

**United States Army**  
Fort Monmouth, New Jersey

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**Underground Storage Tank  
Closure and Site Investigation  
Report**

***Building 718  
Main Post-West Area***

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**NJDEP UST Registration No. 81533-116  
DICAR No. 98-6-17-1650-28**

**January 2000**

**UNDERGROUND STORAGE TANK  
CLOSURE AND SITE INVESTIGATION REPORT**

**BUILDING 718**

**MAIN POST-WEST AREA  
NJDEP UST REGISTRATION NO. 81533-116**

**JANUARY 2000**

**PREPARED FOR:**

**UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY  
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## EXECUTIVE SUMMARY

### UST Closure

On June 18, 1998, 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. 0081533-116 (Fort Monmouth ID No. 718), was located southeast of Building 718. UST No. 0081533-116 was a 550-gallon #2 fuel oil UST. The fill port was located directly above the tank.

### 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. Numerous holes were noted in the UST. Soils at the location of the holes were dark in color and appeared to be contaminated. The NJDEP hotline was notified and the case was assigned DICAR No. 98-6-17-1650-28. On June 18 and 19, 1998, potentially contaminated soil was removed from the excavation area. In total, approximately 32 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area. Groundwater was encountered at 5.0 feet below ground surface and no sheen was observed. Soil samples, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 208.69 mg/kg.

All post excavation soil samples collected from the UST excavation at Building 718 contained TPHC concentrations below the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 milligrams per kilogram (mg/kg) (N.J.A.C. 7:26D and revisions dated February 3, 1994). Following receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with a combination of uncontaminated excavated soil and certified clean fill. The excavation site was then restored to its original condition.

In response to the observation of potentially contaminated soil and the potential of groundwater contamination, two (2) groundwater samples were collected at Building 718. On October 24, 1998, and December 7, 1998, Building 718 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOC's), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOC's). All groundwater analytical results were either below the detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC).

No further action is proposed in regard to the closure and site assessment of UST No. 81533-116 at Building 718.

## 1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

### 1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-116, was closed at Building 718 at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on June 18, 1998. Refer to the 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 steel 550-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 81533-116 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. 81533-116 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. 81533-116 are included in Appendices A and B, respectively.

After removal of the potentially contaminated soil, the site was assessed. Based on inspecting the UST, field screening of remaining subsurface soils, and reviewing analytical results of soil samples and groundwater 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 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 718 is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 0081533-116 was located southeast of Building 718 and appurtenant copper piping ran approximately five- (5) feet northwest to Building 718. The fill port area was located directly above the tank. A site map is provided on Figure 2.

### 1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 718. 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 (Zapeczka, 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 Zapeczka, 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:

- 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 718 is located approximately 500 feet southeast of Wampum Brook, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 718 is anticipated to be to the northwest.



### **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 OVA for evidence of contamination. Potentially contaminated soils were identified and logged during closure activities.
- Surface materials (i.e., asphalt, concrete, etc.) were excavated and staged separately from all soil and recycled in accordance with all applicable regulations and laws.
- A Sub-Surface Evaluator from the DPW was present during all site assessment activities.

#### **1.4.2 Underground Storage Tank Excavation and Cleaning**

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST, and 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 25 gallons of liquid from the UST and its associated piping were transported by Casie Protank to Casie Ecology Oil Salvage, Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Vineland, 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 Sub-Surface 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 32 cubic yards of potentially contaminated soil were removed from the excavated area and transported to the Main Post petroleum contaminated soil holding 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 5.0 feet below ground surface and no sheen was observed. See Figure 3 for a cross-sectional view of the excavated area.

## **1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL**

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

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 visual observation, 32 cubic yards of contaminated soil were removed from the excavation area. 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 at the Main Post Building. Soils that did not exhibit signs of contamination were used as backfill following the removal of the UST. Groundwater was encountered at 5.0 feet below ground surface and no sheen was observed.

## 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 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: Charles Appleby  
Employer: U.S. Army, Fort Monmouth  
Phone Number: (908) 532-0989  
NJDEP Certification No.: 002056
- 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: Casie Protank Environmental Services  
Contact Person: Bob Corsiglia  
Phone Number: (609) 696-4401  
NJDEP Company Certification No.: 16931

### 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 exhibited evidence of potential contamination. Approximately 32 cubic yards of potentially petroleum contaminated soil were removed from the excavated 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 5.0 feet below ground surface and no sheen was observed.

