-12½' Green Clay + Silt Traces of 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 7-18-94

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 - 30967
Atlas Sheet Coordinates 29 : 13 : 656

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 689 A&B 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 7/14/94
Regulatory Program Requiring Well UST Case I.D. # 93-11-17-175933
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"	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'		BENONITE
Method of Grouting	POUR			

Static water level after drilling 4½ 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 TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-4" ASPHALT
4"-5' BROWN SAND + CLAY
5'-8' GREEN CLAY + SAND
8'-12½ COARSE HARD BROWN CLAY AND 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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 30968
Atlas Sheet Coordinates 29 : 13 : 656

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. 600 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. # 93-119-0923-00
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'		Gemwite
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 TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Concrete
1'-4' Brown Sand + Silt
4'-6' Green Clay - Silt
6' 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
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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. # 93-11-2-12001-13

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.) [From land surface]	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-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
1-3' med Sand + Silt
3'-10' Green Clay + Sand
10'-12½' dark Grey 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.

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32874
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 MW)

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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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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'		Gemwite
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. 1421
Name of Drilling Company TYREE 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#)

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.

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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-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 7/14/94
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 6 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'		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 TYREE ENVIRONMENTAL TECHNOLOGY

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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

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Well Permit No. 29 - 30979
Atlas Sheet Coordinates 29 : 13 : 658

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-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 7/11/99
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 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 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
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2'	15'	4"	.010 SLOT PVC
Tail Piece				
Gravel Pack	1'	15'		#2
Annular Seal/Grout	0'	1'		BENTONITE
Method of Grouting	Pour			

Static water level after drilling 3½ 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 TECHNOLOGY

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-3" TOP SOIL
3"-3' BROWN SAND MED
3'-12' BROWN SAND + SILT
12'-15' DARK BROWN 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 7-18-99

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 30980
Atlas Sheet Coordinates 29 : 13 : 66

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 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.) [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"	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 TECHNOLOGI

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.

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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 ____ : ____ : ____

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.)	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 Kaulunas
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 Kaulunas Date 6/29/94

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 1931

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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 2½ 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

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WELREC 107 1932

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31401
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner NJ TRANSIT
Address 1 HUDSON PLACE
City HOBOKEN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-12
County MONMOUTH Municipality LITTLE SILVER B Lot No. 1 Block No. 7501
Address BRANCH & SYCAMORE AVE, LITTLE SILVER, NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/5/94
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES 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 NA 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 RISER
Outer Casing (Not Protective Casing)	NA	NA	NA	NA
Screen (Note slot size)	2	20	4	020 SLOT PVC SCREEN
Tail Piece	NA	NA	NA	NA
Gravel Pack	1	20	12	#2 SAND
Annular Seal/Grout	0	1	12	NEAT CEMENT
Method of Grouting	TREMIE PIPE			

Static water level after drilling 9 ft.
Water level was measured using TAPE
Well was developed for 1 hours at 3 gpm
Method of development MOYNO
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
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. 31540
Name of Drilling Company GARY PARENT/SHORE DRILLING, INC

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-4" ASPHALT
4"-6" TRAP ROCK
6"-5' BR. FN-MD SAND
5'-20' GREENISH BLACK V-FN 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 Gary Parent Date 6/1/94

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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~~ : 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. 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.)	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. 14121
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

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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 0 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 TECHNOLOGI

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.

LP

Driller's Signature Michael E Beck Date 10-10-94

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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 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. 401
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' 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

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31775
Atlas Sheet Coordinates 29 : 13 : 684

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address SELFS-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.)	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

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31776
Atlas Sheet Coordinates 29 : 13 : 651

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. 697 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/13/94
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 17½ ft.
Well finished to 17½ 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 2½ 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	2½'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	17½'	4	20 slot PVC
Tail Piece				
Gravel Pack	1½'	17½'		#2 Morie sand
Annular Seal/Grout	6"	1½'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 12 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, topsoil
6"-3' Olive gray, fine-medium sand
3'-5' Medium brown fine sand
5'-8' Olive gray soft clay
8'-10' Dark gray medium sand
10'-17½' Brown, 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.

Driller's Signature Michael E. Beck Date 10-10-94 LP

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29- 31777
Atlas Sheet Coordinates 29 13 651

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. 2000 MW-#1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9,23,94
Regulatory Program Requiring Well UST Case I.D. # 94-5-18-0936-36
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 Morie sand
Annular Seal/Grout	0	1'		Bentonite Portland
Method of Grouting	Tremmie			

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 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 TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Topsoil, vegetation
6"-2' Brown, fine sands + silts
2'-3' Light brown, med. stiff clay
3'-5' Brown, fine-med. sand
5'-6' Greenish-gray, soft clay w/ light brown, fine sand + silts
6'-11' Dark brown, silts w/ light brown soft clay
11'-12' Brown, 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

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WELREC 107 0668

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31778
Atlas Sheet Coordinates 29: 13: 651

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. 0067 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10, 4, 94
Regulatory Program Requiring Well UST Case I.D. # 94-5-16-1445-30
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"	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 5 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. 14121
Name of Drilling Company TYREE ENVIRONMENTAL TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-3' Yellowish-orange, fine-med. sand
3'-7' Brown, clayey fine-med. sand
7'-10' Brown, clayey fine-med. sand w/ angular gravel
10'-12½' Dark gray, 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

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31779
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 651

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. 2067- MW-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10, 5, 94
Regulatory Program Requiring Well DEF Case I.D. # 94-5-16-1445-30

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"	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 5 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' Light brown, silty fine sands
1'-2' Dark brown, silty fine sands
2'-3' Brown, silty fine sands
3'-3½' Dark gray, very soft clay
3½'-7' Olive gray, soft clay w/ brown silty fine sands
7'-10' Light brown, clayey fine sands
10'-11' Brown, clayey fine sands
11'-12½' Dark gray, 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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31780
Atlas Sheet Coordinates 29 : 13 : 850

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 707 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/13/94
Regulatory Program Requiring Well UST Case I.D. # 94-5-13-0932-29
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 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	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 9'11" 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" Grassy area, top soil
6"-1½' Medium brown, fine sand
1½'-3' Light brown, silty sands
3'-4' Light brown, fine sands w/ black fines.
4'-5' Medium brown silts + clay lenses
5'-6' Med. brown silts + very hard clay lenses.
6'-12½' Olive gray 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

MONITORING WELL RECORD

Well Permit No. 29 - 31781
Atlas Sheet Coordinates 29: 13: 656

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. 707 MW-2
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/13/94
Regulatory Program Requiring Well UST Case I.D. # 94-5-13-0932-29
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 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	2½'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	12½'	4	20 slot PVC
Tail Piece				
Gravel Pack	1'	12½'		#2 Morie sand
Annular Seal/Grout	6"	1'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 6'10" 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 TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Grassy area, topsoil
6"-2' Lite brown, fine sand w/fines
2-3' Dark brown, silts + fine sands
3'-7' Olive gray fine sand
7'-12½' Olive gray 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

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29- 31782
Atlas Sheet Coordinates 29 13 656

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. 745
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/13/94
Regulatory Program Requiring Well UST Case I.D. # 94-5-10-0831-11
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	1'	12½'		#2 Morie sand
Annular Seal/Grout	6"	1'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 2' 11" 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 TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Asphalt / Subbase
6"-2' Brown, medium sands w/ pebbles
2'-3' Olive gray medium sand
3'-7' Olive gray fine sand
7'-12½' Olive gray, 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

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31783
Atlas Sheet Coordinates 29 : 13 : 051

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. 2567 MW-5
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/23/94
Regulatory Program Requiring Well UST Case I.D. # 91-8-27-1414
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 2½ 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	2½'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	12½'	4	20 slot PVC
Tail Piece				
Gravel Pack	1'	12½'		#2 Morie sand
Annular Seal/Grout	0	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. 1421
Name of Driller Company TYREE ENVIRONMENTAL TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6" Topsoil, vegetation
6"-1' Brown, fine sand
1'-2' Black, soft clay
2'-3' Brown, fine sands + silts
3'-12½' Gray, med. sand w/ well rounded gravel.

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

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WELREC 107 0671

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 31784
Atlas Sheet Coordinates 29 13 654

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address SELFM-IW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 206 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. # 93-10-21-1910-1
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"	2½"	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	12½'	4	20 slot PVC
Tail Piece				
Gravel Pack	2'	12½'		#2 Morie Sand
Annular Seal/Grout	6"	2'		Bentonite Portland
Method of Grouting	Tremmie			

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 880
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 Drilling Company TYREE ENVIRONMENTAL TECHNOLOGI

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'-1' Asphalt/Subbase
1'-2' Dark grey silty fine sands
2'-5' Gravel w/ dark grey silty fine sands
5'-8' Gravel w/ light brown clay-sand mix.
8'-12½' Grey soft clay + 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 10-10-94 LP

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31785
Atlas Sheet Coordinates 29 : 13 : 655

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. 1108 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/12/94
Regulatory Program Requiring Well UST Case I.D. # 94-5-13-0932-29
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"	5'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5'	15'	4	20 slot PVC
Tail Piece				
Gravel Pack	3'	15'		#2 Morie sand
Annular Seal/Grout	6"	3'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 6'4" 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 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, topsoil
6"-1½' Brown, silty sands with pebbles
1½'-3' Dark brown, clayey sands
3'-7' Gray stiff clay w/ brown fine sand
7'-13' Dark greenish-gray stiff clay
13'-15' Olive gray stiff 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

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WELREC 107 0686

DWR-138 M
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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31787
Atlas Sheet Coordinates 29: 13: 6.3

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. 0337 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9/26/94
Regulatory Program Requiring Well UST Case I.D. # 94-5-24-1422-56
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"	2½'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	12½'	4	20 slot PVC
Tail Piece				
Gravel Pack	2'	12½'		#2 Morie sand
Annular Seal/Grout	6"	2'		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 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' Brown, fine-med. sand
1'-3' Dark gray, silty clays
3'-3½' Greenish-gray, fine-med. sand
3½'-4' Light brown, fine-med. sand
4'-6' Olive gray, fine-med. sand
6'-7' Greenish-gray, soft clay + silts
7'-12' Brown, soft clay + silts
12'-12½' Dark gray, 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

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DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31788
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 643

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. 2700, 2, 6 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10, 17, 94
Regulatory Program Requiring Well UST Case I.D. # 94-4-7-1617-44

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: ☐ 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"	10'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	10'	20'	4	20 slot PVC
Tail Piece				
Gravel Pack	2'	20'		#2 Morie Sand
Annular Seal/Grout	6"	2'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 18 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" Vegetation, topsoil
6"-3' Brown, clayey fine sands
3'-3½' Dark grey, very soft clay
3½'-4' Light brown, clayey fine sands
4'-6' Brown, silty fine sands
6'-6½' Brown, clayey fine sands
6½'-10½' Brown, sand-clay mixtures
10½'-13' Brown, silty fine sands
13'-14' Greenish-grey, silty fine sands wl
14'-20' dark grey, ~~hard stiff~~ clay
Brown, silty fine sands

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 10-19-94

LP

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DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 31792
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 634

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 210 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. # 94-1-25-0913-00

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 Morie sand
Annular Seal/Grout	6"	1'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 6 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" Grassy area, top soil
6"-2' Light brown, fine sand + silts
2'-3' Light brown, medium sand
3'-7' Med. brown, med. sand w/ silts
7'-12' Med. brown, silty sands

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

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DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32115
Atlas Sheet Coordinates 29: 13: 6[illegible]

OWNER IDENTIFICATION - Owner U S ARMY-FT. 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. 2700, 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 9/26/94
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 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'	12'	4	20 slot PVC
Tail Piece				
Gravel Pack	1'	12'		#2 Morie Sand
Annular Seal/Grout	0'	1'		Bentonite Portland
Method of Grouting	Tremmie			

Static water level after drilling 12 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 BBO
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'-6" Topsoil, Vegetation
6"-5' Brown, silty fine sands w/ sub-rounded pebbles.
5'-6' Brown, fine to medium sand.
6'-12' Brown, silty fine sands with black fines.

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

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WELREC 107 0656

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32189
Atlas Sheet Coordinates 29: 13: 655

OWNER IDENTIFICATION - Owner US ARMY ENGINEERS DIST
Address 26 FEDERAL PLAZA
City NEW YORK State NY Zip Code 10278

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 Near Sherill Ave. and Messinger Ave.

TYPE OF WELL (as per Well Permit Categories) BORING Date well completed 10/21/94
Regulatory Program Requiring Well 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 4" in.
Bottom 4" 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	N/A			
Outer Casing (Not Protective Casing)				
Screen (Note slot size)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	Pressure Grout Method			

Static water level after drilling — ft.
Water level was measured using —
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Rotary
Drilling Fluid Type of Rig F1500
Name of Driller Joseph 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. M-1350
Name of Drilling Company WARREN GEORGE INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

9¼"	Black Top
4¼'	M-F Sand Little SILT
4'/12'	Grey Green clayey SILT M-F sand trace 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 [signature] Date 10/24/94 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- 32190
Atlas Sheet Coordinates 29 13 655

OWNER IDENTIFICATION - Owner US ARMY ENGINEERS DIST
Address 26 FEDERAL PLAZA
City NEW YORK State NY Zip Code 10278

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 Near Sherill Ave & Messinger Ave.

TYPE OF WELL (as per Well Permit Categories) ~~BORING~~ Date well completed 10/19/94
Regulatory Program Requiring Well Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 47' ft.
Well finished to 47' ft.
Borehole diameter:
Top 4" in.
Bottom 4" 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	N/A			
Outer Casing (Not Protective Casing)				
Screen (Note slot size)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	Pressur Grout Method			

Static water level after drilling 8' ft.
Water level was measured using —
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Rotary
Drilling Fluid Type of Rig F-1500
Name of Driller Joseph 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. N-1350
Name of Drilling Company WARREN GEORGE INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0/4"	Black Top
4"/4'	M+F Sand, Little silt
4'/13'	Grey-green clayey silt M+F sand trace clay
13'/47'	Grey silty clay & M-F 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 Date 10/24/94 LP

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29. 32191
Atlas Sheet Coordinates 29 13 655

OWNER IDENTIFICATION - Owner US ARMY ENGINEERS DIST
Address 26 FEDERAL PLAZA
City NEW YORK State NY Zip Code 10278

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 near Sherill Ave & Messinger Ave.

TYPE OF WELL (as per Well Permit Categories) ~~BORING~~ Date well completed 10/20/94
Regulatory Program Requiring Well _____ Case I.D. # _____
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) _____ Tele. # _____

WELL CONSTRUCTION
Total depth drilled 32' ft.
Well finished to 32' ft.
Borehole diameter:
Top 4" in.
Bottom 4" 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	N/A			
Outer Casing (Not Protective Casing)				
Screen (Note slot size)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	Pressure Grout Method			

Static water level after drilling — ft.
Water level was measured using —
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type: —
Drilling Method Rotary
Drilling Fluid — Type of Rig Failing 1500
Name of Driller Joseph 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. M-1350
Name of Drilling Company WARREN GEORGE INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0'/4"	Black Top
4"/4'	M-F Sand Little Silt
4'/12'	grey-green clayey silt and M-F sand Trace clay
12'/32'	Gr. silt clay + M-F 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 _____ Date 10/24/94

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WELREC 107 0689

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29- 32192
Atlas Sheet Coordinates 29 13 655

OWNER IDENTIFICATION - Owner US ARMY ENGINEERS DIST
Address 26 FEDERAL PLAZA
City NEW YORK State NY Zip Code 10278

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B-4
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. ~~N/A~~ Block No. ~~N/A~~
Address Near Sherill Ave. and Messina Ave.

TYPE OF WELL (as per Well Permit Categories) ~~BORING~~ Date well completed 10/20/94
Regulatory Program Requiring Well Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 27' ft.
Well finished to 27' ft.
Borehole diameter:
Top 4" in.
Bottom 4" 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	N/A			
Outer Casing (Not Protective Casing)				
Screen (Note slot size)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout				
Method of Grouting	Pressure Grout Method			

Static water level after drilling — ft.
Water level was measured using —
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity — gpm
Pump type:
Drilling Method Rotary
Drilling Fluid Type of Rig Failing 1500
Name of Driller Joseph 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. M-1350
Name of Drilling Company WARREN GEORGE INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0/4"	Black Top
4"/4'	M-F Sand Little Silt
4'/12'	Grey. Green clayey silt M-F sand trace clay
12'/27'	Grey Silty clay M-F 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 Date 10/24/94

LP

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32560
Atlas Sheet Coordinates 29 : 13 : ~~658~~

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. MW12
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 12/20/94
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	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	15	4	f.j. .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 7.5 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
0-3'	Brown silty sand
3'-4'	Brown sand
4'-8'	orange brown sand
8'-8.5'	Red brown sand
8.5'-9.5'	Green sand
9.5'-12'	Brown sand with silt
12'-14.5'	Brown sand with silt
14.5'-15'	Green 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 Steve Burger (JD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 32561
Atlas Sheet Coordinates 29 : 13 : 656

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. MW13
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 1/17/95
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 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	4	16		#1 Morie
Annular Seal/Grout	0	4		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 3.0 ft.
Water level was measured using M-Scope
Well was developed for 2 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 Failing F-2
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. J-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
0-4'	Brown silty sand, wood fragments
4'-13'	Gray sandy silt, gravel
13'-16'	Grayish brown 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 Date 4-19-95

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WELREC 107 0708

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32562
Atlas Sheet Coordinates 29 : 13 : 656

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. MW14
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 1/16/95
Regulatory Program Requiring Well MONITORING OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 16 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 2.0 ft.
Was steel protective casing installed? [X] 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. pvc .010slot
Tail Piece				
Gravel Pack	4	16		#1 Morie
Annular Seal/Grout	0	4		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 6.5 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 [X] No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method HSA
Drilling Fluid none Type of Rig Failing F-2
Name of Driller Wellington Reeves
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. 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
0-1'	Brown silty sand
1'-8'	Gray sandy silt
8'-10'	Brown silty sand
10'-12'	Gray sandy silt
12'-13'	Brown silt with sand
13'-16'	Green 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 Wellington Reeves (D) Date 4-19-95

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32563
Atlas Sheet Coordinates 29 : 13 : 656

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. MW15
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 1/17/95
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 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	fij. .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 3.0 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 Failing F-2
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. J-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/black silty sand
2'-7'	Gray brown silty sand
7'-13'	Gray silty sand
13'-16'	Dark green 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 Wellington Reeve Jr. Date 4-19-95

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12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 32565
Atlas Sheet Coordinates 29 : 13 : 656

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. MW24
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 1/13/95
Regulatory Program Requiring Well MONITORING 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	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	3.5	15.5		#1 Morie
Annular Seal/Grout	0	3.5		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 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 B 57
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"	orange silty gravel with sand
2"-3'	Brown silty sand
3'-4'	Black fill, shingles
4'-15.5'	Gray/dark 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 Wellington Reeve (QD) Date 4-19-95

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DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 32566
Atlas Sheet Coordinates ~~29~~ : ~~13~~ : 656

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 25
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1.1.8. Block No. 3.53.54
Address same as above.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 1/13/95
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.) [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	fj. .010slot 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 2.5 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 Mobile B57
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. J 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
0-4'	Brown silty sand
4'-6'	Olive green/gray sand
6'-15.5'	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 Wellington Reeve (QD) 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 - 32563
Atlas Sheet Coordinates 29 : 13 : 656

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. B4 MW04B
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 1/9/95
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 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 2.0 ft.
Was steel protective casing installed? [X] 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	4	16		#1 Morie
Annular Seal/Grout	0	4		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 5 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 [X] 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? [X] Yes [ ] No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 31455
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 silty sand
.5'-2'	dive brown silty sand
2'-10'	dive silty sand
10'-14'	Green silty sand
14'-16'	Dark green 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 (JR) Date 4-19-95