## 2.3 SOIL SAMPLING

On June 18, 1998, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, and DUP B were collected from a total of three (3) locations of the UST excavation. Sidewall samples A, B, C, and DUP B were collected at a depth of 4.5 feet bgs.

On June 19, 1998, following the removal of potentially contaminated soils, post-excavation soil samples A, B, C, and DUP C were collected from a total of three (3) locations of the UST excavation. Sidewall samples A, C, and Dup C were collected at a depth of 4.5 feet bgs. Excavation floor sample B was collected at a depth of 7.0 feet bgs.

All samples collected on June 18 and 19, 1998 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.

## 2.4 GROUNDWATER SAMPLING

On October 24, 1998, and December 7, 1998, Building 718 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOC's), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOC's). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation*. Refer to Appendix F for the field sampling documentation.

## **3.0 CONCLUSIONS AND RECOMMENDATIONS**

### **3.1 SOIL SAMPLING RESULTS**

To evaluate soil conditions following removal of the UST and associated piping, post-excavation soil samples were collected on June 18 and 19, 1998 from a total of six (6) 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 June 18 and 19, 1998, from the UST excavation and from below piping associated with the UST contained concentrations of TPHC below the NJDEP soil cleanup criteria. Soil samples, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 208.69 mg/kg.

### **3.2 GROUNDWATER SAMPLING RESULTS**

No compounds were detected in the samples collected from Building 718 on October 24, 1998, and December 7, 1998. A summary of the analytical results and comparison to the NJDEP groundwater cleanup criteria is provided in Table 3 and the groundwater sampling locations are shown on Figure 5. The analytical data package is provided in Appendix F. The full data package, including quality control, is on file at U.S. Fort Monmouth, DPW.

Groundwater samples collected on October 24, 1998, and December 7, 1998, were either below the detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC).

No further action is proposed in regard to the closure and site assessment of UST No. 81533-116 at Building 718.

### **3.3 CONCLUSIONS AND RECOMMENDATIONS**

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 718 were below the NJDEP soil cleanup criteria for total organic contaminants.

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

Based on the analytical results of the groundwater samples collected at Building 718 on October 24, 1998, and December 7, 1998, groundwater quality at Building 718 was either below the detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC).

No further action is proposed in regard to the closure and site assessment of UST No. 81533-116 at Building 718.

## TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES  
BUILDING 718, MAIN POST-WEST AREA  
FORT MONMOUTH, NEW JERSEY

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| Sample ID | Date of Collection | Date Analysis Started | Matrix | Sample Type     | Analytical Parameters* | NJDEP Method |
|-----------|--------------------|-----------------------|--------|-----------------|------------------------|--------------|
| A         | 6/18/98            | 6/18/98               | Soil   | Post-Excavation | TPHC                   | OQA-QAM-025  |
| B         | 6/18/98            | 6/18/98               | Soil   | Post-Excavation | TPHC                   | OQA-QAM-025  |
| C         | 6/18/98            | 6/18/98               | Soil   | Post-Excavation | TPHC                   | OQA-QAM-025  |
| DUPB      | 6/18/98            | 6/18/98               | Soil   | Post-excavation | TPHC                   | OQA-QAM-025  |

Note:

\* TPHC Total Petroleum Hydrocarbons



TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES  
BUILDING 718, MAIN POST-WEST AREA  
FORT MONMOUTH, NEW JERSEY

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| Sample ID | Date of Collection | Date Analysis Started | Matrix | Sample Type     | Analytical Parameters* | NJDEP Method |
|-----------|--------------------|-----------------------|--------|-----------------|------------------------|--------------|
| A         | 6/19/98            | 6/22/98               | Soil   | Post-Excavation | TPHC                   | OQA-QAM-025  |
| B         | 6/19/98            | 6/22/98               | Soil   | Post-Excavation | TPHC                   | OQA-QAM-025  |
| C         | 6/19/98            | 6/22/98               | Soil   | Post-Excavation | TPHC                   | OQA-QAM-025  |
| DUPC      | 6/19/98            | 6/22/98               | Soil   | Post-excavation | TPHC                   | OQA-QAM-025  |

Note:

\* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF SAMPLING ACTIVITIES  
BUILDING 718, MAIN POST-WEST AREA  
FORT MONMOUTH, NEW JERSEY

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| Sample ID | Date of Collection | Date Analysis Started | Matrix  | Sample Type | Analytical Parameters* | Sampling Method** |
|-----------|--------------------|-----------------------|---------|-------------|------------------------|-------------------|
| 4003.01   | 10/24/98           | 10/28/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |
| 4003.02   | 10/24/98           | 10/28/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |
| 4003.04   | 10/24/98           | 10/28/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |
| 4116.01   | 12/7/98            | 12/10/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |
| 4116.02   | 12/7/98            | 12/10/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |
| 4117.01   | 12/7/98            | 12/10/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |
| 4117.02   | 12/7/98            | 12/10/98              | Aqueous | Groundwater | VOCs, SVOCs            | PPNDP             |

## Note:

- \*VOCs: Volatile Organic Compounds plus 15 tentatively identified compounds  
\*SVOCs: Semivolatile organic compounds plus 15 tentatively identified compounds  
\*\*PPNDP: Passively Placed Narrow Diameter Point

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS  
 BUILDING 718, MAIN POST-WEST AREA  
 FORT MONMOUTH, NEW JERSEY

Page 1 of 2

| Sample ID/<br>Depth | Sample<br>Laboratory ID | Sample<br>Date | Analysis<br>Date | Analytical<br>Parameters | Method<br>Detection<br>Limit<br>(mg/kg) | Compound<br>of<br>Concern | Results<br>(mg/kg) * | NJDEP<br>Soil Cleanup<br>Criteria **<br>(mg/kg) | Exceeds<br>Cleanup<br>Criteria |
|---------------------|-------------------------|----------------|------------------|--------------------------|-----------------------------------------|---------------------------|----------------------|-------------------------------------------------|--------------------------------|
| A/4.5=              | 3670.01                 | 6/18/98        | 6/18/98          | Total Solid              | --                                      | --                        | 78.22 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 196                                     | yes                       | ND                   | 10,000                                          | No                             |
| B/4.5=              | 3670.02                 | 6/18/98        | 6/18/98          | Total Solid              | --                                      | --                        | 83.97 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 183                                     | Yes                       | ND                   | 10,000                                          | No                             |
| C/4.5=              | 3670.03                 | 6/18/98        | 6/18/98          | Total Solid              | --                                      | --                        | 84.10 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 183                                     | Yes                       | ND                   | 10,000                                          | No                             |
| DUPB/4.5=           | 3670.04                 | 6/18/98        | 6/18/98          | Total Solid              | --                                      | --                        | 82.55 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 185                                     | 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 718, MAIN POST-WEST AREA  
FORT MONMOUTH, NEW JERSEY