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

CL

MONITORING WELL RECORD

Well Permit No. 29 - 32568
Atlas Sheet Coordinates 29 : 13 : 656

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELEM-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. MW04
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 23 ft.
Well finished to 23 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 2.0 ft.
Was steel protective casing installed? [X] Yes [ ] No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	8	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	8	23	4	fj .010 slot pvc
Tail Piece				
Gravel Pack	6	23		#1 Morie
Annular Seal/Grout	0	6		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 10 ft.
Water level was measured using m-scope
Well was developed for 2.0 hours at 1 gpm
Method of development pumping
Was permanent pumping equipment installed? [ ] Yes [X] 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? [X] 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
0-8.5'	olive green silty sand
8.5'-10'	Brown olive green silty sand
10'-23'	Dark olive green

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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 32569
Atlas Sheet Coordinates 29 : 13 : 655

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELEM-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. MP3 MW05
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 1/9/95
Regulatory Program Requiring Well MONITORING OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 17 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.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	6	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	6	16	4	f.j. pvc. .010 slot
Tail Piece				
Gravel Pack	5	17		#1 Morie
Annular Seal/Grout	0	5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 6.5 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'	Brown silty sand
2'-14'	Black silty sand with gravel
14'-17'	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 Wellington Reeve Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32570
Atlas Sheet Coordinates 29 : 13 : 655

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 06
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 1/1/95
Regulatory Program Requiring Well GWQR INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 16 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	4	16		#1 morie
Annular Seal/Grout	0	4		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 6.5 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. J 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-.5'	Black organic topsoil
.5'-8'	Brown to black silty sand
8'-16'	Green 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 Wellington Reeve Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32571
Atlas Sheet Coordinates 29 : 13 : 655

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. MW07
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 12/14/94
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 15.5 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	5.5	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5.5	15.5	4	fj. .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 6.0 ft.
Water level was measured using m-scope
Well was developed for 2 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. 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-.5'	Dark brown sandy silt
.5'-3'	Brown-red sand with silt
3'-4'	Orange brown silty sand
4'-14'	Olive brown silty sand
14'-15.5'	Olive 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 (JD) Date 4-19-95

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WELREC 107 0694

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32572
Atlas Sheet Coordinates 29 : 13 : 655

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. MW08
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 12/13/94
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 19 ft.
Well finished to 19 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 2.0 ft.
Was steel protective casing installed? [X] 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	4	flushjoint pvc.
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4	19	4	fij. .010 slot pvc.
Tail Piece				
Gravel Pack	2	19		#1 morie
Annular Seal/Grout	0	2		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 hours at 1.5 gpm
Method of development pumping
Was permanent pumping equipment installed? [ ] Yes [X] 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? [X] 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
0-2'	Brown organic soil
2'-4'	Red brown fill
4'-5'	Dark brown sand
5'-12'	Brown sand, silty gravel
12'-13'	Brown organic soil
13'-16'	Gray silty sand
16'-19'	Green 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 (SB) Date 4-19-95

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32573
Atlas Sheet Coordinates 29 : 13 : 655

OWNER IDENTIFICATION - Owner U. S. ARMY (DIRECTORATE
Address BLDG. 167 ATT: SELEM-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. MW09
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 12/13/94
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 22 ft.
Well finished to 22 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	7	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	7	22	4	fj .010 slot pvc
Tail Piece				
Gravel Pack	5	22		#1 Morie
Annular Seal/Grout	0	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 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
0-8'	Brown silty sand, sandy silt
8'-10'	Green gray sandy silt
10'-12'	Dark gray silt with sand
12'-14'	Gray silt, gravel
14'-16'	Gray silty sand
16'-22'	Green sandy 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 Steve Burger (JD.) Date 4-19-95

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Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 32574
Atlas Sheet Coordinates 29 : 13 : 655

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. MW10
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 12/14/94
Regulatory Program Requiring Well MONITORING UNDER 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 2.5 ft.
Water level was measured using m-scope
Well was developed for 2 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-.5'	Brown sandy silt topsoil
.5'-4'	Olive brown silty sand
4'-6'	Brown/yellow brown silty sand
6'-15'	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

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32575
Atlas Sheet Coordinates 29 : 13 : 655

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 11
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 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	f.j. .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 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 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 16024
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 silty topsoil
.5'-1'	Orange sandy silt
1'-4'	Gray brown / brown sand w/silt
4'-7'	Olive green / brown silty sand
7'-10'	Green/brown sandy silt
10'-15'	Brown green 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 Date 4-19-95

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WELREC 107 0698

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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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-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 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 JD Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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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. 3,59,54
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.

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New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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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: SELEM-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 OTHER 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 (SB) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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Bureau of Water Allocation

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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 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	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 (QD) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0752

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. MW 21
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.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0	6	4	flushjoint 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 (SB) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

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12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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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: SELEM-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. 31455
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

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12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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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) 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 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. 31455
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.

WELREC 107 0755

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

E
CL

Well Permit No. 29 - 32584
Atlas Sheet Coordinates 29 : 13 : 68

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. MP2 MW01
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 12/14/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 23 ft.
Well finished to 22 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	7	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	7	22	4	fij. .010 slot pvc
Tail Piece				
Gravel Pack	5	23		#1 Morie
Annular Seal/Grout	3	5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 15.0 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. J 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-.5'	Dark brown silty sand
.5-4'	Light brown sand
4'-4.5'	Grayish brown silty sand
4.5'-5.5'	Orange brown sand, sandy clay
5.5'-7.5'	Grayish brown silty sand
7.5'-23'	Brown/dark 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 Wellington Reeve (JD) Date 4-19-95

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DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 - 32585
Atlas Sheet Coordinates 29 : 13 : 681

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. MP2 MW02
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 12/13/94
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 17 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 2.0 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	0	7	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	7	17	4	fij. .010 slot pvc
Tail Piece				
Gravel Pack	5	18		#1 Morie
Annular Seal/Grout	3	5		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 9.0 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 [X] 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? [X] Yes [ ] No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. J 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/Dark brown sandy silt
2'-6'	Green gray sandy silt
6'-8'	Green/black fill soils
8'-16'	Brown/gray silty sand
16'-18'	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 Wellington Reeve (90) 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

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MONITORING WELL RECORD

Well Permit No. 29 - 32586
Atlas Sheet Coordinates 29 : 13 : 681

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. MP2 MW03
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 12/13/94
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 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	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5	15	4	f.j. .010 slot pvc
Tail Piece				
Gravel Pack	4	16		#1 Morie
Annular Seal/Grout	2	4		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. J 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
0-1'	Light brown silty sand
1'-2'	Grayish brown silty sand
2'-3'	Grayish green silty sand
3'-6'	Grayish white sand
6'-8'	white tan sand
8'-14'	Brown/greenish gray sand
14'-16'	Dark 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 Wellington Reeve (D) Date 4-19-95

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0827

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 32587
Atlas Sheet Coordinates 29 : 13 : 681

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. MW01B
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 1/9/95
Regulatory Program Requiring Well OWNER INVESTIGATION 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 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	4	flushjoint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	4	14	4	f.j. .010 slot pvc
Tail Piece				
Gravel Pack	2	14		#1 Morie
Annular Seal/Grout	0	2		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 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-.5'	Brown silty sand
.5'-2'	Yellow brown sand
2'-4'	Olive yellow brown sand
4'-6'	Orange brown sand
6'-12'	Brown sand w/silt
12'-14'	Strong brown 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 (SB) 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 - 32588
Atlas Sheet Coordinates 29 : 13 : 681

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. MW02B
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 1/6/95
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 2.0 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	10	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	10	20	4	fj. .010 slot pvc
Tail Piece				
Gravel Pack	8	20		#1 Morie
Annular Seal/Grout	0	8		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 10.5 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
0-4'	Brown sandy silt
4'-6'	Brown/olive clay with sand
6'-8'	Green/gray brown clay with sand
8'-10'	Brown/olive brown silt with sand
10'-20'	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 (SB) 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

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MONITORING WELL RECORD

Well Permit No. 29 - 32589
Atlas Sheet Coordinates 29 : 13 : 681

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. MW03B
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 1/9/95
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 26 ft.
Well finished to 26 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	16	4	flush joint pvc
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	16	26	4	fj. .010 slot pvc
Tail Piece				
Gravel Pack	14	26		#1 Morie
Annular Seal/Grout	0	14		cement-bentonite
Method of Grouting	Tremie			

Static water level after drilling 10 ft.
Water level was measured using m-scope
Well was developed for 2.0 hours at 1 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'	Brown silty sand
2'-4'	Brown/yellow silty sand
4'-6'	Olive yellow silty sand
6'-12'	Brown/green gray silty sand
12'-26'	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 (JD) 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

E LP

Well Permit No. 29 - 32743
Atlas Sheet Coordinates 29 : 13 : 650

OWNER IDENTIFICATION - Owner ~~UNITED STATES GOVERNMENT~~
Address ~~FORT MONMOUTH ARMY BASE~~
City ~~FORT MONMOUTH~~ State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. B-1 to B-10
County ~~MONMOUTH~~ Municipality ~~OCEANPORT BORO~~ Lot No. ~~NA~~ Block No. ~~NA~~
Address Same

TYPE OF WELL (as per Well Permit Categories) ~~BORING~~ Date well completed 2/9/95
Regulatory Program Requiring Well ~~OWNER INVESTIGATION~~ Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) SCHNABEL ENGINEERS Tele. # 610-696-6066

WELL CONSTRUCTION
Total depth drilled 505 ft.
Well finished to _____ ft.
Borehole diameter:
Top 4 1/4 in.
Bottom 4 1/4 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

6@50'
1@35'

	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)				
Tail Piece				
Gravel Pack				
Annular Seal/Grout	0	50		Bentonite grout
Method of Grouting	Tremie			

Static water level after drilling _____ ft.
Water level was measured using _____
Well was developed for _____ hours at _____ gpm
Method of development _____
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity _____ gpm
Pump type: _____
Drilling Method Mud Botary
Drilling Fluid Potable water Type of Rig 1500 Failing
Name of Driller Joseph Jester
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one): None D C B A
N.J. License No. J13992
Name of Drilling Company ~~UNI-TECH DRILLING~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-10' F-C Silty sand, gravel, moist
10'-20' F-C Sand, clay, black, moist
20'-30' Same
30'-40' Same
40'-50' Fine clayey

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 Joseph Jester Date 2-22-95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

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MONITORING WELL RECORD

Well Permit No. 29 - 32925
Atlas Sheet Coordinates 29 : 13 : 619

OWNER IDENTIFICATION - Owner TRMI
Address P.O. BOX 1404 1111 BAGBY
City HOUSTON State TX Zip Code 77251-1404

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-25
County MONMOUTH Municipality SHREWSBURY BORO Lot No. LOCAL Block No. R.O.W.
Address 473 Broad St

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 4/20/1995
Regulatory Program Requiring Well UST Case I.D. # 84-10-25-12C
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) HANDEX OF NJ Tele. # (908) 536-8500

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	0	3	4	SCH 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	3	15	4	SCH 40 PVC, 0.02" SLOT
Tail Piece	—	—	—	—
Gravel Pack	2	15	12	#1 MORIE SAND
Annular Seal/Grout	0	2	12	PORTLAND + BENTONITE
Method of Grouting	PRESSURE			

Static water level after drilling 3.5 ft.
Water level was measured using PROBE
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 — Type of Rig MOBILE B-47
Name of Driller CHRISTOPHER O'SHAUGHNESSY
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 00 001151
Name of Drilling Company HANDEX CORP./STEVE QUATRO

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Asphalt + concrete
1'-4' Brown Med-Fine Sand and Silt
4'-9' Brown Med-Fine Sand, with Silt and Clay
9'-15' Orange-Brown Med-Fine Sand with Silt and 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 [signature] Date 6-28-95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

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MONITORING WELL RECORD

Well Permit No. 29 - 33063
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 333 WILLOW DR.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-7
County MONMOUTH Municipality LITTLE SILVER B Lot No. 42 Block No. 54
Address 333 WILLOW DR LITTLE SILVER, NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 4/13/95
Regulatory Program Requiring Well UST Case I.D. # 83-03-01-04
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) EEG 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 NA 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 RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	2	15	4	020 SLOT PVC
Tail Piece	NA			
Gravel Pack	1	15	12	#2 SAND
Annular Seal/Grout	0	1	12	BENT. SLURRY
Method of Grouting	TREMIE PIPE			

Static water level after drilling 5 ft.
Water level was measured using TAPE
Well was developed for 1.5 hours at 5 gpm
Method of development MOYNO
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
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" ASPHALT
6"-1' CONCRETE
1'-15' GREEN/BROWN CLAYEE SILT W/ FN SD LENS

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 6/7/95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

MONITORING WELL RECORD

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Well Permit No. 29 - 33064
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 333 WILLOW DR
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-8
County MONMOUTH Municipality LITTLE SILVER B Lot No. 42 Block No. 54
Address 333 WILLOW DRIVE LITTLE SILVER, NJ.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 4/13/95
Regulatory Program Requiring Well UST Case I.D. # 83-03-01-04
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) EEG 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 NA 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 RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	2	15	4	020 SLOT PVC
Tail Piece	NA			
Gravel Pack	1	15	12	#2 SAND
Annular Seal/Grout	0	1	12	BENT. SLURRY
Method of Grouting	TREMIE PIPE			

Static water level after drilling 5 ft.
Water level was measured using TAPE
Well was developed for 15 hours at 5 gpm
Method of development MOYNO
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
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" ASPHALT
6"-1' CONCRETE
1'-15' GREEN/BR. CLAYEY SILT W/ FN SD LENSES

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 G Parent Date 6/7/95

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 - 33265
Atlas Sheet Coordinates 29 : 13 : 635

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 333 WILLOW DR.
City LITTLE SILVER State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-9
County MONMOUTH Municipality LITTLE SILVER B Lot No. 42 Block No. 54
Address 333 WILLOW DR. LITTLE SILVER, N.J.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 4/13/95
Regulatory Program Requiring Well UST Case I.D. # 83-03-01-04
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) EEG 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 NA 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 RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	2	15	4	.020 SLOT PVC
Tail Piece	NA			
Gravel Pack	1	15	12	#2 SAND
Annular Seal/Grout	0	1	12	BENT. SLURRY
Method of Grouting	TREMIE PIPE			

Static water level after drilling 5 ft.
Water level was measured using TAPE
Well was developed for 15 hours at 5 gpm
Method of development MYND
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
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" ASPHALT
6"-1' CONCRETE
1'-15' GREEN/BR. CLAYEE SILT W/ FN SD LENSES

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 6/7/95

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 - 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 ENVIROMENT 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: ☒ 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	+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 ☒ 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' 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.

WELREC 163 1705

, 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 Slurry
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.

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

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MONITORING WELL RECORD

Well Permit No. 29- 33769
Atlas Sheet Coordinates 29 13 659

OWNER IDENTIFICATION - Owner EATONTOWN BOROUGH OF
Address 47 BROAD STREET
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-7
County MONMOUTH Municipality EATONTOWN BORO Lot No. 32 Block No. 12
Address 20 Lewis Street

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/25/95
Regulatory Program Requiring Well UST Case I.D. # 95-02-21-1035
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 NA 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
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	3	13	4	.020 PVC
Tail Piece	NA			
Gravel Pack	2	13	12	#2 SAND
Annular Seal/Grout	0	2	12	Bentonite
Method of Grouting	Tremie			

Static water level after drilling 4 ft.
Water level was measured using 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. 12775
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8' Black vf SAND + CLAY (FILL)
8-13 Greenish black silty vf 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 Gary Parent Date 7/25/95

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 33770
Atlas Sheet Coordinates 29 13 659

OWNER IDENTIFICATION - Owner EATONTOWN BOROUGH OF
Address 47 BROAD STREET
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 8
County MONMOUTH Municipality EATONTOWN BORO Lot No. 32 Block No. 12
Address 80 Lewis St

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/25/95
Regulatory Program Requiring Well UST Case I.D. # 95-02-21-1035
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 NA 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
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	3	13	4	.020 PVC
Tail Piece	NA			
Gravel Pack	2	13	12	#2 Sand
Annular Seal/Grout	0	2	12	bentonite
Method of Grouting	Tremie			

Static water level after drilling 4 ft.
Water level was measured using Tape
Well was developed for .5 hours at 3 gpm
Method of development Manual
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.)

0-8' BLACK vF SAND + silty CLAY

8-13' Black + greenish black vF glauconitic 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 Gary Parent Date 7/25/95

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 - 33771
Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner EATONTOWN BOROUGH OF
Address 47 BROAD STREET
City EATONTOWN 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. 2 Block No. 54
Address 21 Lewis St

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/25/95
Regulatory Program Requiring Well UST Case I.D. # 95-02-21-1035
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 NA 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
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	3	13	4	.020 PVC
Tail Piece	NA			
Gravel Pack	2	13	12	#2 Gravel
Annular Seal/Grout	0	2	12	Bentonite
Method of Grouting	Tremie			

Static water level after drilling 4 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 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.)

0-7' - Dk Brn vFSND + gravel
7'-13' Dk brn - brn vFSND + 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 Gary Parent Date 7/25/95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1490

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E DMR

MONITORING WELL RECORD

Well Permit No. 29 - 33772
Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner EATONTOWN BOROUGH OF
Address 47 BROAD STREET
City EATONTOWN 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. 2 Block No. 54
Address 21 Lewis St

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/25/95
Regulatory Program Requiring Well UST Case I.D. # 95-02-21-1035
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 NA 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
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	3	13	4	.020 PVC
Tail Piece	NA			
Gravel Pack	2	13	12	#2 SND
Annular Seal/Grout	0	2	12	bentonite
Method of Grouting	Tremie			

Static water level after drilling 4 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 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' - Dk greenish black vf SD + clay + (Fill)

6'-13' Dk grey clay with some gravel + vf 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 Gary Parent Date 7/25/95

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

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DMR

MONITORING WELL RECORD

Well Permit No. 29 - 33773
Atlas Sheet Coordinates 29 : 13 : 659

OWNER IDENTIFICATION - Owner ~~EATONTOWN BOROUGH OF~~
Address 47 BROAD STREET
City EATONTOWN 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. 2 Block No. ~~54~~
Address 21 Lewis St

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/25/95
Regulatory Program Requiring Well ~~UST~~ Case I.D. # ~~95-02-21-1035~~
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 NA 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
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	3	13	4	(.020) PVC
Tail Piece	NA			
Gravel Pack	2	13	12	#2 SAND
Annular Seal/Grout	0	2	12	bentonite
Method of Grouting	Tremie			

Static water level after drilling 4 ft.
Water level was measured using Tape
Well was developed for .5 hours at 3 gpm
Method of development Mag Mo
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' Dk gry vFSND + Clay
4'-8' Dk gry vFSND + silt
8'-13' Dk grey silty SND

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 7/25/95

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- 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

MONITORING WELL RECORD

Well Permit No. 29 - 34248
Atlas Sheet Coordinates 29 : 13 : 684

OWNER IDENTIFICATION - Owner ~~GETTY PETROLEUM CORP.~~
Address ~~P O BOX 1299~~
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW12
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 Block No. 16
Address ~~157 BROAD ST.~~

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10 4 95 ~~09-12-15-0952~~
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tyrrell-Ed Plyt Tele. # 609-239-0033

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 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	+2	5	4	sch 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	5	15	4	.020 slot sch 40 PVC
Tail Piece	—	—	—	—
Gravel Pack	3	15	11	#2 morie sand
Annular Seal/Grout	1 / 0	3 / 1	11	~~Cement Bentonite~~ Bentonite cement grout slurry
Method of Grouting	gravity displacement			

Static water level after drilling 11 ft.
Water level was measured using ~~00~~ mscope
Well was developed for NA hours at NA gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Hollow stem Auger
Drilling Fluid none Type of Rig B-59
Name of Driller Jerry Mallack
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1167
Name of Drilling Company ADT-MIDATLANTIC INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-7' Fitan sand + gravel
7-15 greenish brown 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 Jerry Mallack Date 10-30-95