Page 2 of 2

| Sample ID/<br>Depth | Sample<br>Laboratory ID | Sample<br>Date | Analysis<br>Date | Analytical<br>Parameters | Method<br>Detection<br>Limit<br>(mg/kg) | Compound<br>of<br>Concern | Results<br>(mg/kg) * | NJDEP<br>Soil Cleanup<br>Criteria **<br>(mg/kg) | Exceeds<br>Cleanup<br>Criteria |
|---------------------|-------------------------|----------------|------------------|--------------------------|-----------------------------------------|---------------------------|----------------------|-------------------------------------------------|--------------------------------|
| A/4.5=              | 3675.01                 | 6/19/98        | 6/22/98          | Total Solid              | --                                      | --                        | 78.34 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 199                                     | yes                       | ND                   | 10,000                                          | No                             |
| B/7.0=              | 3675.02                 | 6/19/98        | 6/22/98          | Total Solid              | --                                      | --                        | 75.86 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 195                                     | Yes                       | ND                   | 10,000                                          | No                             |
| C/4.5=              | 3675.03                 | 6/19/98        | 6/22/98          | Total Solid              | --                                      | --                        | 77.04 %              | --                                              | --                             |
|                     |                         |                |                  | TPHC                     | 203                                     | Yes                       | 208.69               | 10,000                                          | No                             |
| DUPC/4.5=           | 3675.04                 | 6/19/98        | 6/22/98          | Total Solid              | --                                      | --                        | 75.32 %              | --                                              | --                             |
|                     |                         |                |                  | 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 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/24/98Location: 718Lab Sample ID: 4003.01(Trip Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 107028     | Acrolein                  | 1.85          | Not Detected | --        | 50                        | no                  |
| 107131     | Acrylonitrile             | 2.78          | Not Detected | --        | 50                        | no                  |
| 75650      | tert-Butyl alcohol        | 8.52          | Not Detected | --        | nle                       | no                  |
| 1634044    | Methyl-tert-Butyl ether   | 0.16          | Not Detected | --        | nle                       | no                  |
| 108203     | Di-isopropyl ether        | 0.25          | Not Detected | --        | nle                       | no                  |
|            | Dichlorodifluoromethane   | 1.68          | Not Detected | --        | nle                       | no                  |
| 74-87-3    | Chloromethane             | 1.16          | Not Detected | --        | 30                        | no                  |
| 75-01-4    | Vinyl Chloride            | 1.06          | Not Detected | --        | 5                         | no                  |
| 74-83-9    | Bromomethane              | 1.10          | Not Detected | --        | 10                        | no                  |
| 75-00-3    | Chloroethane              | 1.01          | Not Detected | --        | nle                       | no                  |
| 75-69-4    | Trichlorofluoromethane    | 0.50          | Not Detected | --        | nle                       | no                  |
| 75-35-4    | 1, 1-Dichloroethene       | 0.24          | Not Detected | --        | 2                         | no                  |
| 67-64-1    | Acetone                   | 1.36          | Not Detected | --        | 700                       | no                  |
| 75-15-0    | Carbon Disulfide          | 0.46          | Not Detected | --        | nle                       | no                  |
| 75-09-2    | Methylene Chloride        | 0.24          | Not Detected | --        | 2                         | no                  |
| 156-60-5   | trans-1,2-Dichloroethene  | 0.16          | Not Detected | --        | 100                       | no                  |
| 75-35-3    | 1,1-Dichloroethane        | 0.12          | Not Detected | --        | 70                        | no                  |
| 108-05-4   | Vinyl Acetate             | 0.78          | Not Detected | --        | nle                       | no                  |
| 78-93-3    | 2-Butanone                | 0.62          | Not Detected | --        | 300                       | no                  |
| 156-59-2   | cis-1,2-Dichloroethene    | 0.17          | Not Detected | --        | 10                        | no                  |
| 67-66-3    | Chloroform                | 0.30          | Not Detected | --        | 6                         | no                  |
| 75-55-6    | 1,1,1-Trichloroethane     | 0.23          | Not Detected | --        | 30                        | no                  |
| 56-23-5    | Carbon Tetrachloride      | 0.47          | Not Detected | --        | 2                         | no                  |
| 71-43-2    | Benzene                   | 0.23          | Not Detected | --        | 1                         | no                  |
| 107-06-2   | 1,2-Dichloroethane        | 0.18          | Not Detected | --        | 2                         | no                  |
| 79-01-6    | Trichloroethene           | 0.23          | Not Detected | --        | 1                         | no                  |
| 78-87-5    | 1, 2-Dichloropropane      | 0.40          | Not Detected | --        | 1                         | no                  |
| 75-27-4    | Bromodichloromethane      | 0.55          | Not Detected | --        | 1                         | no                  |
| 110-75-8   | 2-Chloroethyl vinyl ether | 0.65          | Not Detected | --        | nle                       | no                  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.69          | Not Detected | --        | nle                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/24/98Location: 718Lab Sample ID: 4003.01(Trip Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 108-10-1   | 4-Methyl-2-Pentanone      | 0.59          | Not Detected | --        | 400                       | no                  |
| 108-88-3   | Toluene                   | 0.37          | Not Detected | --        | 1000                      | no                  |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.87          | Not Detected | --        | nle                       | no                  |
| 79-00-5    | 1,1,2-Trichloroethane     | 0.48          | Not Detected | --        | 3                         | no                  |
| 127-18-4   | Tetrachloroethene         | 0.32          | Not Detected | --        | 1                         | no                  |
| 591-78-6   | 2-Hexanone                | 0.71          | Not Detected | --        | nle                       | no                  |
| 126-48-1   | Dibromochloromethane      | 0.86          | Not Detected | --        | 10                        | no                  |
| 108-90-7   | Chlorobenzene             | 0.39          | Not Detected | --        | 4                         | no                  |
| 100-41-4   | Ethylbenzene              | 0.65          | Not Detected | --        | 700                       | no                  |
| 1330-20-7  | m+p-Xylenes               | 1.14          | Not Detected | --        | nle                       | no                  |
| 1330-20-7  | o-Xylene                  | 0.62          | Not Detected | --        | nle                       | no                  |
| 100-42-5   | Styrene                   | 0.56          | Not Detected | --        | 100                       | no                  |
| 75-25-2    | Bromoform                 | 0.70          | Not Detected | --        | 4                         | no                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 0.47          | Not Detected | --        | 2                         | no                  |
| 541-73-1   | 1,3-Dichlorobenzene       | 0.55          | Not Detected | --        | 600                       | no                  |
| 106-46-7   | 1,4-Dichlorobenzene       | 0.57          | Not Detected | --        | 75                        | no                  |
| 95-50-1    | 1,2-Dichlorobenzene       | 0.64          | Not Detected | --        | 600                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/24/98Location: 718Lab Sample ID: 4003.02(Field Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 107028     | Acrolein                  | 1.85          | Not Detected | --        | 50                        | no                  |
| 107131     | Acrylonitrile             | 2.78          | Not Detected | --        | 50                        | no                  |
| 75650      | tert-Butyl alcohol        | 8.52          | Not Detected | --        | nle                       | no                  |
| 1634044    | Methyl-tert-Butyl ether   | 0.16          | Not Detected | --        | nle                       | no                  |
| 108203     | Di-isopropyl ether        | 0.25          | Not Detected | --        | nle                       | no                  |
|            | Dichlorodifluoromethane   | 1.68          | Not Detected | --        | nle                       | no                  |
| 74-87-3    | Chloromethane             | 1.16          | Not Detected | --        | 30                        | no                  |
| 75-01-4    | Vinyl Chloride            | 1.06          | Not Detected | --        | 5                         | no                  |
| 74-83-9    | Bromomethane              | 1.10          | Not Detected | --        | 10                        | no                  |
| 75-00-3    | Chloroethane              | 1.01          | Not Detected | --        | nle                       | no                  |
| 75-69-4    | Trichlorofluoromethane    | 0.50          | Not Detected | --        | nle                       | no                  |
| 75-35-4    | 1, 1-Dichloroethene       | 0.24          | Not Detected | --        | 2                         | no                  |
| 67-64-1    | Acetone                   | 1.36          | Not Detected | --        | 700                       | no                  |
| 75-15-0    | Carbon Disulfide          | 0.46          | Not Detected | --        | nle                       | no                  |
| 75-09-2    | Methylene Chloride        | 0.24          | Not Detected | --        | 2                         | no                  |
| 156-60-5   | trans-1,2-Dichloroethene  | 0.16          | Not Detected | --        | 100                       | no                  |
| 75-35-3    | 1,1-Dichloroethane        | 0.12          | Not Detected | --        | 70                        | no                  |
| 108-05-4   | Vinyl Acetate             | 0.78          | Not Detected | --        | nle                       | no                  |
| 78-93-3    | 2-Butanone                | 0.62          | Not Detected | --        | 300                       | no                  |
| 156-59-2   | cis-1,2-Dichloroethene    | 0.17          | Not Detected | --        | 10                        | no                  |
| 67-66-3    | Chloroform                | 0.30          | Not Detected | --        | 6                         | no                  |
| 75-55-6    | 1,1,1-Trichloroethane     | 0.23          | Not Detected | --        | 30                        | no                  |
| 56-23-5    | Carbon Tetrachloride      | 0.47          | Not Detected | --        | 2                         | no                  |
| 71-43-2    | Benzeze                   | 0.23          | Not Detected | --        | 1                         | no                  |
| 107-06-2   | 1,2-Dichloroethane        | 0.18          | Not Detected | --        | 2                         | no                  |
| 79-01-6    | Trichloroethene           | 0.23          | Not Detected | --        | 1                         | no                  |
| 78-87-5    | 1, 2-Dichloropropane      | 0.40          | Not Detected | --        | 1                         | no                  |
| 75-27-4    | Bromodichloromethane      | 0.55          | Not Detected | --        | 1                         | no                  |
| 110-75-8   | 2-Chloroethyl vinyl ether | 0.65          | Not Detected | --        | nle                       | no                  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.69          | Not Detected | --        | nle                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/24/98Location: 718Lab Sample ID: 4003.02(Field Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 108-10-1   | 4-Methyl-2-Pentanone      | 0.59          | Not Detected | --        | 400                       | no                  |
| 108-88-3   | Toluene                   | 0.37          | Not Detected | --        | 1000                      | no                  |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.87          | Not Detected | --        | nle                       | no                  |
| 79-00-5    | 1,1,2-Trichloroethane     | 0.48          | Not Detected | --        | 3                         | no                  |
| 127-18-4   | Tetrachloroethene         | 0.32          | Not Detected | --        | 1                         | no                  |
| 591-78-6   | 2-Hexanone                | 0.71          | Not Detected | --        | nle                       | no                  |
| 126-48-1   | Dibromochloromethane      | 0.86          | Not Detected | --        | 10                        | no                  |
| 108-90-7   | Chlorobenzene             | 0.39          | Not Detected | --        | 4                         | no                  |
| 100-41-4   | Ethylbenzene              | 0.65          | Not Detected | --        | 700                       | no                  |
| 1330-20-7  | m+p-Xylenes               | 1.14          | Not Detected | --        | nle                       | no                  |
| 1330-20-7  | o-Xylene                  | 0.62          | Not Detected | --        | nle                       | no                  |
| 100-42-5   | Styrene                   | 0.56          | Not Detected | --        | 100                       | no                  |
| 75-25-2    | Bromoform                 | 0.70          | Not Detected | --        | 4                         | no                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 0.47          | Not Detected | --        | 2                         | no                  |
| 541-73-1   | 1,3-Dichlorobenzene       | 0.55          | Not Detected | --        | 600                       | no                  |
| 106-46-7   | 1,4-Dichlorobenzene       | 0.57          | Not Detected | --        | 75                        | no                  |
| 95-50-1    | 1,2-Dichlorobenzene       | 0.64          | Not Detected | --        | 600                       | no                  |