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 - 34249
Atlas Sheet Coordinates 29: 13: 684

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP.
Address P.O. BOX 1299
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW11
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 Block No. 16
Address ~~157 BROAD ST.~~

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/4/95
Regulatory Program Requiring Well UST Case I.D. # ~~89-12-15-0952~~

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tyree - Ed Pike Tele. # 609-239-0033

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 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	+2	5	4	SCH 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	5	15	4	.020 SLOT SCH 40 PVC
Tail Piece	—	—	—	—
Gravel Pack	3	15	11	#2 MORIE SAND
Annular Seal/Grout	1/0	3/1	11	BENTONITE SLURRY CEMENT BENTONITE
Method of Grouting	gravity displacement			

Static water level after drilling 12 ft.
Water level was measured using MSCOPE
Well was developed for NA hours at NA gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA
Drilling Method Holow Stem Auger
Drilling Fluid none Type of Rig B-59
Name of Driller Jerry Malack
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1167
Name of Drilling Company ADT-MIDATLANTIC INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-6' Fine yellow to brown sand & gravel
6-8' yellow fine sand w/ gravel
8-10 F/sand & gravel yellow-brown
10-15 fine 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 Jerry Malack Date 10-30-95

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

LAS

MONITORING WELL RECORD

Well Permit No. 29- 34250
Atlas Sheet Coordinates 29 13 684

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP.
Address P.O. BOX 1099
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW10
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 Block No. 16
Address 157 BROAD ST.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10,5,95
Regulatory Program Requiring Well UST Case I.D. # ~~89-12-15-2052~~

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tyree-Edlyc Tele. # 609-239-0033

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 NA 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	SCH 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	5	15	4	SCH 40 PVC .020 SLOT
Tail Piece	—	—	—	—
Gravel Pack	3	15	11	#2 MONTSAND
Annular Seal/Grout	1 0	3 1	11	BENTONITE SLURRY CEMENT BENTGROUT
Method of Grouting	gravity displacement			

Static water level after drilling 10 ft.
Water level was measured using MSCOPE
Well was developed for NA hours at NA gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HOLLOWSTEM AUGER
Drilling Fluid NONE Type of Rig B-59
Name of Driller Jerry Mallick
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 11617
Name of Drilling Company ADT-MIDATLANTIC INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5 F/tan+yellow sand
5-10 F/tan sand+grav
10-15 F/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 Jerry Mallick Date 10/30-95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1511

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

MONITORING WELL RECORD

Well Permit No. 29 - 34251
Atlas Sheet Coordinates 29 : 13 : 684

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP.
Address P.O. BOX 1099
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW9
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 Block No. 16
Address ~~157 BROAD ST.~~

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/5/95
Regulatory Program Requiring Well UST Case I.D. # ~~89-12-15-0952~~

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) TYTEC - ED PIET Tele. #6092390033

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 NA 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	SCH 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	5	15	4	.020 SLOT SCH 40 PVC
Tail Piece	—	—	—	—
Gravel Pack	3	15	4	#2 MONTE SAND
Annular Seal/Grout	1/0	3/1	11	BENTONITE SLURRY CEMENT BENT GROUT
Method of Grouting	gravity displacement			

Static water level after drilling 11 ft.
Water level was measured using NA
Well was developed for NA hours at NA gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HOLLOW STEM AUGER
Drilling Fluid NONE Type of Rig B-59
Name of Driller JERRY MALCOLM
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 11167
Name of Drilling Company ADT-MIDATLANTIC INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5 F/fan brown sand
5-10 F/sand & gravel
10-15 fan 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 Jerry Malcolm Date 10-30-95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1512

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

MONITORING WELL RECORD

Well Permit No. 29 - 34252
Atlas Sheet Coordinates 29 : 13 : 684

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP.
Address P.O. BOX 1299
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW7
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 Block No. 16
Address 157 BROAD ST.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 10/5/95
Regulatory Program Requiring Well UST Case I.D. # 89-12-15-0952

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tyree-Edlyc Tele. # 609-239-0033

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 NA 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	SCH 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	5	15	4	.020 SLOT SCH 40 PVC
Tail Piece	—	—	—	—
Gravel Pack	3	15	11	#2 MONTE SAND
Annular Seal/Grout	1 / 0.3 / 1		11	BENTONITE SLURRY CEMENT-BENTONITE
Method of Grouting	gravity displacement			

Static water level after drilling 11 ft.
Water level was measured using MSCOPE
Well was developed for NA hours at NA gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HOLLOW STEM AUGER
Drilling Fluid NONE Type of Rig B-59
Name of Driller Jerry Malcuit
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 1167
Name of Drilling Company ADT-MIDATLANTIC INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-5 Ft tan sand
5-10 Ft sand + gravel
10-15 Ft tan 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 Jerry Malcuit Date 10-30-95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1513

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E
DMR

MONITORING WELL RECORD

Well Permit No. 29- 34566
Atlas Sheet Coordinates 29 13 625

OWNER IDENTIFICATION - Owner ~~UNITED JERSEY BANK FINANC~~
Address 301 CARNEGIE CENTER
City PRINCETON 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. 133 Block No. 30.1
Address ~~42 BIRCH AVE.~~ OAK GLEN CONTRACTING, 42 BIRCH AVENUE, LITTLE SILVER, NJ

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 11 / 17 / 95
Regulatory Program Requiring Well UST Case I.D. #

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) N/A Tele. #

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 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	4'	20'	ANNULUS	#1 MORIE WELL GRAVEL
Annular Seal/Grout	GRADE	4'	ANNULUS	PORTLAND CEMENT
Method of Grouting	TREMMY			

Static water level after drilling APRX. 6 ft.
Water level was measured using STEEL TAPE
Well was developed for 1/2 hours at 15 gpm
Method of development Sub. Pump
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity N/A gpm
Pump type: N/A
Drilling Method AIR ROTARY
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. License 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 all applicable State rules and regulations.

Driller's Signature Richard M. Tabor Date 12-29-95

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WR

WELREC 163 1466

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET · LINDEN, NEW JERSEY 07036 · (908)862-8888

BORING LOG:

WELL NO. MW-1 APPLICATION NO. 29·13·625 PERMIT NO. 2934566

DATE DRILLED 11/17/95 COUNTY MONMOUTH USE MONITORING

LOCATION OAK GLEN CONTRACTING, 42 BIRCH AVENUE LITTLE SILVER, NJ

OWNER UNITED JERSEY BANK FINANCIAL CORP ADDRESS 301 CARNEGIE CENTER, PRINCETON NJ 08540

DRILLING METHOD AIR ROTARY SAMPLING METHOD COMPOSITE

HOLE DIA. 8" TOTAL DEPTH 20'

CASING:

TYPE BEDROCK SCH 40 PVC SLOT NA DIA. 4" LENGTH 5'

SCREEN:

TYPE BEDROCK SCH 40 PVC SLOT .020 DIA. 4" LENGTH 15'

GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL PORTLAND CEMENT/NEAT 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
0'-8'		NO SPOONS	2x2 CONCRETE PAD WITH 12" STEEL MANHOLE	0'-8' → BROWN TO LIGHT BROWN, FINE GRAINED SILTY CLAY
			← H_2O APPROX 6'	
8'-20'			#1 WELL GRAVEL; 15' OF 4" .020 SLOT SCREEN	8'-20' → DARK GREEN TO BLACK, FINE TO MEDIUM GRAINED SILT + SAND
				END DRILLING @ 20'

DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E DMR

MONITORING WELL RECORD

Well Permit No. 29 - 34582
Atlas Sheet Coordinates 29: 13: 619 ☐

OWNER IDENTIFICATION - Owner WELSH FARMS
Address 110 EAST FRONT ST.
City RED BANK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-15 (VP-10)
County MONMOUTH Municipality RED BANK BORO Lot No. 6.01 Block No. 11
Address ~~109 E. FRONT ST.~~

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 12/18/95
Regulatory Program Requiring Well UST Case I.D. # ~~95-9-26-1616~~

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Najarian Tele. # (908) 389-0220

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	+ 3	27	1	PVC
Outer Casing (Not Protective Casing)	+3 / ~~0~~	17 / ~~0~~	4	PVC
Screen (Note slot size)	17 / 27	26 / 30	4 / 1	PVC .020
Tail Piece	26	27	4	PVC
Gravel Pack	15 / 27	26 / 30		Morie #1
Annular Seal/Grout	0 / 26	15 / 27		Portland / Bent.
Method of Grouting	Tremie			

Static water level after drilling 16 ft.
Water level was measured using tape
Well was developed for ~~hours at~~ gpm
Method of development NONE
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method HSA
Drilling Fluid — Type of Rig Mobile B-57
Name of Driller Jim Burton
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 0013752
Name of Drilling Company SUMMIT WELL DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Please See 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 James C Burton Date 1-29-96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

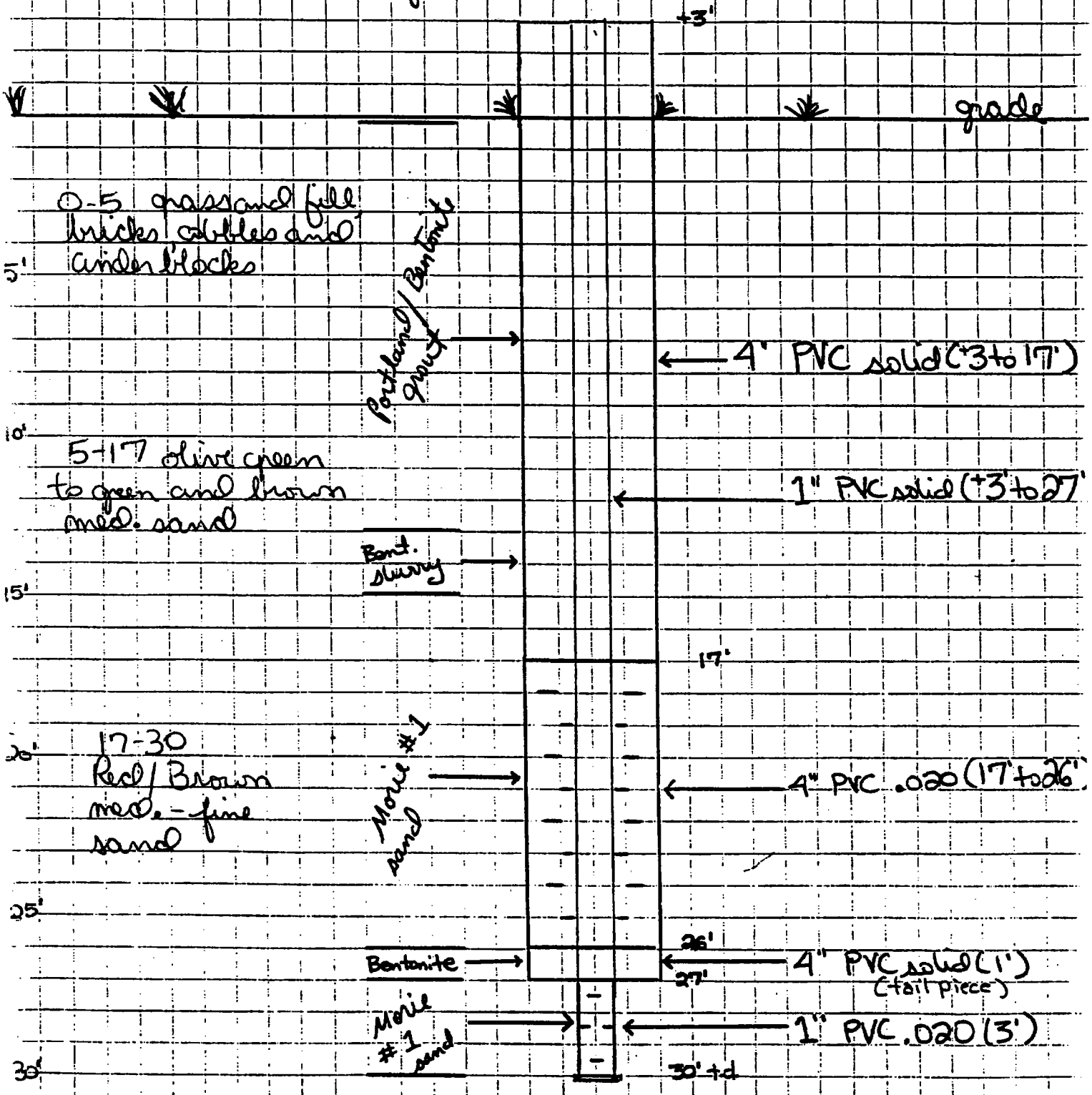
Dual-phase recovery well

MW-15 (VP-10)

29-34/582

29 13 [redacted] 619

*each box is one linear foot (vertical)



DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E
DMR

MONITORING WELL RECORD

Well Permit No. 29. 34583
Atlas Sheet Coordinates 29 13 619

OWNER IDENTIFICATION - Owner WELSH FARMS
Address 110 EAST FRONT ST.
City RED BANK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-16 (VP-11)
County MONMOUTH Municipality RED BANK BORO Lot No. 6.01 Block No. 11
Address 109 E. FRONT ST.

TYPE OF WELL (as per Well Permit Categories) MONITORING UST Date well completed 12/18/95 ~~95-9-28-1618~~
Regulatory Program Requiring Well Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Najarian Tele. # (908) 389-0220

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	+3	27	1	PVC
Outer Casing (Not Protective Casing)	+3 / ~~30~~	17 / ~~60~~	4	PVC
Screen (Note slot size)	17 / 27	26 / 30	4 / 1	PVC.020
Tail Piece	26	27	4	PVC
Gravel Pack	15 / 27	26 / 30		Morie #1
Annular Seal/Grout	0 / 26	15 / 27		Portland/Bent.
Method of Grouting	Tremie			

Static water level after drilling 16 ft.
Water level was measured using tape
Well was developed for ____ hours at ____ gpm
Method of development NONE
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity ____ gpm
Pump type: ____
Drilling Method HSA
Drilling Fluid - Type of Rig Mobile B-57
Name of Driller Jim Burton
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 0013752
Name of Drilling Company SUMMIT WELL DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Please See 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 James C Burton Date 1-29-96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

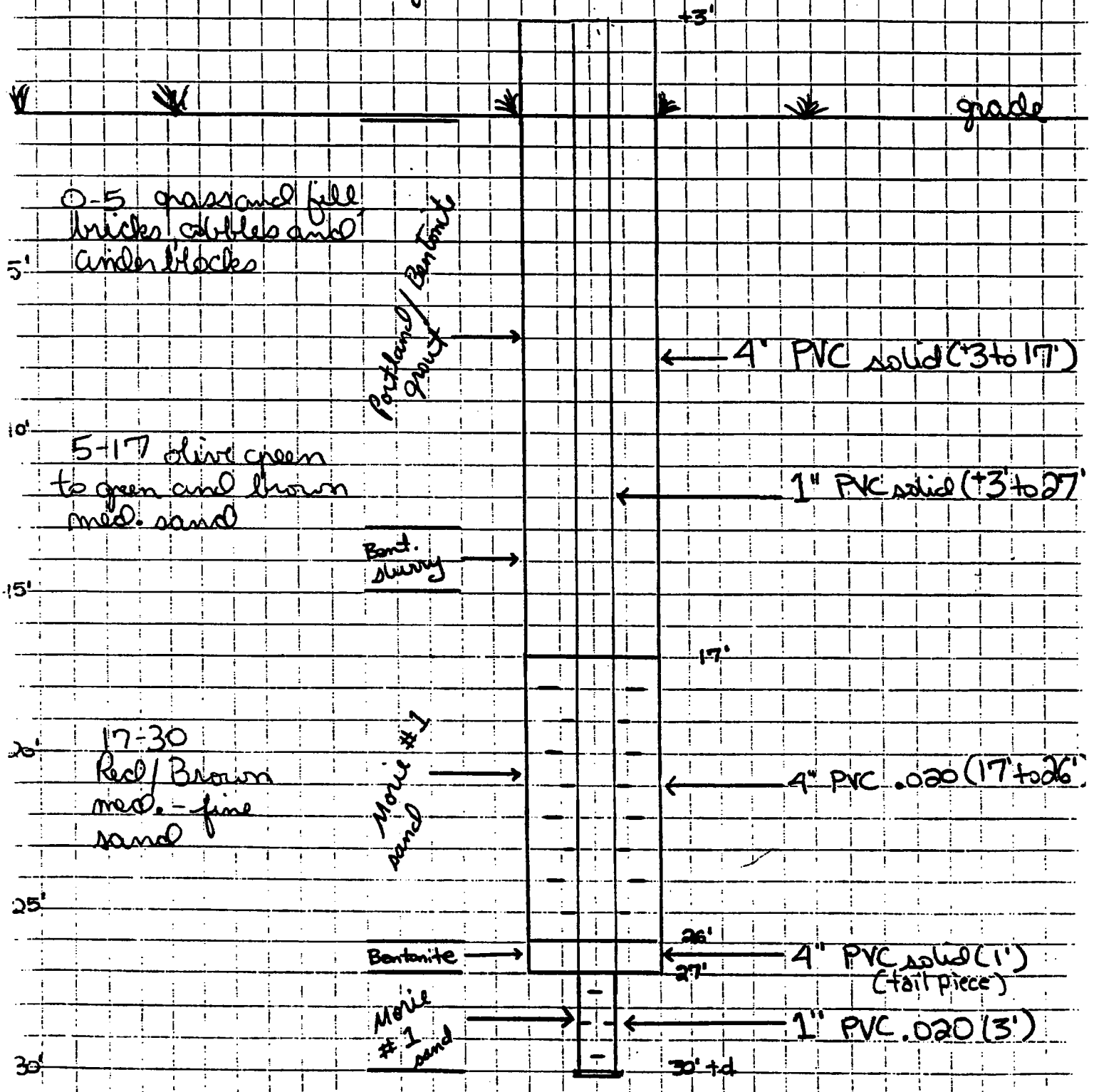
Dual-phase recovery well

MW-16 (VP-11)

29-34583

29 13 6 19

*each box is one linear foot (vertical)



DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E DMR

MONITORING WELL RECORD

Well Permit No. 29- 34584
Atlas Sheet Coordinates 29 13 619

OWNER IDENTIFICATION - Owner WELSH FARMS
Address 110 EAST FRONT ST.
City RED BANK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-17 (VP-2)
County MONMOUTH Municipality RED BANK BORO Lot No. 6.01 Block No. 11
Address 109 E. FRONT ST.

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 12/19/95
Regulatory Program Requiring Well UST Case I.D. # 95-9-26-1616

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Najarian Tele. # (908) 389-0220

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	+3	27	1	PVC
Outer Casing (Not Protective Casing)	+3	17	4	PVC
Screen (Note slot size)	17 / 27	26 / 30	4 / 1	PVC. 020
Tail Piece	26	27	4	PVC
Gravel Pack	15 / 27	26 / 30		Morie #1
Annular Seal/Grout	0 / 26	19 / 27		Portland/Bent.
Method of Grouting	Tremie			

Static water level after drilling 16 ft.
Water level was measured using tape
Well was developed for ~~hours at~~ gpm
Method of development NONE
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method HSA
Drilling Fluid – Type of Rig Mobile B-57
Name of Driller Jim Burton
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 0013752
Name of Drilling Company SUMMIT WELL DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Please See 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 James C. Burton Date 1-29-96

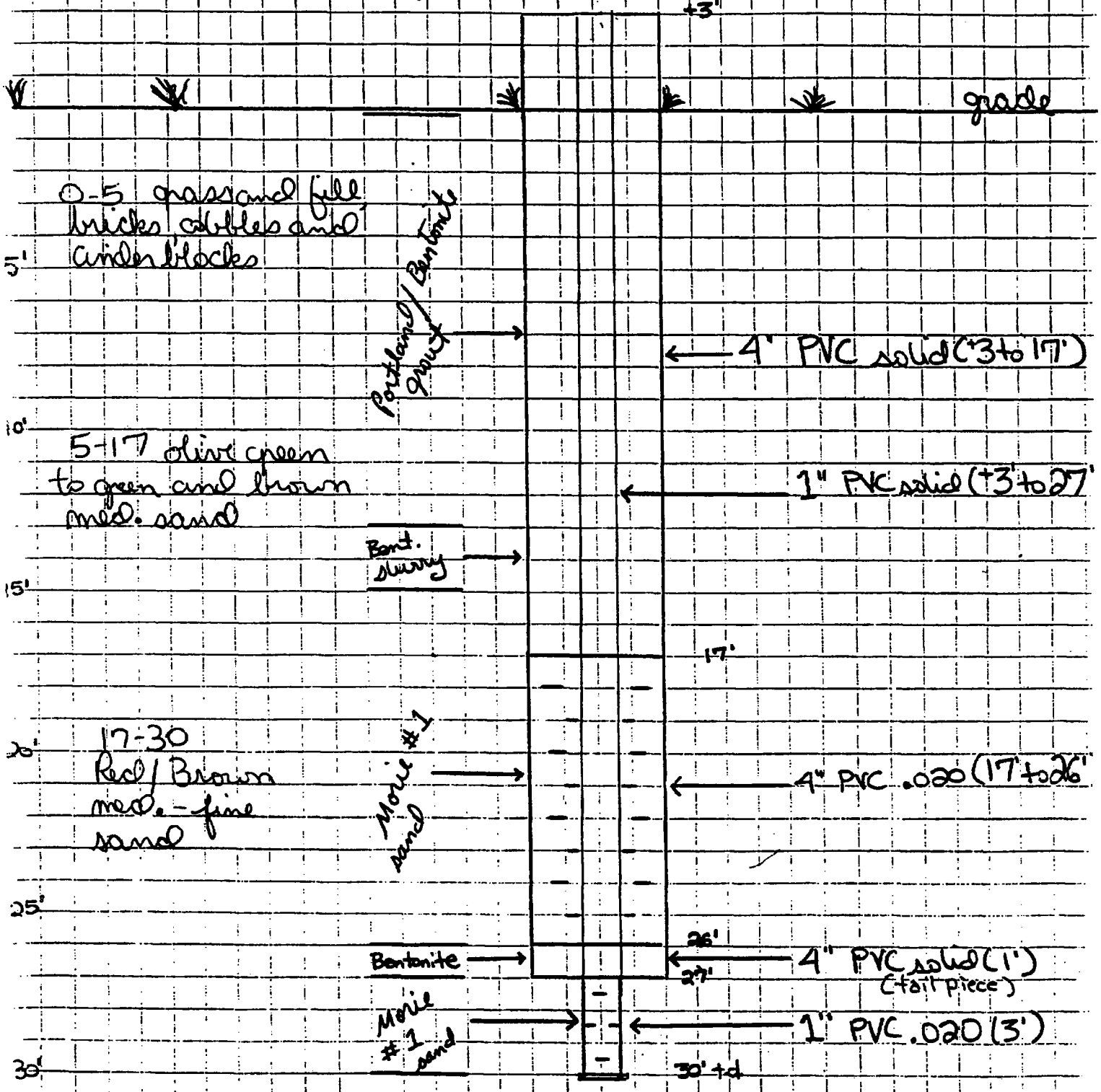
COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Dual-phase recovery well

MW-17 (VP-12)

29-34584
29/36/9

*each box is one linear foot (vertical)



DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

E DMR

MONITORING WELL RECORD

Well Permit No. 29- 34585
Atlas Sheet Coordinates 29 13 619

OWNER IDENTIFICATION - Owner ~~WELSH FARMS~~
Address 110 EAST FRONT ST
City RED BANK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-18 ~~(VP-14)~~
County MONMOUTH Municipality RED BANK BORO Lot No. 6.01 Block No. 11
Address ~~109 E. FRONT ST.~~

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 12/22/95
Regulatory Program Requiring Well UST Case I.D. # 95-9-26-1616

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Najarian Tele. # (908) 389-0220

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	+3	27	1	PVC
Outer Casing (Not Protective Casing)	+3 ~~0~~	17 ~~0~~	4	PVC
Screen (Note slot size)	17 / 27	26 / 30	4 / 1	PVC .020
Tail Piece	26	27	4	PVC
Gravel Pack	15 / 27	26 / 30		Morie #1
Annular Seal/Grout	0 / 26	15 / 27		Portland/Bent
Method of Grouting	Tremie			

Static water level after drilling 16 ft.
Water level was measured using tape
Well was developed for ____ hours at ____ gpm
Method of development NONE
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity ____ gpm
Pump type: ____
Drilling Method HSA
Drilling Fluid - Type of Rig Mobile B-59
Name of Driller Matt Raab
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 001315
Name of Drilling Company ~~SUMMIT WELL DRILLING~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Please See 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 Matt Raab Date 1-29-96

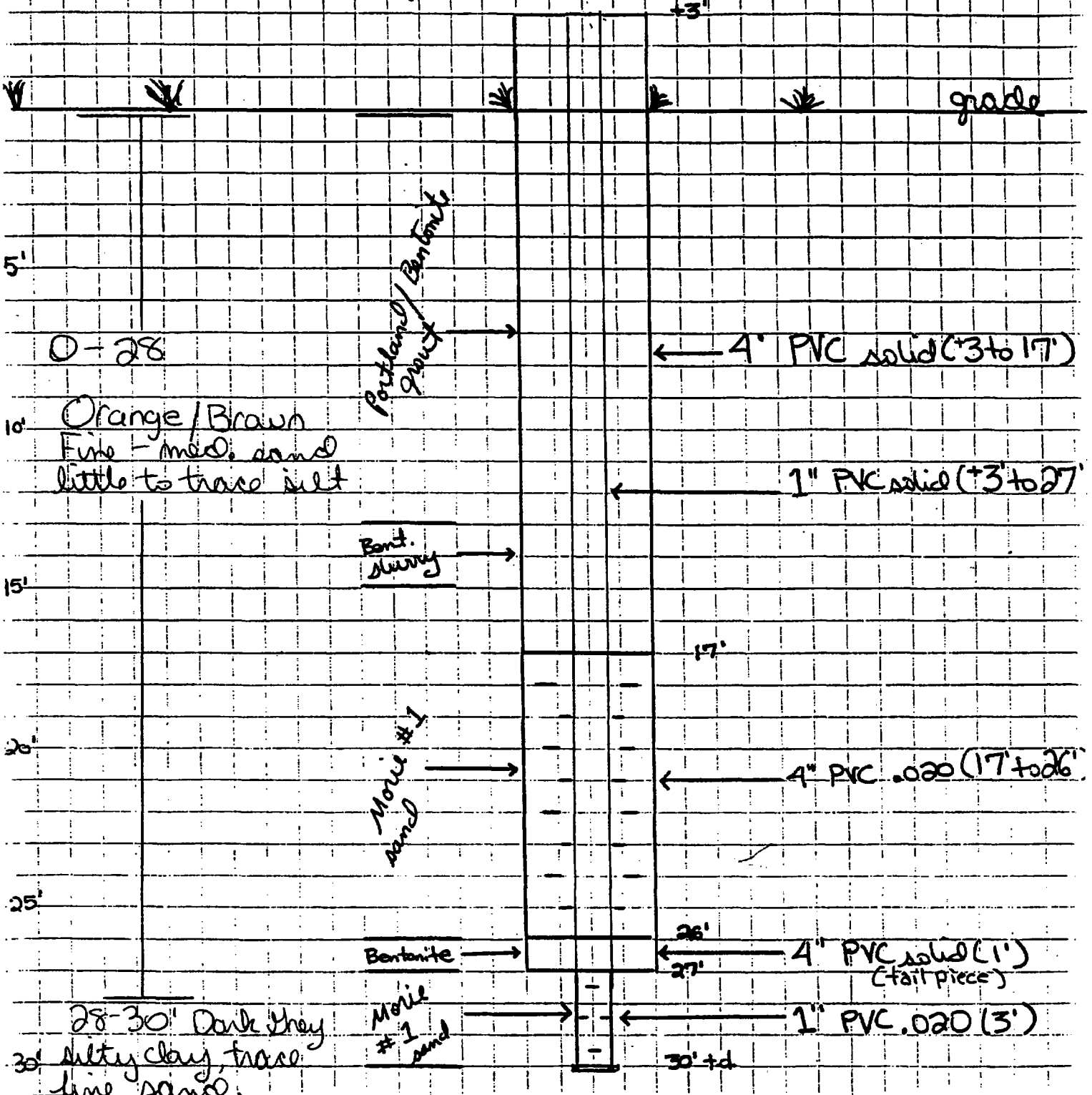
COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

MW-18 (VP-14)

29-34585
29 13 6/9

Dual-phase recovery well

*each box is one linear foot (vertical)



DWR-138 M
11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER ALLOCATION

DMR

MONITORING WELL RECORD

Well Permit No. 29- 34586
Atlas Sheet Coordinates 29 13 619

OWNER IDENTIFICATION - Owner ~~WELSH FARMS~~
Address 110 EAST FRONT ST
City RED BANK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-19 (VP-15)
County MONMOUTH Municipality RED BANK BORO Lot No. 6.01 Block No. 11
Address ~~109 E. FRONT ST.~~

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 12/22/95
Regulatory Program Requiring Well UST Case I.D. # 95-9-26-1616
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Najarian Tele. # (908) 389-0220

WELL CONSTRUCTION

Total depth drilled 30 ft.
Well finished to 30 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

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	+3	27	1	PVC
Outer Casing (Not Protective Casing)	+3 / ~~0~~	17 / ~~0~~	4	PVC
Screen (Note slot size)	17 / 27	26 / 30	4 / 1	PVC .020
Tail Piece	26	27	4	PVC
Gravel Pack	15 / 27	26 / 30		Morie #1
Annular Seal/Grout	0 / 26	15 / 27		Portland/Bent.
Method of Grouting	Tremie			

Static water level after drilling 16 ft.
Water level was measured using tape
Well was developed for NONE hours at gpm
Method of development
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method HSA
Drilling Fluid - Type of Rig Mobile B-59
Name of Driller Matt Raab
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. License No. 000315
Name of Drilling Company SUMMIT WELL DRILLING

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

Please See 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 Matt Raab Date 1-29-96

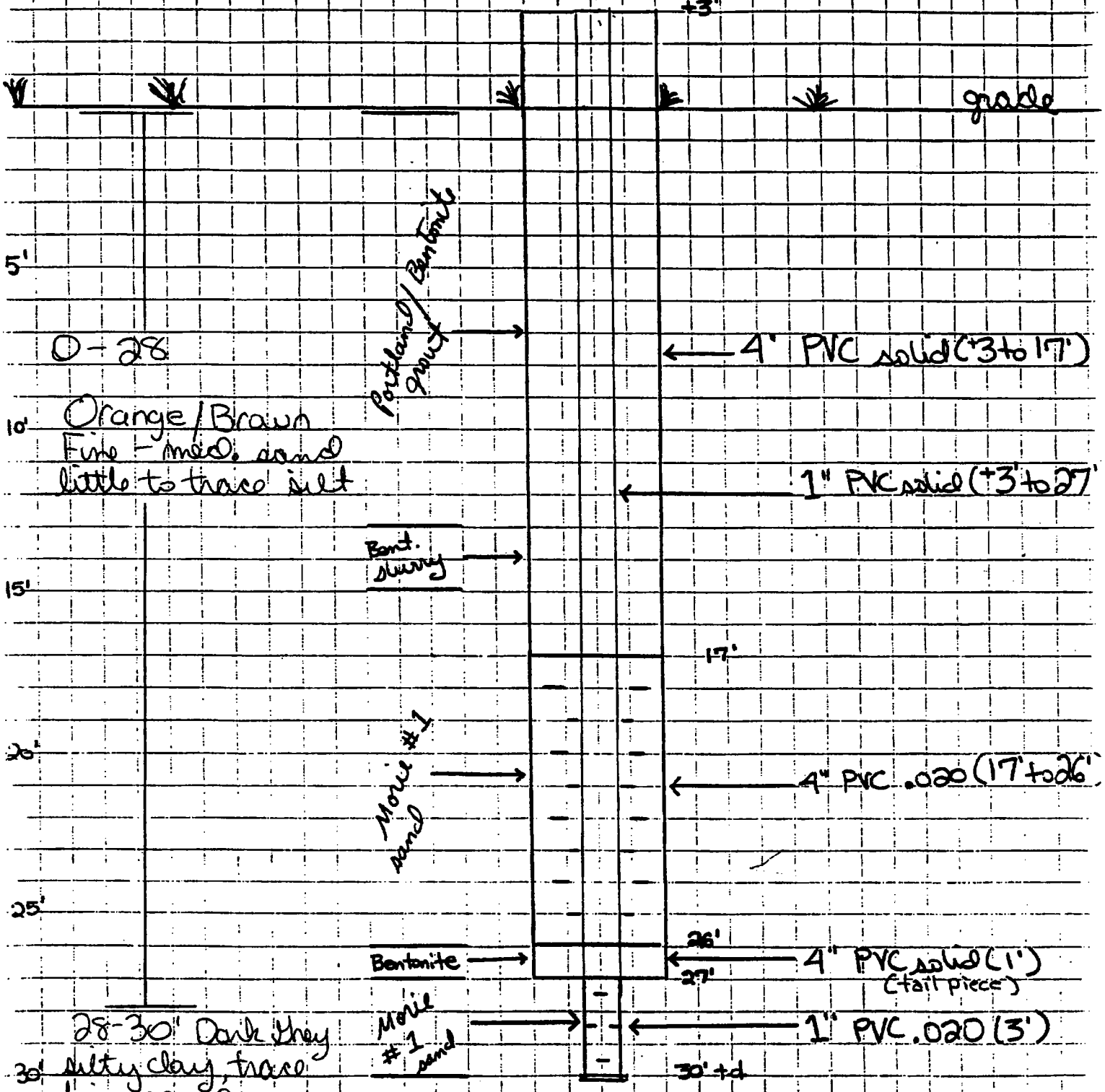
COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Dual-phase recovery well

MW-19 (VP-15)

29-34586
29 13 6 19

*each box is one linear foot (vertical)



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)	COMPLE		TED	
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.

DWR-138.M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

DMR

MONITORING WELL RECORD

Well Permit No. 29 35127
Atlas Sheet Coordinates 29 : 13 687

OWNER IDENTIFICATION - Owner ALLIED SIGNAL-BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW#3
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6&13 Block No. 64
Address 118 HIGHWAY 35 Date well started 10/3/Ale
TYPE OF WELL (as per Well Permit Categories) RECOVERY Date well completed 10/3/Ale
Regulatory Program Requiring Well ISRA SITE Case I.D. # 86688
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 908536-8500

WELL CONSTRUCTION

Total depth drilled 49.5' ft.
Well finished to 34' ft.
Borehole diameter: Top 14" in. Bottom 8" in.
Well was finished: [X] above grade [ ] flush mounted
If finished above grade, casing height (stick up) above land surface 2.0' 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	+2.0'	4'	6"	Sch 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	4'	34'	6"	Low Carbon Steel .025 Slot
Tail Piece	—	—	—	—
Gravel Pack	3'	34'	14"	#2 Morie
Annular Seal/Grout	0	3'	14"	Bentonite/Portland
Method of Grouting	Pressure			

Static water level after drilling 8.5' ft.
Water level was measured using Steel tape
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity — gpm
Pump type: —
Drilling Method 10 1/4" ID HSA
Drilling Fluid — Type of Rig B-59
Name of Driller Steve Kovelesky
Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. JD 1689
Name of Drilling Company HANDEX CORP / STEVE QUATRO

GEOLOGIC LOG

(Copies of other geologic logs and/or geophysical logs should be attached.)

0-1.2 - Asphalt & Sub Base
1.2-17 - Fine & medium sand w/ 10% silt, no gravel
17-18.5 - Medium sand & silt
18.5-32 - Medium & fine sand w/ 5 to 15% silt
32-43 - Medium sand w/ 15% silt & glauconite sand
43-48 - Medium clean sand
48-49.5 - Silty clay; green; very firm

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 [signature] Date 11/17/86

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1515

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 35128
Atlas Sheet Coordinates 29 : 13 : 587

OWNER IDENTIFICATION - Owner ALLIED SIGNAL-BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW#4
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6&13 Block No. 64
Address 118 HIGHWAY 35 Date well started 10/02/96
TYPE OF WELL (as per Well Permit Categories) RECOVERY Date well completed 10/03/96
Regulatory Program Requiring Well ISRA SITE Case I.D. # 86688
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 908536-8500

WELL CONSTRUCTION

Total depth drilled 47' ft.
Well finished to 34' ft.
Borehole diameter: Top 14" 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

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	+2	4'	6"	Sch 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	4'	34'	6"	Low Carbon Steel .025 slot
Tail Piece	—	—	—	—
Gravel Pack	3'	34'	14"	#2 Morie
Annular Seal/Grout	0	3'	14"	Bentonite/Portland
Method of Grouting	Pressure			

Static water level after drilling 9.0' ft.
Water level was measured using Steel 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 4¼"/10¼" HSA
Drilling Fluid None Type of Rig B-59
Name of Driller Steve Kovelesky
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. 10609
Name of Drilling Company HANDEX CORP./STEVE QUATRO

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Asphalt & Sub base
1-17' Fine & medium sand
17-18.5' Medium Sand & silt
18.5-32' Medium & fine sand/silt
32-43' Medium Sand & silt
43-46' Medium clean sand
46-47' Silty clay

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 [signature] Date 11/12/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 35129
Atlas Sheet Coordinates 29 : 13 687

OWNER IDENTIFICATION - Owner ALLIED SIGNAL-BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW #2
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6&13 Block No. 64
Address 118 HIGHWAY 35 Date well started 10/01/96
TYPE OF WELL (as per Well Permit Categories) RECOVERY Date well completed 10/04/96
Regulatory Program Requiring Well ISRA SITE Case I.D. # 86688
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 908 536-8500

WELL CONSTRUCTION

Total depth drilled 48' ft.
Well finished to 34' ft.
Borehole diameter: Top 14" in.
Bottom 8" in.
Well was finished: [X] above grade [ ] flush mounted
If finished above grade, casing height (stick up) above land surface 2 ft.
Was steel protective casing installed? [ ] Yes [X] No

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.) (From land surface)	Diameter (inches)	Type and Material
Inner Casing	+2'	4'	6"	Sch 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	4'	34'	6"	Low Carbon Steel .025 slot
Tail Piece	—	—	—	—
Gravel Pack	3'	34'	14"	#2 Morie
Annular Seal/Grout	0	3'	14"	Bentonite/Portland
Method of Grouting	Pressure			

Static water level after drilling 8.5' ft.
Water level was measured using Steel Tape
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity — gpm
Pump type: —
Drilling Method 4¼" / 10¼" HSA
Drilling Fluid None Type of Rig B-59
Name of Driller Steve Kovelesky
Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. ~~HANDEX CORP./STEVE QUATRO~~ JD 11609
Name of Drilling Company

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Asphalt
1-17' Fine/medium Sand
17-19' Medium sand/silt
19-32' Medium+fine Sand/Silt
32-43' Medium Sand/Silt Glauconite sand
43-47' Medium clean sand
47-48' Silty clay

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 Steve Kuby Date 11/12/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 35130
Atlas Sheet Coordinates 29 : 13 687

OWNER IDENTIFICATION - Owner ALLIED SIGNAL-BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW#6
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6&13 Block No. 64
Address 118 HIGHWAY 35 Date well started 9/30/96
TYPE OF WELL (as per Well Permit Categories) RECOVERY Date well completed 10/04/96
Regulatory Program Requiring Well ISRA SITE Case I.D. # 86688
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 908 536-8500