**TABLE 3**  
**VOLATILE ORGANICS ANALYSIS DATA SHEET**

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER  
Date Sampled: 10/24/98 Location: 718 Lab Sample ID: 4003.04(Bldg 718)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 107028     | Acrolein                  | 1.85          | Not Detected | --        | 50                        | no                  |
| 107131     | Acrylonitrile             | 2.78          | Not Detected | --        | 50                        | no                  |
| 75650      | tert-Butyl alcohol        | 8.52          | Not Detected | --        | nle                       | no                  |
| 1634044    | Methyl-tert-Butyl ether   | 0.16          | Not Detected | --        | nle                       | no                  |
| 108203     | Di-isopropyl ether        | 0.25          | Not Detected | --        | nle                       | no                  |
|            | Dichlorodifluoromethane   | 1.68          | Not Detected | --        | nle                       | no                  |
| 74-87-3    | Chloromethane             | 1.16          | Not Detected | --        | 30                        | no                  |
| 75-01-4    | Vinyl Chloride            | 1.06          | Not Detected | --        | 5                         | no                  |
| 74-83-9    | Bromomethane              | 1.10          | Not Detected | --        | 10                        | no                  |
| 75-00-3    | Chloroethane              | 1.01          | Not Detected | --        | nle                       | no                  |
| 75-69-4    | Trichlorofluoromethane    | 0.50          | Not Detected | --        | nle                       | no                  |
| 75-35-4    | 1, 1-Dichloroethene       | 0.24          | Not Detected | --        | 2                         | no                  |
| 67-64-1    | Acetone                   | 1.36          | Not Detected | --        | 700                       | no                  |
| 75-15-0    | Carbon Disulfide          | 0.46          | Not Detected | --        | nle                       | no                  |
| 75-09-2    | Methylene Chloride        | 0.24          | Not Detected | --        | 2                         | no                  |
| 156-60-5   | trans-1,2-Dichloroethene  | 0.16          | Not Detected | --        | 100                       | no                  |
| 75-35-3    | 1,1-Dichloroethane        | 0.12          | Not Detected | --        | 70                        | no                  |
| 108-05-4   | Vinyl Acetate             | 0.78          | Not Detected | --        | nle                       | no                  |
| 78-93-3    | 2-Butanone                | 0.62          | Not Detected | --        | 300                       | no                  |
| 156-59-2   | cis-1,2-Dichloroethene    | 0.17          | Not Detected | --        | 10                        | no                  |
| 67-66-3    | Chloroform                | 0.30          | Not Detected | --        | 6                         | no                  |
| 75-55-6    | 1,1,1-Trichloroethane     | 0.23          | Not Detected | --        | 30                        | no                  |
| 56-23-5    | Carbon Tetrachloride      | 0.47          | Not Detected | --        | 2                         | no                  |
| 71-43-2    | Benzene                   | 0.23          | Not Detected | --        | 1                         | no                  |
| 107-06-2   | 1,2-Dichloroethane        | 0.18          | Not Detected | --        | 2                         | no                  |
| 79-01-6    | Trichloroethene           | 0.23          | Not Detected | --        | 1                         | no                  |
| 78-87-5    | 1, 2-Dichloropropane      | 0.40          | Not Detected | --        | 1                         | no                  |
| 75-27-4    | Bromodichloromethane      | 0.55          | Not Detected | --        | 1                         | no                  |
| 110-75-8   | 2-Chloroethyl vinyl ether | 0.65          | Not Detected | --        | nle                       | no                  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.69          | Not Detected | --        | nle                       | no                  |