WELL CONSTRUCTION

Total depth drilled 46' ft.
Well finished to 34' ft.
Borehole diameter: Top 14" in. Bottom 8" in.
Well was finished: [X] above grade [ ] flush mounted
If finished above grade, casing height (stick up) above land surface 2.0' ft.
Was steel protective casing installed? [ ] Yes [X] No

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.) (From land surface)	Diameter (inches)	Type and Material
Inner Casing	+2'	4'	6"	Sch 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	4'	34'	6"	Low Carbon Steel .025 Slot
Tail Piece	—	—	—	—
Gravel Pack	3'	34'	14"	#2 Morie
Annular Seal/Grout	0	3'	14"	Bentonite/Portland
Method of Grouting	Pressure			

Static water level after drilling 9.0' ft.
Water level was measured using Steel Tape
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity — gpm
Pump type: —
Drilling Method 4¼"/10¼" HSA
Drilling Fluid None Type of Rig B-59
Name of Driller Steve Kovelesky
Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. JD1609
Name of Drilling Company ~~HANDEX CORP./STEVE QUATRO~~

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-1' Asphalt
1-17' Fine & medium Sand
17-19' Medium sand & silt
19-32' Med & fine sand/silt
32-43' Med sand/silt w/ silt & glauconite sand
43-45' Medium clean sand
45-46' Silty clay

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 [signature] Date 11/27/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29- 35312
Atlas Sheet Coordinates 29 : 13 :657

OWNER IDENTIFICATION - Owner U. S. ARMY
Address BLDG 167 ATT;SELTM-PW-EV
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW281
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1.1 8.01 Block No. 1,53,54
Address CORREGIDOR RD Date well started 5/01/96
TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5/2/96
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Weston Consultants Tele. #

WELL CONSTRUCTION

Total depth drilled 50 ft.
Well finished to 41 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.) (From land surface)	Diameter (inches)	Type and Material
Inner Casing	+2	31	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	31	41	4	Sch 40 PVC .020
Tail Piece				
Gravel Pack	28	41		Morie #2
Annular Seal/Grout	0 / 41	28 / 50		Portland
Method of Grouting	Tremie			

Static water level after drilling 10 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:
Drilling Method Auger
Drilling Fluid Type of Rig B-57
Name of Driller John Vogt
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. 0001279
Name of Drilling Company ~~SUMMIT WELL DRILLING CO INC~~ Summit Drilling

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 John Vogt Date 5/13/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1478

SUMMIT DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (908) 356-1009

WELL LOG

WELL: MW281 DATE DRILLED: 5/01/1996 COORD #1: 29.13.657 PERMIT #1: 29-35312
COORD #2: PERMIT #2:
SITE: Camp Char Wood, R& D Facility, Corregidor Road, Fort Monmouth, NJ 07703 COUNTY: Monmouth
OWNER: U.S. Army, Building 167, Att: SELFM-PW-EV, Fort Monmouth, NJ 07703 XSTREET:
USE: Monitor

INNER CASING: PVC
DIAMETER: 4"
LENGTH: 33'

OUTER CASING:
DIAMETER:
LENGTH:

SCREEN TYPE 1: PVC
SCREEN TYPE 2:
DIAMETER: 4"
LENGTH 1: 10'
LENGTH 2:
SLOT SIZE: .020

DRILLING METHOD: Auger
SAMPLING METHOD: S/S
HOLE DIAMETER: 10"
TOTAL DEPTH: 50'

SET WELL: 41'
GRAVEL PK SZ: Morie #2
DRILLER: John Vogt
SURFACE COMPLETION: S

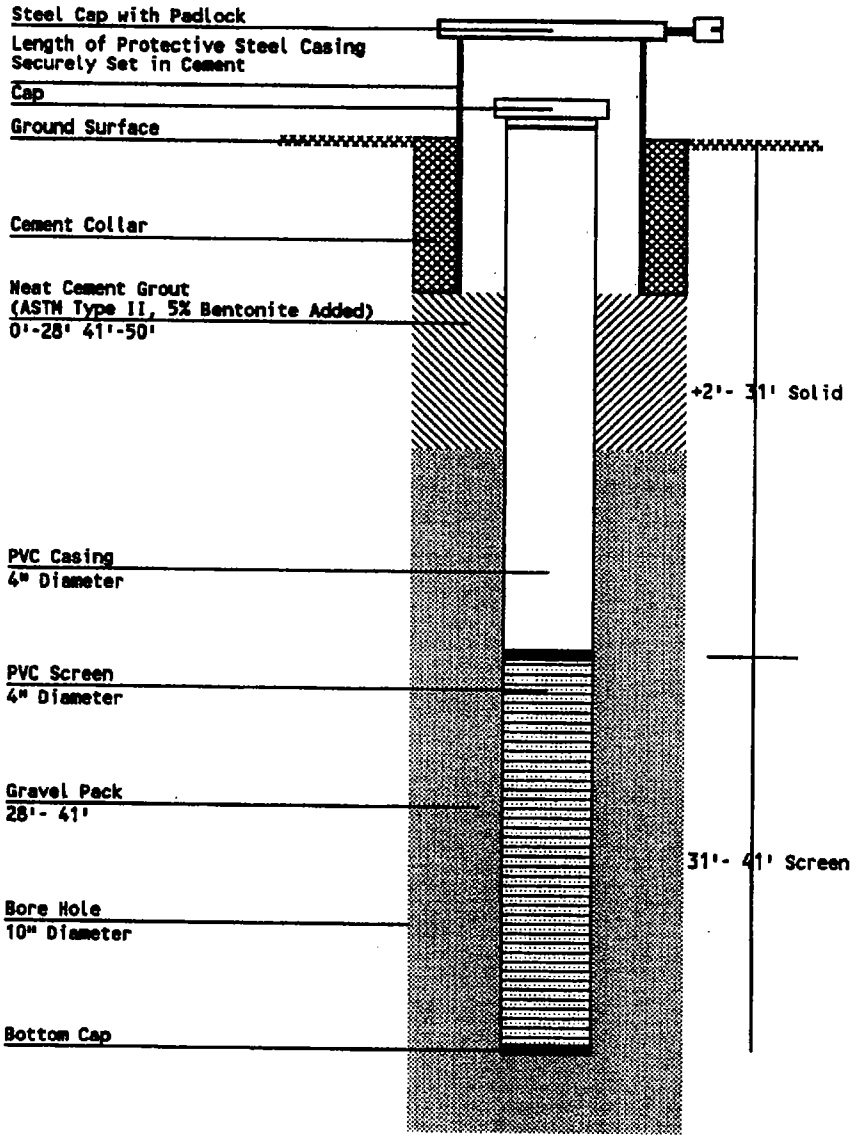
GAL PER MIN: 2
STAT H20 LVL: 10'
DEVELOPMENT METHOD: Pump
DEVELOPMENT TIME: 1 Hour

CASING SEAL: Portland
OPEN HOLE:

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER
0' - 2'	5-8-9-7
2' - 4'	6-4-4-3
4' - 6'	2-2-4-6
6' - 8'	2-2-2-3
8' - 10'	3-3-3-4
10' - 12'	3-4-10-13
12' - 14'	10-14-11-12
14' - 16'	4-7-9-9
16' - 18'	7-11-17-20
18' - 20'	4-12-17-23
20' - 22'	18-21-23-25
22' - 24'	13-12-12-15
24' - 26'	15-12-10-18
26' - 28'	3-7-11-15
28' - 30'	14-19-29-27
30' - 32'	4-13-23-13
32' - 34'	14-13-24-21
34' - 36'	13-24-23-26
36' - 40'	18-39-100/3"
40' - 42'	20-55-40-38
42' - 44'	23-29-25-30
44' - 46'	23-26-28-40
46' - 48'	20-21-22-26
48' - 50'	41-39-39-40

REMARKS / SOILS IDENTIFICATION

0' - 28' Brown fine sand.
28' - 50' Black silty clay sand.



DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29- 35313
Atlas Sheet Coordinates 29 : 13 657

OWNER IDENTIFICATION - Owner U. S. ARMY
Address BLDG 167 ATT;SELTM-PW-EV

City FT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW282

County MONMOUTH Municipality EATONTOWN BORO Lot No. 1.1-8.01 Block No. 1,53,54
Address CORREGIDOR RD Date well started 5/2/96

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5/2/96
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Weston Consultants Tele. #

WELL CONSTRUCTION

Total depth drilled 42 ft.
Well finished to 16 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.) (From land surface)	Diameter (inches)	Type and Material
Inner Casing	+2	6	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	6	16	4	Sch 40 PVC .020
Tail Piece				
Gravel Pack	4	16		Morie #2
Annular Seal/Grout	0/16	4/42		Portland
Method of Grouting	Tremie			

Static water level after drilling 10 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:
Drilling Method Auger
Drilling Fluid Type of Rig B-57
Name of Driller John Vogt
Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. 0001279
Name of Drilling Company ~~SUMMIT WELL DRILLING CO. INC~~ Summit Drilling

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 John Vogt Date 5/13/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1480

SUMMIT DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (908) 356-1009

WELL LOG

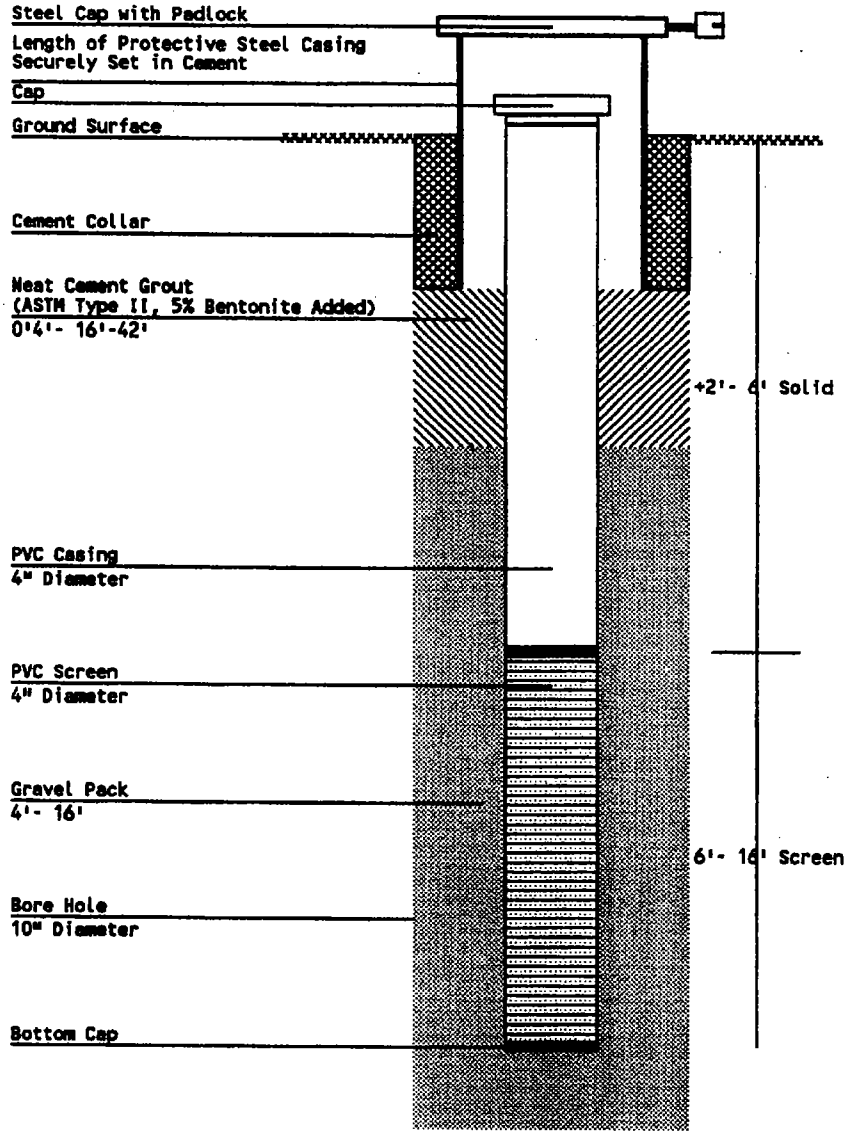
WELL: MW282 DATE DRILLED: 5/02/1996 COORD #1: 29.13.657 PERMIT #1: 29-35313
COORD #2: PERMIT #2: COUNTY: Monmouth
SITE: Camp Char Wood, R& D Facility, Corregidor Road, Fort Monmouth, NJ 07703 XSTREET:
OWNER: U.S. Army, Building 167, Att: SELFM-PW-EV, Fort Monmouth, NJ 07703 USE: Monitor

INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE 1: PVC	DRILLING METHOD: Auger
DIAMETER:	4"	DIAMETER:		SCREEN TYPE 2:	SAMPLING METHOD: S/S
LENGTH:	8'	LENGTH:		DIAMETER: 4"	HOLE DIAMETER: 10"
				LENGTH 1: 10'	TOTAL DEPTH: 42'
SET WELL:	16'	GAL PER MIN:	2	LENGTH 2:	
GRAVEL PK SZ:	Morie #2	STAT H2O LVL:	10'	SLOT SIZE: .020	
DRILLER:	John Vogt	DEVELOPMENT METHOD:	Pump	CASING SEAL: Portland	
SURFACE COMPLETION:	S	DEVELOPMENT TIME:	1 Hour	OPEN HOLE:	

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER
0' - 2'	8-10-12-10
2' - 4'	4-10-14-18
4' - 6'	10-14-21-16
6' - 8'	11-13-13-22
8' - 10'	11-13-19-22
10' - 12'	6-10-13-18
12' - 14'	18-23-25-30
14' - 16'	9-17-15-11
16' - 18'	13-13-13-14
18' - 20'	12-9-7-6
20' - 22'	5-4-4-6
22' - 24'	9-11-14-20
24' - 26'	7-16-16-20
26' - 28'	22-23-26-16
28' - 30'	12-3-6-9
30' - 32'	3-12-13-17
32' - 34'	10-15-16-19
34' - 36'	10-14-16-20
36' - 38'	11-12-16-18
38' - 40'	23-54-91-100/4"
40' - 42'	33-52-88-100/4"

REMARKS / SOILS IDENTIFICATION

0' - 24' Brown fine sand.
24' - 42' Black silty sand clay.



DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29- 35314
Atlas Sheet Coordinates 29 :13 657

OWNER IDENTIFICATION - Owner U. S. ARMY
Address BLDG 167 ATT;SELTM-PW-EV
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW291
County MONMOUTH Municipality EATONTOWN BORO Lot No. 1.1-8.01 Block No. 1,53,54
Address CORREGIDOR RD Date well started 5/3/96
TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 5/3/96
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Weston Consultants Tele. #

WELL CONSTRUCTION

Total depth drilled 34 ft.
Well finished to 16 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.) (From land surface)	Diameter (inches)	Type and Material
Inner Casing	+2	6	4	Sch 40 PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	6	16	4	Sch 40 PVC .020
Tail Piece				
Gravel Pack	4	16		Morie #2
Annular Seal/Grout	0/16	4/34		Portland
Method of Grouting	Tremie			

Static water level after drilling 10 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:
Drilling Method Auger
Drilling Fluid Type of Rig B-57
Name of Driller John Vogt
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. 0001279
Name of Drilling Company SUMMIT WELL DRILLING CO INC Summit Drilling

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 John Vogt Date 5/13/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

SUMMIT DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (908) 356-1009

WELL LOG

WELL: MW291 DATE DRILLED: 5/03/1996 COORD #1: 29.13.657 PERMIT #1: 29-35314
COORD #2: PERMIT #2: COUNTY: Monmouth
SITE: Camp Char Wood, R& D Facility, Corregidor Road, Fort Monmouth, NJ 07703 XSTREET:
OWNER: U.S. Army, Building 167, Att: SELFM-PW-EV, Fort Monmouth, NJ 07703 USE: Monitor

INNER CASING: PVC
DIAMETER: 4"
LENGTH: 8'

OUTER CASING:
DIAMETER:
LENGTH:

SCREEN TYPE 1: PVC
SCREEN TYPE 2:
DIAMETER: 4"
LENGTH 1: 10'
LENGTH 2:
SLOT SIZE: .020

DRILLING METHOD: Auger
SAMPLING METHOD: S/S
HOLE DIAMETER: 10"
TOTAL DEPTH: 34'

SET WELL: 16'
GRAVEL PK SZ: Morie #2
DRILLER: John Vogt
SURFACE COMPLETION: S

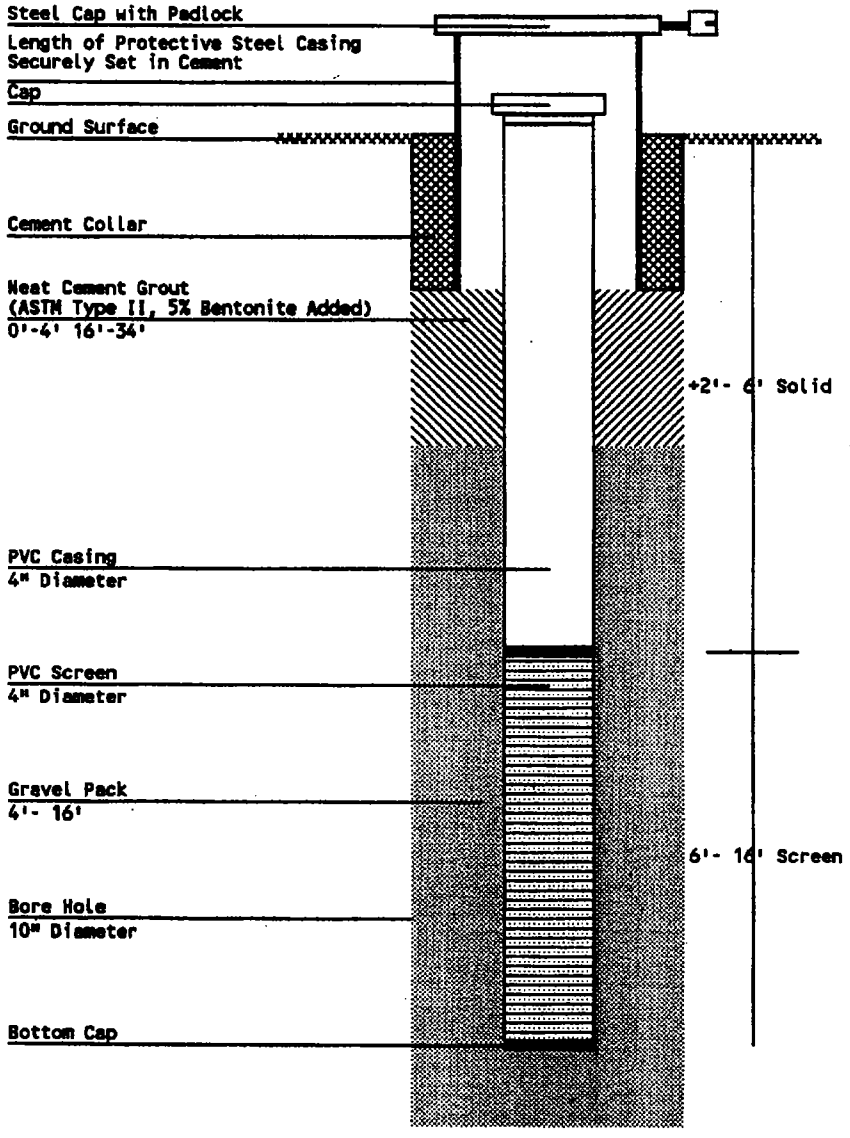
GAL PER MIN: 2
STAT H2O LVL: 10'
DEVELOPMENT METHOD: Pump
DEVELOPMENT TIME: 1 Hour

CASING SEAL: Portland
OPEN HOLE:

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER
0' - 2'	2-6-6-6
2' - 4'	11-23-20-20
4' - 6'	20-16-16-16
6' - 8'	16-8-13-11
8' - 10'	8-9-10-13
10' - 12'	13-11-18-20
12' - 14'	27-22-18-16
14' - 16'	11-12-13-11
16' - 18'	13-10-11-12
18' - 20'	14-14-16-19
20' - 22'	2-5-12-19
22' - 24'	17-16-18-21
24' - 26'	7-13-10-13
26' - 28'	8-7-9-14
28' - 30'	6-7-13-17
30' - 32'	10-11-12-14
32' - 34'	16-16-20-24

REMARKS / SOILS IDENTIFICATION

0' - 24' Brown fine sand.
24' - 34' Black silty clay sand.



DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 35585
Atlas Sheet Coordinates 29 : 13 684

OWNER IDENTIFICATION - Owner GETTY PETROLEUM CORP
Address 86 DOREMUS AVE
City NEWARK 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. ~~6~~ Block No. ~~16~~
Address ~~157 BROAD ST~~ Date well started 7/3/96
TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 7/3/96
Regulatory Program Requiring Well UST Case I.D. # 89-12-15-0952
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 NA 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
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	3	20	4	PVC (.020)
Tail Piece	NA			
Gravel Pack	2	20	12	#2 sand
Annular Seal/Grout	0	2	12	Bentonite
Method of Grouting	Tremie			

Static water level after drilling 7 ft.
Water level was measured using Tape
Well was developed for 5 hours at 1.5 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. Registration No. 1540
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" Top soil
4"-20' Dk brn to Dk green Silty Clay + Fn SND

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 Gary Parent Date 7/23/96

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. ~~29~~ 35931
Atlas Sheet Coordinates ~~29~~ : ~~13~~ ~~688~~

OWNER IDENTIFICATION - Owner ~~ALLIED SIGNAL/BENDIX~~
Address 118 HIGHWAY 35
City ~~EATONTOWN~~ State ~~NJ~~ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. RW 5
County ~~MONMOUTH~~ Municipality ~~EATONTOWN BORO~~ Lot No. ~~6 & 13~~ Block No. ~~64~~
Address 118 HIGHWAY 35 Date well started 10/02/96
TYPE OF WELL (as per Well Permit Categories) ~~RECOVERY~~ Date well completed 10/07/96
Regulatory Program Requiring Well ~~ISRA SITE~~ Case I.D. # ~~86688~~
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 908 536-8500

WELL CONSTRUCTION

Total depth drilled 48' ft.
Well finished to 34' ft.
Borehole diameter: Top 14" in. Bottom 8" in.
Well was finished: [X] above grade [ ] flush mounted
If finished above grade, casing height (stick up) above land surface 1 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	+1'	4'	6"	Sch 40 PVC
Outer Casing (Not Protective Casing)	—	—	—	—
Screen (Note slot size)	4'	34'	6"	Low Carbon Steel .025 slot
Tail Piece	—	—	—	—
Gravel Pack	3'	34'	14"	#2 Morie
Annular Seal/Grout	0	3'	14"	Bentonite/Portland
Method of Grouting	Pressure			

Static water level after drilling 9.0 ft.
Water level was measured using Steel Tape
Well was developed for — hours at — gpm
Method of development —
Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity — gpm
Pump type: —
Drilling Method 4¼"/10¼" HSA
Drilling Fluid None Type of Rig B-59
Name of Driller Steve Kovelesky
Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. JD 11609
Name of Drilling Company HANDEX CORP./DENNIS HAYES

GEOLOGIC LOG

(Copies of other geologic logs and/or geophysical logs should be attached.)

0-1.2' Asphalt & Subbase
1.2-17' Fine & Med Sand
17-18.5' Med sand & silt
18.5-32' Med & fine sand
32-43' Med sand, silt & glauconite sand
43-47 Med clean sand
47-48 Silty Clay

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 11/17/96

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- 37524

Atlas Sheet Coordinates 29 : 13 : 673

OWNER IDENTIFICATION - Owner MOBIL OIL CORP.
Address 4Ø0 ATRIUM BD
City SOMERSET 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. 5 Block No. 8
Address RTE 35 & W. TRENTON AVE.

DATE WELL STARTED 9/3/97
DATE WELL COMPETED 9/3/97

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 90-10-01-1200

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES 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 5 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 A-300

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	2	PVC	Sch 40
Middle Casing (for triple cased wells only)	NA				
Outer Casing (largest diameter)	NA				
Open Hole or Screen (No. Used)	2	14	2	PVC	010 SLOT
Blank Casings (No. Used)	NA				
Tail Piece	NA				
Gravel Pack	1	14	8	#2 SAND	
Grout	0	1	8	Neat Cement / Bentonite	lbs. / 5 lbs.

Grouting Method TREMIE PIPE
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 GARY PARENT/SHORE DRLG. INC.
Well Driller (Print) M. GRAVESE
Driller's Signature M. Graves
Registration No. 501764 Date 9/3/97

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-4" CONCRETE
4"-1' DK BRN FN SD + SILT
1'-10' GLN / BRN FN SD + SILT
10'-14' GREEN MD-CS SD SOME SILT + BLACK CS SD LENSES

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1502

DWR-138 M
11/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29- 37602

Atlas Sheet Coordinates 29 : 13 : 688

OWNER IDENTIFICATION - Owner ALLIED SIGNAL/BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. TRW-2
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 & 13 Block No. 64
Address 118 HIGHWAY 35

DATE WELL STARTED 9/24/97
DATE WELL COMPETED 9/24/97

TYPE OF WELL (as per Well Permit Categories) RECOVERY
Regulatory Program Requiring Well ISRA SITE Case I.D.# #86688

CONSULTING FIRM/FIELD SUPERVISOR (If applicable) Handex Tele. # 732 536-8500

WELL CONSTRUCTION

Total depth drilled 22 ft.
Well finished to 21.5' ft.

Borehole diameter:
Top 14" in.
Bottom 14" in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 4.5' ft.

Was steel protective casing installed? [ ] Yes [X] No

Static water level after drilling 6' ft.

Water level was measured using Steel 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	+4.5'	5'8"	6"	PVC	Sch 40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or Screen (No. Used 020)	5'8"	18.5'	6"	Stainless Steel	Sch 40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	18.5'	21.5'	6"	Stainless Steel	
Gravel Pack	3.5'	22'	14"	Morie	#1
Grout	0	3.5'	14"	Neat Cement Bentonite	184 lbs. 16 lbs.

Grouting Method Pressure
Drilling Method 10 1/4" ID HSA

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity — gpm

Pump type: —

Drilling Fluid None Type of Rig B-59

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 HANDEX CORP./DENNIS [illegible]

Well Driller (Print) Stephen [illegible]

Driller's Signature [illegible]

Registration No. JD 1609 Date 10/7/97

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18' Backfilled Pea Gravel w/ silt
18-22' Silty Sand

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 - 37603

Atlas Sheet Coordinates 29 : 13 : 688

OWNER IDENTIFICATION - Owner ALLIED SIGNAL/BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. TRW-3
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 & 13 Block No. 64
Address 118 HIGHWAY 35

DATE WELL STARTED 9/24/97
DATE WELL COMPETED 9/24/97

TYPE OF WELL (as per Well Permit Categories) RECOVERY
Regulatory Program Requiring Well ISRA SITE Case I.D.# #86688

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732536-8500

WELL CONSTRUCTION

Total depth drilled 22' ft.
Well finished to 21.5' ft.

Borehole diameter:
Top 14" in.
Bottom 14" in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 4.5 ft.

Was steel protective casing installed? [ ] Yes [X] No

Static water level after drilling 6' ft.

Water level was measured using Steel Tape

Well was developed for — hours at — gpm

Method of development —

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity — gpm

Pump type: —

Drilling Fluid None Type of Rig B-59

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	+4.5	5'8"	6"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 020)	5'8"	18.5'	6"	Stainless	Steel
Blank Casings (No. Used)					
Tail Piece	18.5'	21.5'	6"	Stainless	Steel
Gravel Pack	3.5'	22'	14"	Morie #1	
Grout	0	3.5'	14"	Neat Cement Bentonite	184 lbs. 116 lbs.

Grouting Method Pressure
Drilling Method 16"/14" ID HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18' Backfilled pea gravel w/ silt
18-22' 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./DENNIS [illegible]
Well Driller (Print) Stephen Kovelasky
Driller's Signature [signature] DECLINED
Registration No. JD 11609 Date 10/7/97

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~~ ~~37604~~

Atlas Sheet Coordinates ~~29~~ : ~~13~~ : ~~688~~

OWNER IDENTIFICATION - Owner ~~ALLIED SIGNAL/BENDIX CORP~~
Address ~~118 HIGHWAY 35~~
City ~~EATONTOWN~~ State ~~NJ~~ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. U-2
County ~~MONMOUTH~~ Municipality ~~EATONTOWN BORO~~ Lot No. ~~6 & 13~~ Block No. ~~64~~
Address ~~118 HIGHWAY 35~~

DATE WELL STARTED 9/24/97
DATE WELL COMPETED 9/24/97

TYPE OF WELL (as per Well Permit Categories) ~~RECOVERY~~
Regulatory Program Requiring Well ~~ISRA SITE~~ Case I.D.# ~~#86688~~

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536-8500

WELL CONSTRUCTION

Total depth drilled 22' ft.
Well finished to 21.5' ft.

Borehole diameter:
Top 14" in.
Bottom 14" in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 4.5 ft.

Was steel protective casing installed? [ ] Yes [X] No

Static water level after drilling 6' ft.

Water level was measured using Steel 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	+4.5'	5'8"	6"	PVC	Sch 40
Middle Casing (for triple cased wells only)	~~~~				
Outer Casing (largest diameter)	~~~~				
Open Hole or Screen (No. Used 010)	5'8"	18.5'	6"	Stainless	Steel
Blank Casings (No. Used)	~~~~				
Tail Piece	18.5'	21.5'	6"	Stainless	Steel
Gravel Pack	3.5'	22'	14"	Morie	#1
Grout	∅	3.5'	14"	Neat Cement Bentonite	184 lbs. 116 lbs.

Grouting Method Pressure
Drilling Method 10'14" ID HSA

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity ~~~~ gpm

Pump type: ~~~~

Drilling Fluid None Type of Rig B-59

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 HANDEX CORP./DENNIS HAYES

Well Driller (Print) Stephen Kovelesky

Driller's Signature

Registration No. JD 11609 Date 10/7/97

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GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18' Backfilled Pea Gravel w/ Silt

18-22' Silty sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/96

LAS

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 37605

Atlas Sheet Coordinates 29 : 13 : 688

OWNER IDENTIFICATION - Owner ALLIED SIGNAL/BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. TRW-1
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 & 13 Block No. 64
Address 118 HIGHWAY 35

DATE WELL STARTED 9/25/97
DATE WELL COMPETED 9/25/97

TYPE OF WELL (as per Well Permit Categories) RECOVERY
Regulatory Program Requiring Well ISRA SITE Case I.D.# #86688

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536-8500

WELL CONSTRUCTION

Total depth drilled 22' ft.
Well finished to 21.5' ft.

Borehole diameter:
Top 14" in.
Bottom 14" in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 4.5 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6' ft.

Water level was measured using Steel Tape

Well was developed for ____ hours at ____ gpm

Method of development ____

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ____ gpm

Pump type: ____

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	+4.5'	5'8"	6"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 020)	5'8"	18.5'	6"	Stainless	Steel
Blank Casings (No. Used)					
Tail Piece	18.5'	21.5'	6"	Stainless	Steel
Gravel Pack	3.5'	22'	14"	Morie	#1
Grout	0	3.5'	14"	Neat Cement Bentonite	184 lbs. 16 lbs.

Grouting Method Pressure
Drilling Method 10 1/4" ID HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18' Backfilled pea gravel w/ silt
18-22' 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./DENNIS HAYES
Well Driller (Print) Stephen Kovelesky
Driller's Signature
Registration No. JD 1609 Date 10/7/97

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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 - 37606

Atlas Sheet Coordinates 29 : 13 : 688

OWNER IDENTIFICATION - Owner ALLIED SIGNAL/BENDIX CORP
Address 118 HIGHWAY 35
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. U-1
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 & 13 Block No. 64
Address 118 HIGHWAY 35

DATE WELL STARTED 9/25/97
DATE WELL COMPETED 9/25/97

TYPE OF WELL (as per Well Permit Categories) RECOVERY
Regulatory Program Requiring Well ISRA SITE Case I.D.# #86688

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Handex Tele. # 732 536-8500

WELL CONSTRUCTION

Total depth drilled 22' ft.
Well finished to 21.5' ft.

Borehole diameter:
Top 14" in.
Bottom 14" in.

Well was finished: ☑ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 4.5 ft.

Was steel protective casing installed? ☐ Yes ☒ No

Static water level after drilling 6' ft.

Water level was measured using Steel 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	+4.5	5'8"	6"	PVC	Sch 40
Middle Casing (for triple cased wells only)	—				
Outer Casing (largest diameter)	—				
Open Hole or Screen (No. Used 030)	5'8"	18.5'	6"	Stainless	Steel
Blank Casings (No. Used)	—				
Tail Piece	18.5'	21.5'	6"	Stainless	Steel
Gravel Pack	3.5'	22'	14"	Morie	#1
Grout	ϕ	3.5'	14"	Neat Cement Bentonite	184 lbs. 16 lbs.

Grouting Method Pressure
Drilling Method 10 1/4" ID HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ——— gpm

Pump type: ———

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 HANDEX CORP./DENNIS HAYES

Well Driller (Print) Stephen Kavelesky

Driller's Signature

Registration No. JD 11609 Date 10/25/97

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-18' Backfilled Pea Gravel w/ Silt
18-22' Silty Sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 163 1524

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

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MONITORING WELL RECORD

Well Permit No. 29 – 37737
Atlas Sheet Coordinates 29 : 13 : 657

OWNER IDENTIFICATION - Owner ~~UNITED STATES ARMY~~
Address FORT MONMOUTH
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SPG-1
County MONMOUTH Municipality EATONTOWN BORO Lot No. NA Block No. NA
Address RT. 35 Date well started 12/2/97
TYPE OF WELL (as per Well Permit Categories) ~~GAS VENT~~ Date well completed 12/2/97
Regulatory Program Requiring Well ~~UST~~ Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. #

WELL CONSTRUCTION

Total depth drilled 22 ft.
Well finished to 22 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

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	19	2	PVC RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	19	22	2	020 SLOT PVC
Tail Piece	NA			
Gravel Pack	17	22	8	#2 SAND
Annular Seal/Grout	0	17	8	BENT. SLURRY
Method of Grouting	TREMIE			

Static water level after drilling NA ft.
Water level was measured using NA
Well was developed for NA hours at ____ gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity NA gpm
Pump type NA
Drilling Method TOHSA
Drilling Fluid NONE Type of Rig A-300
Name of Driller ~~Gary~~ MIKE BRANESE
Health and Safety Plan submitted? ☐ Yes ☑ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. ID 17864
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8" GRASS, TOPSOIL
8"-20' GREENISH YELLOW MD SD ~~SOME~~ LITTLE SILT
20'-22' GREY SILTY FN SD

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 M. Parent Date 12/6/97

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 — 37738
Atlas Sheet Coordinates 29 : 13 : 657

OWNER IDENTIFICATION - Owner UNITED STATES ARMY
Address FORT MONMOUTH
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SPG-2
County MONMOUTH Municipality EATONTOWN BORO Lot No. NA Block No. NA
Address RT. 35 Date well started 12/2/97
TYPE OF WELL (as per Well Permit Categories) GAS VENT Date well completed 12/2/97
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. #

WELL CONSTRUCTION

Total depth drilled 22 ft.
Well finished to 22 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

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	19	2	PVC RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	19	22	2	020 SLOT PVC
Tail Piece	NA			
Gravel Pack	17	22	8	#2 SAND
Annular Seal/Grout	0	17	8	BENT. SLURRY
Method of Grouting	TREMIE			

Static water level after drilling NA ft.
Water level was measured using NA
Well was developed for NA hours at ____ gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
Name of Driller MIKE GRANESE
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. Registration No. ID17864
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8" TOPSOIL, GRASS
8"-20' GREENISH YELLOW MD SD LITTLE SILT
20'-22' GREY SILTY FN SD

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 M. Granese Date 12/6/97

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 — 37739
Atlas Sheet Coordinates 29 : 13 : 657

OWNER IDENTIFICATION - Owner UNITED STATES ARMY
Address FORT MONMOUTH
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address Owner's Well No. SVE-1
County MONMOUTH Municipality EATONTOWN BORO Lot No. NA Block No. NA
Address RT. 35 Date well started 12/2/97
TYPE OF WELL (as per Well Permit Categories) GAS VENT Date well completed 12/2/97
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. #

WELL CONSTRUCTION

Total depth drilled 6 ft.
Well finished to 4 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

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	4	4	PVC RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	4	6	4	020 SLOT PVC
Tail Piece	NA			
Gravel Pack	3	6	12	#2 SAND
Annular Seal/Grout	0	3	12	BENT SLURRY
Method of Grouting	TREMIE			

Static water level after drilling NA ft.
Water level was measured using NA
Well was developed for NA hours at gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
Name of Driller MIKE GRANESE
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None (D) C B A
N.J. Registration No. ID 17664
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8" GRASS, TOPSOIL
8"-6' GREENISH YELLOW MD SD

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 W. Shane Date 12/6/97

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
1/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 — 37140
Atlas Sheet Coordinates 29 : 13 : 657

OWNER IDENTIFICATION - Owner UNITED STATES ARMY
Address FORT MONMOUTH
City EATONTOWN State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. SVE-2
County MONMOUTH Municipality EATONTOWN BORO Lot No. NA Block No. NA
Address RT. 35 Date well started 12/2/97
TYPE OF WELL (as per Well Permit Categories) GAS VENT Date well completed 12/2/97
Regulatory Program Requiring Well UST Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) GES Tele. #

WELL CONSTRUCTION

Total depth drilled 6 ft.
Well finished to 6 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

	Depth to Top (ft.) (From land surface)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	4	4	PVC RISER
Outer Casing (Not Protective Casing)	NA			
Screen (Note slot size)	4	6	4	020 SLOT PVC
Tail Piece	NA			
Gravel Pack	3	6	12	#2 SAND
Annular Seal/Grout	0	3	12	BENT. SLURRY
Method of Grouting	TREMIE			

Static water level after drilling NA ft.
Water level was measured using NA
Well was developed for NA hours at ____ gpm
Method of development NA
Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity NA gpm
Pump type: NA
Drilling Method HSA
Drilling Fluid NONE Type of Rig A-300
Name of Driller MIKE GRANESE
Health and Safety Plan submitted? ☐ Yes ☒ No
Level of Protection used on site (circle one) None D C B A
N.J. Registration No. TD 17864
Name of Drilling Company GARY PARENT/SHORE DRLG. INC.

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)

0-8" GRASS, TOPSOIL
8"-6' GREENISH YELLOW MDSD

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 M. Granese Date 12/6/97

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. 2.10 Owner's Well No. 113 Block No.

WELL USE IRRIGATION

DATE WELL STARTED 2/3/98
DATE WELL COMPLETED 2/23/98

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.

McCURDY WELL DRILLING, INC.
Drilling Company
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

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

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	lbs. 90 lbs.

Grouting Method TREMIE
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-8" TOPSOIL
8"-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

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. Grane
Registration No. 501764 Date 8/11/98

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

3/20/98

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 – 38350

Atlas Sheet Coordinates 29 : 13 : 628

OWNER Redacted - Privacy Act

Address 137 ELM LANE

City SHREWSBURY State NJ Zip Code

WELL LOCATION ADDRESS 137 ELM LANE Owner's Well No.

County MONMOUTH Municipality SHREWSBURY TWP. Lot No. 4 Block No. 63

WELL USE IRRIGATION

DATE WELL STARTED 33 / 27 / 98

DATE WELL COMPLETED 3 / 27 / 98

WELL CONSTRUCTION

Total Depth Drilled 187 ft.