**TABLE 3**  
**VOLATILE ORGANICS ANALYSIS DATA SHEET**

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER  
 Date Sampled: 10/24/98 Location: 718 Lab Sample ID: 4003.04 (Bldg 718)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 108-10-1   | 4-Methyl-2-Pentanone      | 0.59          | Not Detected | --        | 400                       | no                  |
| 108-88-3   | Toluene                   | 0.37          | Not Detected | --        | 1000                      | no                  |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.87          | Not Detected | --        | nle                       | no                  |
| 79-00-5    | 1,1,2-Trichloroethane     | 0.48          | Not Detected | --        | 3                         | no                  |
| 127-18-4   | Tetrachloroethene         | 0.32          | Not Detected | --        | 1                         | no                  |
| 591-78-6   | 2-Hexanone                | 0.71          | Not Detected | --        | nle                       | no                  |
| 126-48-1   | Dibromochloromethane      | 0.86          | Not Detected | --        | 10                        | no                  |
| 108-90-7   | Chlorobenzene             | 0.39          | Not Detected | --        | 4                         | no                  |
| 100-41-4   | Ethylbenzene              | 0.65          | Not Detected | --        | 700                       | no                  |
| 1330-20-7  | m+p-Xylenes               | 1.14          | Not Detected | --        | nle                       | no                  |
| 1330-20-7  | o-Xylene                  | 0.62          | Not Detected | --        | nle                       | no                  |
| 100-42-5   | Styrene                   | 0.56          | Not Detected | --        | 100                       | no                  |
| 75-25-2    | Bromoform                 | 0.70          | Not Detected | --        | 4                         | no                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 0.47          | Not Detected | --        | 2                         | no                  |
| 541-73-1   | 1,3-Dichlorobenzene       | 0.55          | Not Detected | --        | 600                       | no                  |
| 106-46-7   | 1,4-Dichlorobenzene       | 0.57          | Not Detected | --        | 75                        | no                  |
| 95-50-1    | 1,2-Dichlorobenzene       | 0.64          | Not Detected | --        | 600                       | no                  |

**TABLE 3**  
**SEMI-VOLATILE ANALYSIS DATA SHEET**

Lab Name: FMETL

NJDEP # 13461

Matrix: (soil/water) WATER

Date Sampled: 10/24/98

Location: 718

Lab Sample ID: 4003.02(Field Blank)