Finished Well Depth 187 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	162	4	PVC	Sched. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	162	182	4	PVC	Sched. 40
Blank Casings (No. Used)					
Tail Piece	182	187	4	PVC	Sched. 40
Gravel Pack	152	187	8.5	Blended	.025
Grout	3.5	152	8.5	Neat Cement	lbs
				Bentonite	650 lbs

RECORD OF TEST

Test Date 3 / 27 / 98

Static Water Level 9 ft. below land surface

Water Level Measured Using Measured Tape

Pumping Water Level 130 ft. below land surface

Well Was Pumped Using Air lift

Well Yield 45 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 T. Castellano Reg. No. 0016656

Pump Type Submersible

Depth of Pump below land surface 80 ft.

Capacity 12 gpm Horsepower 3/4

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0- 10 Clayey ochre sand w/ironstone
10- 15 Gray-green clay
15- 40 Cemented green sand
40- 75 Fine & med. gray silty sand
75- 80 Fine & med. gray silty sand w/more clay
80- 160 Gray silty clay
160- 180 Fine gray sand w/some black sand
180- 187 Fine gray sand w/some black 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) Benjamin Primost

Driller's Signature

Registration No. MD 13762 Date 3 / 27 / 98

COPIES: White - DEP 4/21/98 Canary - Driller 4/21/98 Pink - Owner Goldenrod - Health Dept. 4/21/98

WELREC 163 1468

DWR-138 M
11/96

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 39416

Atlas Sheet Coordinates 29 : 13 625

OWNER IDENTIFICATION - Owner Redacted - Privacy Act
Address 92 EAST END AVE
City SHREWSBURY State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 1
County MONMOUTH Municipality SHREWSBURY BORO Lot No. 1 Block No. 56
Address 92 EAST END AVE

DATE WELL STARTED 10/9/98
DATE WELL COMPETED 10/9/98

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 980430154704

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) BRINKERHOFF ENV. Tele. # (732) 223-2225

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 11 ft.

Water level was measured using TAPE

Well was developed for 1.5 hours at 2 gpm

Method of development PUMP

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	.5	4	4	PVC	Sch. 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	4	17	4	PVC	Sch. 40 (.01)
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	17	8	MORIE	#1
Grout	0	2	8	Neat Cement Bentonite	94 lbs. 5 lbs.

Grouting Method PLACED
Drilling Method AUGER

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-8' BROWN SANDY LOAM
8'-9' DARK BROWN SANDY LOAM
9'-14' DARK BROWN CLAYEY SILT
14'-17' GREENISH BLACK CEMENTED 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) B. M. STRZELCZYK
Driller's Signature B. M. Strzelczyk
Registration No. 51290 Date 10/13/98

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 - 39550

Atlas Sheet Coordinates
29 : 13 : 695

OWNER US ARMY - FT. MONMOUTH
Address SELSM-EH-MC BLDG. 2700
City FT. MONMOUTH State NJ Zip Code

WELL LOCATION ADDRESS SELSM-EH-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 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 39820

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner BELMONT CORP
Address 8550 KATY FREEWAY, SUITE 300
City HOUSTON State TX Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. P21
County MONMOUTH Municipality LITTLE SILVER B Lot No. 56-60 Block No. 58
Address OCEANPORT & EASTVIEW AVE

DATE WELL STARTED 1/18/99
DATE WELL COMPLETED 1/18/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Whitestone Envir. Compliance Tele. #

WELL CONSTRUCTION

Total depth drilled 20 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 ____ 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 pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity ____ gpm

Pump type: ____

Drilling Fluid ____ Type of Rig B-57

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	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	2	18	2	PVC	0.10 Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	20		Morie #2	94 lbs.
Grout	0	1		Neat Cement Bentonite	94 lbs. 5 lbs.

Grouting Method gravity
Drilling Method Auger

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

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 SUMMIT WELL DRILLING CO INC

Well Driller (Print) John Vogt

Driller's Signature John Vogt

Registration No. J1544 Date 1/21/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Summit DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (732) 356-1009

WELL LOG

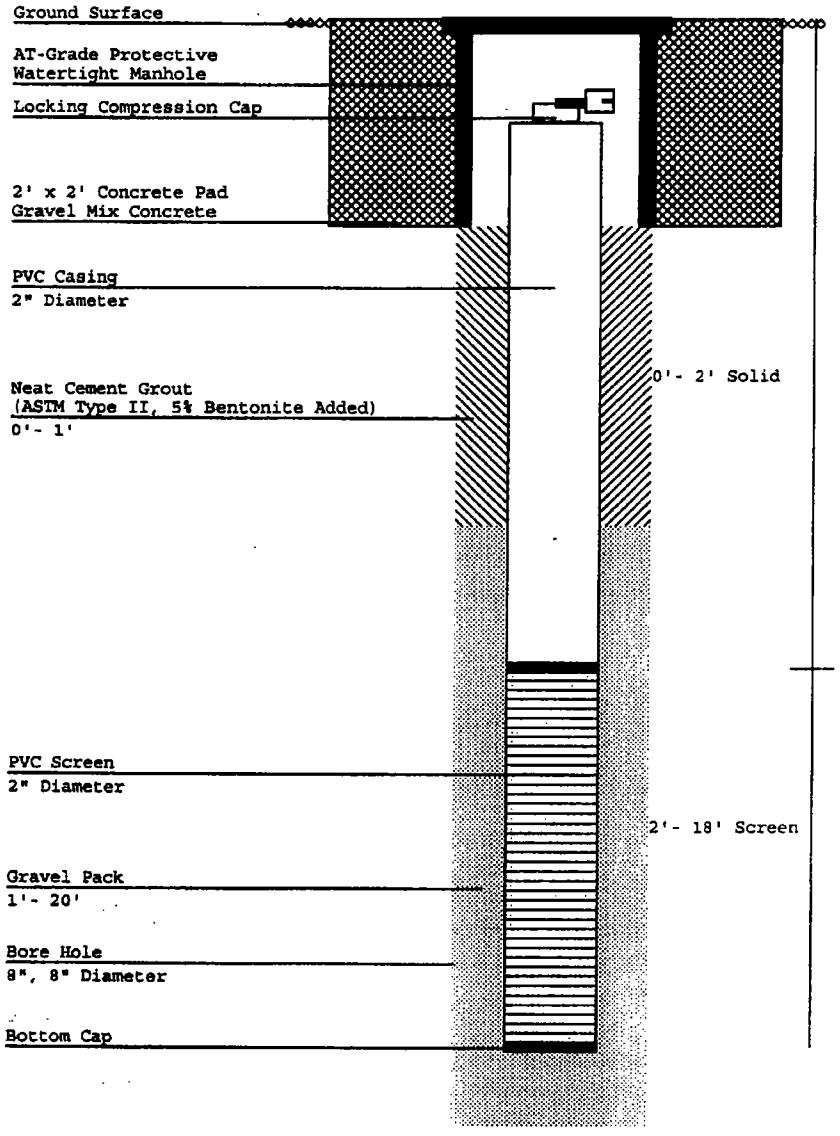
WELL: PZ1 DATE DRILLED: 01/18/1999 COORD #1: 29.13.635 PERMIT #1: 29-39820
COORD #2: PERMIT #2: COUNTY: Monmouth
SITE: Proposed Assisted Living Fac., Oceanport & Eastview Avenue, , Little Silver, NJ XSTREET:
OWNER: Belmont Corp., 8550 Katy Freeway, Suite 300, Houston, TX 77024 USE: Monitoring

INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE 1: PVC	DRILLING METHOD: Auger
DIAMETER:	2"	DIAMETER:		SCREEN TYPE 2:	SAMPLING METHOD:
LENGTH:	2'	LENGTH:		DIAMETER: 2"	HOLE DIA: 8", 8"
				LENGTH 1: 16'	TOTAL DEPTH: 20'
SET WELL:	18'	GAL PER MIN:	2	LENGTH 2:	
GRAVEL PK SZ:	Morie #2	STAT H2O LVL:	8'	SLOT SIZE: .010	
DRILLER:	John Vogt	DEVELOPMENT METHOD:	Pump	CASING SEAL: Portland	
SURFACE COMPLETION:	M	DEVELOPMENT TIME:	1 Hour	OPEN HOLE:	

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER
0' - 2'	None
2' - 4'	None
4' - 6'	None
6' - 8'	None
8' - 10'	None
18' - 20'	None

REMARKS / SOILS IDENTIFICATION

0'- 6' Brown sand.
6'- 20' Grey & green silty clay.



DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 39821

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner BELMONT CORP
Address 8550 KATY FREEWAY, SUITE 300
City HOUSTON State TX Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. PZ2
County MONMOUTH Municipality LITTLE SILVER B Lot No. 56-60 Block No. 58
Address OCEANPORT & EASTVIEW AVE

DATE WELL STARTED 1/18/99
DATE WELL COMPLETED 1/18/99

TYPE OF WELL (as per Well Permit Categories) ~~OWNER INVESTIGATION~~ MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Whitestone Envir. Compliance Tele. #

WELL CONSTRUCTION

Total depth drilled 17 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 4 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:

Drilling Fluid Type of Rig B-57

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	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	2	15	2	PVC	.010 Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	17		Morie #2	
Grout	0	1		Neat Cement Bentonite	94 lbs. 5 lbs.

Grouting Method gravity
Drilling Method Augers

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

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 SUMMIT WELL DRILLING CO INC
Well Driller (Print) John Vogt
Driller's Signature John Vogt
Registration No. J1544 Date 1/21/99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (732) 356-1009

WELL LOG

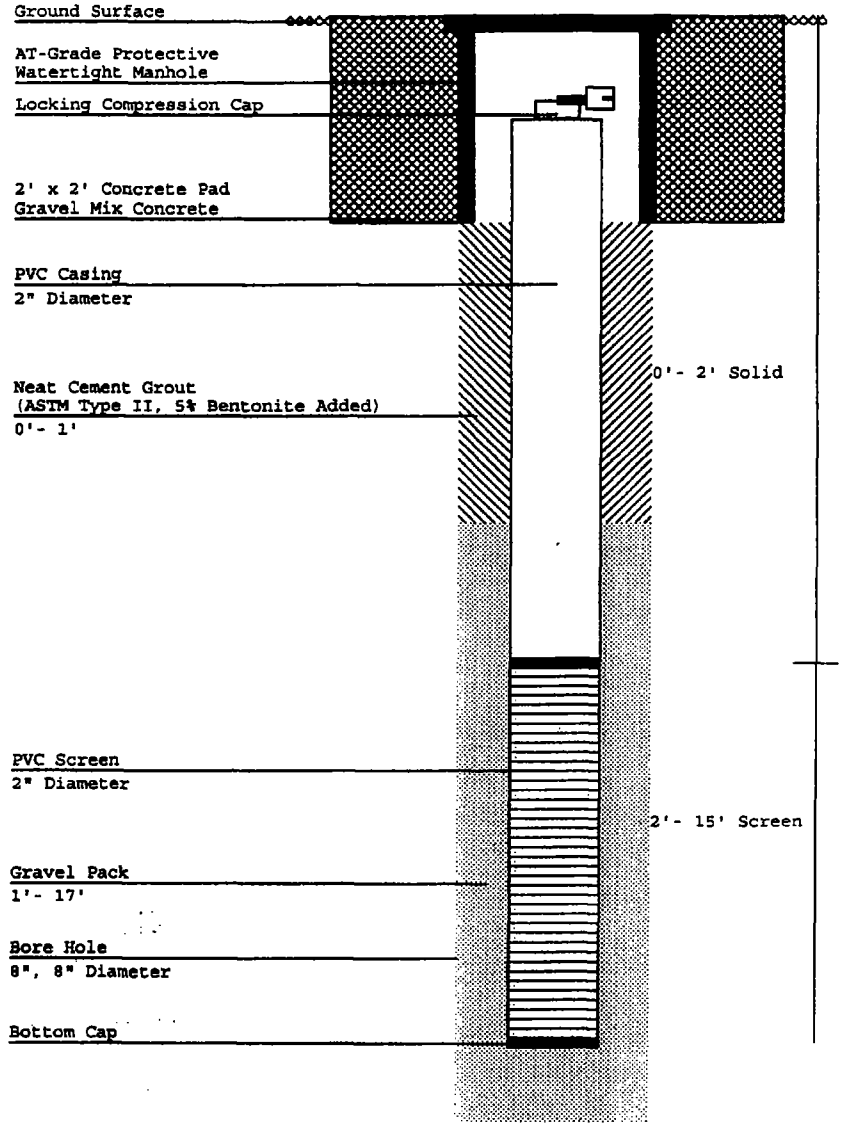
WELL: PZ2 DATE DRILLED: 01/18/1999 COORD #1: 29.13.635 PERMIT #1: 29-39821
COORD #2: PERMIT #2: COUNTY: Monmouth
SITE: Proposed Assisted Living Fac., Oceanport & Eastview Avenue, , Little Silver, NJ XSTREET:
OWNER: Belmont Corp., 8550 Katy Freeway, Suite 300, Houston, TX 77024 USE: Monitoring

INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE 1: PVC	DRILLING METHOD: Auger
DIAMETER:	2"	DIAMETER:		SCREEN TYPE 2:	SAMPLING METHOD:
LENGTH:	2'	LENGTH:		DIAMETER: 2"	HOLE DIA: 8", 8"
				LENGTH 1: 13'	TOTAL DEPTH: 17'
SET WELL:	15'	GAL PER MIN: 2		LENGTH 2:	
GRAVEL PK SZ:	Morie #2	STAT H2O LVL: 4'		SLOT SIZE: .010	
DRILLER:	John Vogt	DEVELOPMENT METHOD: Pump		CASING SEAL: Portland	
SURFACE COMPLETION: M		DEVELOPMENT TIME: 1 Hour		OPEN HOLE:	

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER
0' - 2'	None
2' - 4'	None
4' - 6'	None
6' - 8'	None
8' - 10'	None
15' - 17'	None

REMARKS / SOILS IDENTIFICATION

0'- 6' Brown sand.
6'- 17' Grey & green silty clay.



DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 39822

Atlas Sheet Coordinates 29 : 13 635

OWNER IDENTIFICATION - Owner BELMONT CORP
Address 8550 KATY FREEWAY, SUITE 300
City HOUSTON State TX Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. PZ 3
County MONMOUTH Municipality LITTLE SILVER B Lot No. 56-60 Block No. 58
Address OCEANPORT & EASTVIEW AVE

DATE WELL STARTED 1/18/99
DATE WELL COMPLETED 1/18/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well OWNER INVESTIGATION Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Whitestone Envrs. Compliance Tele. #

WELL CONSTRUCTION

Total depth drilled 17 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 4 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: ____

Drilling Fluid ____ Type of Rig B-57

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	2	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	2	15	2	PVC	.010 Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	17		Morie #2	
Grout	0	1		Neat Cement Bentonite	94 lbs. 5 lbs.

Grouting Method gravity
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 SUBMIT WELL DRILLING CO INC

Well Driller (Print) John Vogt

Driller's Signature John Vogt

Registration No. 15544 Date 1/21/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

See attached

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (732) 356-1009

WELL LOG

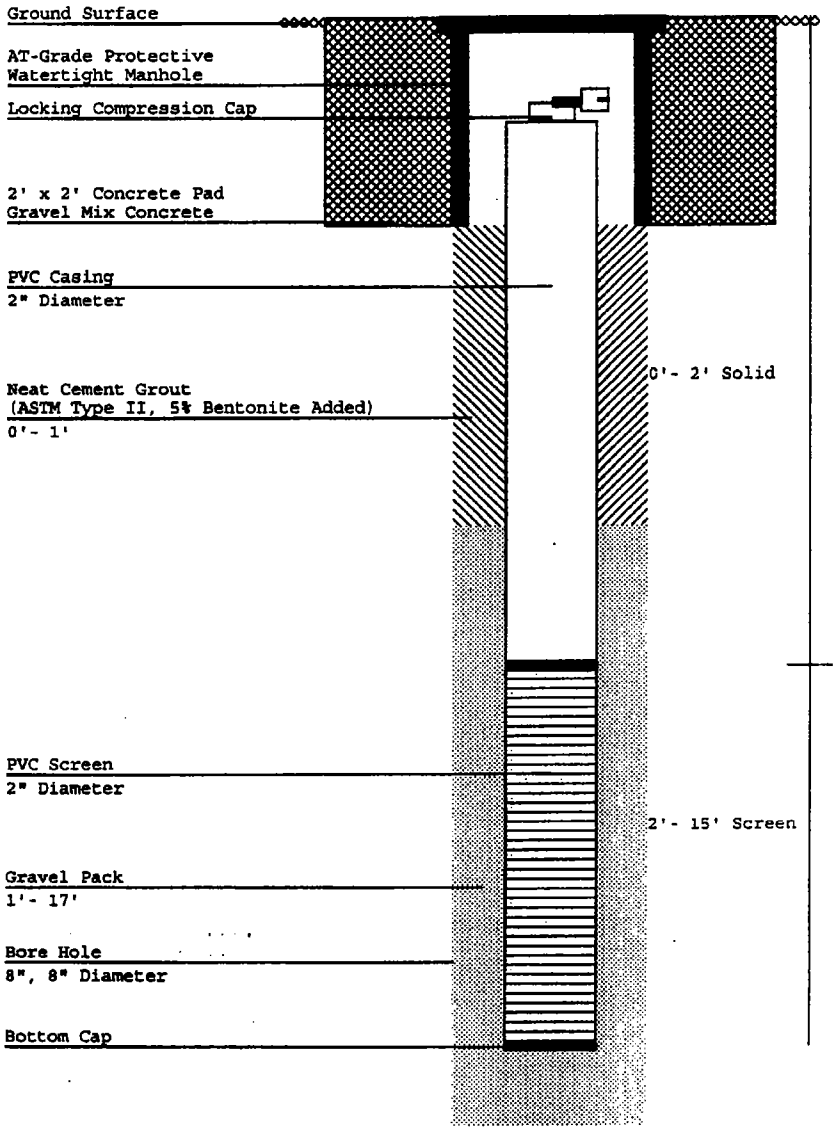
WELL: PZ3 DATE DRILLED: 01/18/1999 COORD #1: 29.13.635 PERMIT #1: 29-39822
COORD #2: PERMIT #2: COUNTY: Monmouth
SITE: Proposed Assisted Living Fac., Oceanport & Eastview Avenue, , Little Silver, NJ XSTREET:
OWNER: Belmont Corp., 8550 Katy Freeway, Suite 300, Houston, TX 77024 USE: Monitoring

INNER CASING:	PVC	OUTER CASING:	SCREEN TYPE 1:	PVC	DRILLING METHOD: Auger
DIAMETER:	2"	DIAMETER:	SCREEN TYPE 2:		SAMPLING METHOD:
LENGTH:	2'	LENGTH:	DIAMETER:	2"	HOLE DIA: 8", 8"
			LENGTH 1:	13'	TOTAL DEPTH: 17'
SET WELL:	15'	GAL PER MIN: 2	LENGTH 2:		
GRAVEL PK SZ:	Morie #2	STAT H2O LVL: 4'	SLOT SIZE:	.010	
DRILLER:	John Vogt	DEVELOPMENT METHOD: Pump	CASING SEAL:	Portland	
SURFACE COMPLETION:	M	DEVELOPMENT TIME: 1 Hour	OPEN HOLE:		

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER
0' - 2'	None
2' - 4'	None
4' - 6'	None
6' - 8'	None
8' - 10'	None
15' - 17'	None

REMARKS / SOILS IDENTIFICATION

0'- 6' Brown sand.
6'- 17' Grey & green silty clay.



DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 39826

Atlas Sheet Coordinates 29 : 13 681

OWNER IDENTIFICATION - Owner GETTY PROPERTIES CORP
Address PO BOX 1299
City NEWARK State NJ Zip Code 07101

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW14
County MONMOUTH Municipality EATONTOWN BORO Lot No. 6 Block No. 16
Address 157 BROAD ST

DATE WELL STARTED 01/13/99
DATE WELL COMPLETED 01/13/99

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 89-12-12-0952

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tyree - Dave Beaver Tele. # 609 2390033

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 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 2 ft.

Was steel protective casing installed? ☑ Yes ☐ No

Static water level after drilling 14 ft.

Water level was measured using mscope

Well was developed for NA hours at NA gpm

Method of development NA

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	3/4	PVC	SCH40
Middle Casing (for triple cased wells only)	—	—	—	—	—
Outer Casing (largest diameter)	—	—	—	—	—
Open Hole or (Screen) (No. Used CRO)	5	20	3/4	PVC	SCH40
Blank Casings (No. Used)	—	—	—	—	—
Tail Piece	—	—	—	—	—
Gravel Pack	3	20	2	Sand	#2 morie
Grout	2 / 0	3 / 2	2	Neat Cement Bentonite	50 lbs. 10 lbs.

Grouting Method gravity displacement
Drilling Method direct push

Was permanent pumping equipment installed? ☐ Yes ☑ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid NA Type of Rig Geoprobe 5400

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 ADT-MIDATLANTIC INC.

Well Driller (Print) Craig Jablonski

Driller's Signature Craig Jablonski

Registration No. 51582 Date 01/28/99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6" topsoil
6" - 4' yellow tan sand fine
4 - 14' Coarse med sand
14' 20' Coarse saturated med fine sand w/silt

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Well Search at the NJDEP Project #4936-118

Well Search #1: M-12 Site

- latitude = 40 18 46, longitude = 74 02 21
- 216 "Hits" ← 1 mile radius

Well Search #2: M-18 Site

- latitude = 40 18 58, longitude = 74 02 48
- 274 "Hits" ~ 1 mile radius

When: Friday, Feb. 16, 2001 at 9:00 A.M.

Meet with: Catherine Kenner or MaryAnne (I think it is the 3rd floor, ask at entrance)

Need to bring to NJDEP:

- Site Location Figures (Figure 2-1) for each site
- Latitude and Longitude of each site (this page)
- Directions to NJDEP
- Blank Check from Dave Stocker / Betsy

Need to obtain for each site:

- ✓ Well Record documents from computer
- ✓ Monitoring Well Records photocopied
- ✓ Printout of the "Hit List"
- ✓ Receipt
- ✓ Photocopy of Completed Check

216
274
490

APPENDIX I

Regenesis Proposal for ORC Advanced™ Injection Program at Site 283

REGENESIS

May 6, 2004 **Proposal No. 0ER0304-43.2Ao**

Jaime Hojdila
Versar, Inc.
201 Gibraltar Road, Suite 100
Horsham, PA 19044
E-mail: jhojdila@versar.com

Subject: Application of ORC *Advanced*™ (Advanced Formula Oxygen Release Compound) to Accelerate the Natural Attenuation of Petroleum Hydrocarbons at Site 283 in Fort Monmouth, NJ

Dear Ms. Hojdila:

Thank you for your continued interest in Regenesis. In response to your request, we have revised our most recent technical approach for the above-referenced site and have prepared the design using our ORC *Advanced* product. In addition, the most recent contaminant concentrations were used in determining the appropriate ORC *Advanced* dose rate for the site. In the following sections, we describe the revised approach and other issues affecting the project implementation.

Use of Advanced formula Oxygen Release Compound (ORC *Advanced*™) to Accelerate Bioremediation

Advanced formula Oxygen Release Compound (ORC *Advanced*) is a patented formulation of phosphate-intercalated calcium oxyhydroxide that is a timed-released source of oxygen. ORC *Advanced* releases oxygen in the dissolved-phase when it is hydrated. Numerous studies have shown that the lack of oxygen can limit the ability of naturally occurring microorganisms (aerobes) to degrade certain compounds. ORC *Advanced* provides terminal electron acceptors to support the oxidative biodegradation of many types of aerobically degradable compounds including but not limited to: petroleum-based hydrocarbons (e.g. Toluene) and chlorinated hydrocarbons (e.g. Vinyl Chloride). ORC *Advanced* is manufactured as a fine powder that can be installed in the subsurface in the following ways: (1) mixed with water to form a slurry that can be injected into both the saturated and unsaturated zones (2) added as a soil amendment to the backfill material used in excavation applications. The use of oxygen sources such as ORC *Advanced* is recognized as a sensible strategy for engineering accelerated bioattenuation at project sites contaminated with aerobically degradable compounds.

Regenesis believes that our ORC *Advanced* product is a good candidate to treat the contaminated soil and/or groundwater at the subject site. When compared to other remediation alternatives there are two main reasons why ORC *Advanced* should be the remediation option of choice: time and money. For example, over the life of a remediation project ORC *Advanced* should be much more cost-effective than monitored natural attenuation (MNA) because it significantly reduces the duration of projects. In addition, when compared to active treatment systems (e.g. Pump & Treat) ORC *Advanced* becomes even more cost-effective because the initial capital costs are considerably less and there are no operations and maintenance (O&M) costs. To this end, it is easy to understand why ORC *Advanced* should be used to treat the contamination at this site.

Preliminary Design and Cost Information for Full Scale Remediation

Based on the information provided, it is assumed that a full-scale remediation approach for the site would consist of injecting ORC *Advanced* in a grid-based pattern to reduce contaminant levels in the source area. Details of the design can be found in the table below.

Design/Proposal Assumptions

Using the information you provided, we have made the following assumptions to estimate system design variables and dose amounts.

- Estimated plume area requiring treatment: 4,220 square feet
- Representative contaminant concentrations: [BTEX] = 2.3 mg/L, [naphthalene] = 0.062 mg/L
- Contaminated saturated zone thickness requiring treatment: 10 feet (7 to 17 feet bgs)
- Estimated groundwater velocity: up to 35 feet/year. Note that groundwater velocity controls the extent to which new contaminant is brought into the treatment zone. This contaminant loading must be considered when specifying time release compound dosing requirements.
- Current groundwater geochemistry: Assumed to be generally **anaerobic** with dissolved oxygen (DO) <4.8 mg/L, nitrate [unknown], ferrous iron <0.3 mg/L, and oxidation reduction potential [unknown].

The design specifications and costs provided below represent a preliminary design for an accelerated bioremediation project. This design may need to be adjusted as detailed design and regulatory oversight issues are finalized. For instance, the following design variables may need to be adjusted prior to the implementation:

- Treatment areas may need to be increased or decreased depending on the overall site remediation strategy.
- Exact delivery locations should be selected in the final design process. Delivery locations may need to be adjusted to take into account site features such as underground utilities and other site structures.

Regenesis' Applications engineering staff is available to assist in the selection of an appropriate final design.

ORC *Advanced* Grid Treatment	
Design Feature	**Specification**
Saturated thickness requiring treatment	10 feet
Treatment Area	4,220 square feet
Delivery Pt. Spacing and Configuration	8 ft-on-center bet. rows, 8 ft-on-center within rows 5 rows of 10 points (offset), 5 rows of 5 points (offset); 75 total points
ORC *Advanced* dose rate in lbs/vertical foot of injection	4 lbs/foot, (40 lbs/point)
ORC *Advanced* material requirement	75 pts. x 10 feet x 4 lbs/ft = 3,000 lbs
ORC *Advanced* material cost at $8.50/lb[1]	$25,500 plus shipping and applicable sales tax

Total ORC *Advanced* Project Cost

The total cost of an ORC *Advanced* accelerated bioremediation project can be estimated using the following items:

- ORC *Advanced* material, shipping fees, and sales tax.
- Fieldwork costs associated with the installation of ORC *Advanced*. Customers are responsible for selecting the drilling subcontractor that will be used for the project.
- Groundwater monitoring well construction (if additional monitoring wells are needed to properly monitor the performance of the project).
- All fieldwork and laboratory analysis associated with periodic groundwater monitoring events.
- Consultant oversight and report generation.
- The Regenesis Technical Services Group provides data evaluation and technical support free of charge.

The costs presented in this proposal are for ORC *Advanced* material costs for a one-time application only. The need to re-apply ORC *Advanced* depends on your plume management strategy, site-specific biodegradation performance, and the ultimate remediation goals for the site as well as other technical or regulatory considerations. For grid-based treatments, one- to-two re-applications may be necessary over the duration of the project. Each re-application would most likely be done over a smaller area and the dose amount would be less than the initial application assuming that there is not an on-going source present. For barrier-based designs, re-applications will be necessary every one-to two-years as long as there is a need to prevent contaminant migration. As can be seen, project costs are directly related to the period of time needed to achieve the site-specific goals.

[1] Unit cost based on a single purchase of 6,000 pounds or more

ORC *Advanced* Delivery to Contaminated Zone Using Direct-Push Equipment

ORC *Advanced* is normally installed using direct-push drilling equipment. This delivery method calls for drive rods to be pushed to the bottom of the contaminated saturated zone and then an ORC *Advanced*/water slurry (ORC *Advanced* slurry) is injected as the rods are withdrawn. Regenesis recommends using drive rods with an inner diameter of at least 5/8 of an inch to inject the ORC *Advanced* slurry. The use of smaller diameter drive rods increases the amount of pressure needed to properly deliver the material and can jeopardize the effectiveness of the installation. Using the proper drilling and related equipment reduces the time required to install ORC *Advanced*.

As a rule, the ORC *Advanced* slurry used for direct-push installations has a solids content of 20% to 40% by weight. Typically, ORC *Advanced* slurries used during installation activities have a solids content of 30%, but this value may need to be adjusted in the field so that the required mass of ORC *Advanced* can be injected at each location. For example, less permeable soil types (e.g. clays) may require a higher ORC *Advanced* solids content since less slurry volume can be injected per location. The volume of water per injection location can be calculated from the following equation:

$$\text{Volume of water (gal/injection pt)} = \frac{\text{ORC Advanced lbs/hole}}{(8.34\ \text{lbs/gal water})(\%\ \text{ORC Advanced solids})}\left[1-(\%\ \text{ORC Advanced solids})\right]$$

One of the most critical aspects of a successful installation is having a pump that can properly install the material in the subsurface. Most direct-push contractors are equipped with grout pumps capable of installing ORC *Advanced* into the subsurface. Typically, the pumps used for these types of product applications should have a pumping rate of at least three gallons per minute and a pressure rating of at least 500 pounds per square inch (psi). Failing to specify and use the appropriate equipment for this type of product installation may increase field time and result in improper application of the material. If you have any questions regarding purchasing, renting or specifying a pump for a project please contact the Technical Service Group staff at Regenesis.

Recommended Groundwater Monitoring Program for ORC *Advanced* Projects

In order to validate the effectiveness of natural attenuation processes (ORC *Advanced* enhanced treatment) we recommend conducting groundwater monitoring at selected wells. Also, a "baseline" round of sampling should be performed to identify the aquifer conditions prior to the installation of ORC *Advanced*. After ORC *Advanced* has been installed into the subsurface, groundwater samples can be collected on a bi-monthly or quarterly basis. Once the initial biodegradation and geochemical trends have been identified, the monitoring frequency can be changed to a semi-annual or annual program. The groundwater monitoring program should employ low flow groundwater sampling techniques and include the measurement of the following field/chemical parameters:

- All COCs
- Field redox parameters: oxidation-reduction potential (ORP), pH, dissolved oxygen (DO), dissolved manganese, and dissolved (ferrous) iron
- Biochemical Oxygen Demand ($BOD_{5\text{-}day}$) and Chemical Oxygen Demand (COD) at selected groundwater monitoring wells within treatment area

Groundwater Monitoring Locations

The following table outlines the suggested locations and significance of monitoring wells used to monitor the progress of an ORC *Advanced* -based project.

Location	Significance
Background (Outside the groundwater plume)	Allows for the changes in natural attenuation conditions induced by addition of ORC *Advanced* to be compared to background levels
Upgradient of treatment zone	Provides a measure of contaminant and competing electron acceptor flux entering treatment zone
Inside treatment zone	Provides information on how ORC *Advanced* is affecting the aquifer conditions and contaminant concentrations
Downgradient of treatment zone	Provides information on the effect ORC *Advanced* is having on the biodegradation rates of contaminants and on aquifer conditions and confirms the mitigation migration

Performance Goals for ORC *Advanced* Projects

The primary goals for an enhanced bioremediation project are to reduce the mass of contaminants and stabilize and/or reduce the size of the contaminant plume. Goals focusing on numerical criteria such as drinking water standards should be considered secondary. Current ORC *Advanced* based projects have been successful at reducing COC concentrations from mg/L to non-detect levels but there is no guarantee that these results will be achieved at the subject site. ORC *Advanced* based projects are subject to the same asymptotic limitations that confront all remediation technologies. Therefore, a realistic set of goals should be established before the project is started.

The duration of an enhanced bioremediation project is very difficult to predict for a number of reasons. First, it is very difficult to predict what the actual mass (dissolved and residual and/or sorbed phases) with any accuracy. Second, the biodegradation rates for a particular contaminant can vary tremendously from site-to-site. The major benefits of bioremediation for petroleum hydrocarbons or other aerobically degradable compounds are that it is a less costly and intrusive remedial alternative when compared to active remediation treatment methods. For the sake of estimation, it can be assumed that biodegradation half-lives can be reduced by 10x and that an average project may require two- to four-years to complete.

Regenesis appreciates the opportunity to provide this information for your project. Please feel free to contact Mike Mazzarese, Regenesis's Mid-Atlantic District Business Development Manager, at 410.685.6890 (e-mail at mmazzarese@regenesis.com) or me at 949.366.8000 (e-mail at erasch@regenesis.com).

Sincerely,

Erin Rasch
Applications Engineer

ORC *Advanced* Design Software for Grid Applications Using Slurry Injection

US Version 1.0

Regenesis Technical Support: USA (949) 366-8000, www.regenesis.com

Site Name: Site 283
Location: source area
Consultant: Versar

Estimated Plume Requiring Treatment

Width of plume (intersecting gw flow direction)	65	ft		
Length of plume (parallel to gw flow direction)	65	ft	4,225	ft^2
Depth to contaminated zone	7	ft		
Thickness of contaminated saturated zone	10	ft		
Nominal aquifer soil (gravel, sand, silty sand, silt, clay)	silt			
Total porosity	0.4	Effective porosity:	0.3	
Hydraulic conductivity	3.5	ft/day	1.2E-03	cm/sec
Hydraulic gradient	0.0074	ft/ft		
Seepage velocity	31.5	ft/yr	0.086	ft/day
Treatment Zone Pore Volume	16,900	ft^3	126,429	gallons

Dissolved Phase Oxygen Demand:	Contaminant Conc. (mg/L)	Contaminant Mass (lb)	Stoichiometry (wt/wt) O_2/contaminant	ORC-Adv Dose (lb)
Individual species that represent oxygen demand:				
Benzene	0.16	0.2	3.1	3
Toluene	0.00	0.0	3.1	0
Ethylbenzene	0.67	0.7	3.2	13
Xylenes	1.43	1.5	3.2	28
MTBE	0.00	0.0	2.7	0
cis-1,2-DCE	0.00	0.0	0.7	0
Vinyl Chloride	0.00	0.0	1.3	0
naphthalene	0.06	0.1	3.0	1
User added, add stoich. demand and Koc **(see pull-down)**	0.00	0.0	0.0	0
Reduced metals: Fe^{+2} and Mn^{+2}	10.00	10.5	0.1	6
Measures of total oxygen demand				
Total Petroleum Hydrocarbons (see pull-down for Koc)	10.00	10.5	3.1	193
Biological Oxygen Demand (BOD)	30.00	31.6	1.0	187
Chemical Oxygen Demand (COD)	60.00	63.3	1.0	373

Parameters for Sorbed Phase Oxygen Demand:

Soil bulk density	1.76	g/cm^3 =	110	lb/cf
Fraction of organic carbon (foc)	0.005	range: 0.0001 to 0.01		

(Estimated using sorbed phase = foc*Koc*Cgw) (Adjust Koc as necessary to provide realistic estimates)	Koc (L/kg)	Contaminant Conc. (mg/kg)	Contaminant Mass (lb)	Stoichiometry (wt/wt) O_2/contaminant	ORC-Adv Dose (lb)	<-
Benzene	123	0.10	0.4	3.1	8	
Toluene	267	0.00	0.0	3.1	0	
Ethylbenzene	327	1.10	5.1	3.2	96	
Xylenes	298	2.13	9.9	3.2	186	
MTBE	12	0.00	0.0	2.7	0	
cis-1,2-DCE	80	0.00	0.0	0.7	0	
Vinyl Chloride	2.5	0.00	0.0	1.3	0	
naphthalene	1000.0	0.31	1.4	3.0	25	
User added, add stoich. demand and Koc (see pull-down)	0.0	0.00	0.0	0.0	0	
Measures of total oxygen demand						
Total Petroleum Hydrocarbons	373	18.65	86.6	3.1	1583	
Biological Oxygen Demand (BOD) Use a multiple of dissolved phase -> 1.00			31.6	1.0	187	
Chemical Oxygen Demand (COD) Use a multiple of dissolved phase -> 1.00			63.3	1.0	373	

Summary of Estimated ORC-Adv Requirements	Dissolved Phase ORC-Adv Demand (lbs)	Sorbed Phase ORC-Adv Demand (lbs)	Additional Demand Factor (1 to 10x)	Total ORC-Adv Demand (lbs)	ORC-Adv Cost	
Total BTEX, MTBE, etc.	52	316	8	2,947	$ 25,075.00	<-
Total Petroleum Hydrocarbons	193	1,583	2	3,553	$ 30,387.50	
Biological Oxygen Demand (BOD)	187	187	2	746	$ 6,712.50	
Chemical Oxygen Demand (COD)	373	373	1.5	1,120	$ 9,843.75	

Required ORC-Adv quantity (in 25 lb increments) ----------> 2,950 pounds ORC-Adv

Delivery Design for ORC-Adv Slurry

Spacing within rows (ft)	8.0	feet
# points per row	9	points/row
Spacing between rows (ft)	8.0	ft
# of rows	9	rows
Advective travel time bet. rows (days)	93	days
Number of points in grid	75	points
ORC-Adv application rate	3.9	lbs/foot
Total ORC-Adv required	**2,950**	lbs of ORC-Adv

Slurry Mixing Volume for Injections

Pounds per location	39	pounds
Buckets per location	1.6	buckets
Design solids content (20-40% by wt. for injections)	30%	
Volume of water required per hole (gal)	11	gallons
Total water for mixing all holes (gal)	825	gallons
Simple ORC-Adv Backfilling: min hole dia. for 67% slurry	3.3	inches
Feasibility for slurry injection in sand: ok up to 15 lb/ft	(ok)	
Feasibility for slurry injection in silt: ok up to 10 lb/ft	(ok)	
Feasibility for slurry injection in clay: ok up to 10 lb/ft	(ok)	

Project Summary		
ORC-Adv bulk material for slurry injection (lbs)		2,950
Number of 25 lb ORC-Adv buckets		118.0
ORC-Adv bulk material cost	$	8.50
Cost for bulk ORC-Adv material	$	25,075
Shipping and Tax Estimates in US Dollars		
Sales Tax rate: 0%	$	-
Total Material Cost	$	25,075
Shipping (call for amount)	$	-
Total Regenesis Material Cost	**$**	**25,075**

ORC-Adv Slurry Injection Cost Estimate (responsibility of customer to contract work)		
Footage for each point = uncontaminated interval + ORC-Adv injection interval (ft)		17
Total length for direct push for project (ft)		1,275
Estimated daily installation rate (ft per day: 300 for push, 150 for drilling)		300
Estimated points per day (10 to 30 is typical for direct push)		17.6
Required number of days		5
Mob/demob cost for injection subcontractor	$	400
Daily rate for injection subcontractor ($1-2K for push, $3-4K for drill rig)	$	1,500
Total injection subcontrator cost for application	$	7,900
Total Install Cost (not including consultant, lab, etc.)	**$**	**32,975**

Other Project Cost Estimates		
Design	$	-
Permitting and reporting	$	-
Construction management	$	-
Groundwater monitoring and rpts	$	-
Other	$	-
Other	$	-
Other	$	-
Other	$	-
Total Project Cost	**$**	**32,975**