| CAS NO.  | COMPOUND NAME               | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|----------|-----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 110-86-1 | Pyridine                    | 2.52          | Not Detected | --        | nle                       | no                  |
| 62-75-9  | N-nitroso-dimethylamine     | 2.64          | Not Detected | --        | 20                        | no                  |
| 62-53-3  | Aniline                     | 2.90          | Not Detected | --        | nle                       | no                  |
| 111-44-4 | bis(2-Chloroethyl)ether     | 2.45          | Not Detected | --        | 10                        | no                  |
| 541-73-1 | 1,3-Dichlorobenzene         | 2.65          | Not Detected | --        | 600                       | no                  |
| 106-46-7 | 1,4-Dichlorobenzene         | 2.50          | Not Detected | --        | 75                        | no                  |
| 100-51-6 | Benzyl alcohol              | 2.09          | Not Detected | --        | nle                       | no                  |
| 95-50-1  | 1,2-Dichlorobenzene         | 2.44          | Not Detected | --        | 600                       | no                  |
| 108-60-1 | bis(2-chloroisopropyl)ether | 2.96          | Not Detected | --        | 300                       | no                  |
| 621-64-7 | n-Nitroso-di-n-propylamine  | 2.22          | Not Detected | --        | 20                        | no                  |
| 67-72-1  | Hexachloroethane            | 2.59          | Not Detected | --        | 10                        | no                  |
| 98-95-3  | Nitrobenzene                | 2.45          | Not Detected | --        | 10                        | no                  |
| 78-59-1  | Isophorone                  | 2.31          | Not Detected | --        | 100                       | no                  |
| 111-91-1 | bis(2-Chloroethoxy)methane  | 2.54          | Not Detected | --        | nle                       | no                  |
| 120-82-1 | 1,2,4-Trichlorobenzene      | 2.58          | Not Detected | --        | 9                         | no                  |
| 91-20-3  | Naphthalene                 | 3.03          | Not Detected | --        | nle                       | no                  |
| 106-47-8 | 4-Chloroaniline             | 2.55          | Not Detected | --        | nle                       | no                  |
| 87-68-3  | Hexachlorobutadiene         | 0.64          | Not Detected | --        | 1                         | no                  |
| 91-57-6  | 2-Methylnaphthalene         | 2.49          | Not Detected | --        | nle                       | no                  |
| 77-47-4  | Hexachlorocyclopentadiene   | 1.59          | Not Detected | --        | 50                        | no                  |
| 91-58-7  | 2-Chloronaphthalene         | 2.15          | Not Detected | --        | nle                       | no                  |
| 88-74-4  | 2-Nitroaniline              | 1.62          | Not Detected | --        | nle                       | no                  |
| 131-11-3 | Dimethylphthalate           | 2.74          | Not Detected | --        | 7000                      | no                  |
| 208-96-8 | Acenaphthylene              | 2.35          | Not Detected | --        | nle                       | no                  |

TABLE 3

## SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/24/98Location: 718Lab Sample ID: 4003.02(Field Blank)

| CAS NO.   | COMPOUND NAME              | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|-----------|----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 606-20-2  | 2,6-Dinitrotoluene         | 1.54          | Not Detected | --        | nle                       | no                  |
| 99-09-2   | 3-Nitroaniline             | 1.62          | Not Detected | --        | nle                       | no                  |
| 83-32-9   | Acenaphthene               | 1.98          | Not Detected | --        | 400                       | no                  |
| 132-64-9  | Dibenzofuran               | 2.13          | Not Detected | --        | nle                       | no                  |
| 121-14-2  | 2,4-Dinitrotoluene         | 1.22          | Not Detected | --        | 10                        | no                  |
| 84-66-2   | Diethylphthalate           | 1.68          | Not Detected | --        | 5000                      | no                  |
| 86-73-7   | Fluorene                   | 1.93          | Not Detected | --        | 300                       | no                  |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1.53          | Not Detected | --        | nle                       | no                  |
| 100-01-6  | 4-Nitroaniline             | 2.70          | Not Detected | --        | nle                       | no                  |
| 86-30-6   | n-Nitrosodiphenylamine     | 1.73          | Not Detected | --        | 20                        | no                  |
| 103-33-3  | Azobenzene                 | 1.92          | Not Detected | --        | nle                       | no                  |
| 101-55-3  | 4-Bromophenyl-phenylether  | 1.54          | Not Detected | --        | nle                       | no                  |
| 118-74-1  | Hexachlorobenzene          | 1.88          | Not Detected | --        | 10                        | no                  |
| 85-01-8   | Phenanthrene               | 1.67          | Not Detected | --        | nle                       | no                  |
| 120-12-7  | Anthracene                 | 1.79          | Not Detected | --        | 2000                      | no                  |
| 84-74-2   | Di-n-butylphthalate        | 1.83          | Not Detected | --        | 900                       | no                  |
| 206-44-0  | Fluoranthene               | 1.85          | Not Detected | --        | 300                       | no                  |
| 92-87-5   | Benzidine                  | 4.11          | Not Detected | --        | 50                        | no                  |
| 129-00-0  | Pyrene                     | 1.02          | Not Detected | --        | 200                       | no                  |
| 85-68-7   | Butylbenzylphthalate       | 1.15          | Not Detected | --        | 100                       | no                  |
| 56-55-3   | Benzo[a]anthracene         | 1.57          | Not Detected | --        | 10                        | no                  |
| 91-94-1   | 3,3'-Dichlorobenzidine     | 2.28          | Not Detected | --        | 60                        | no                  |
| 218-01-9  | Chrysene                   | 2.32          | Not Detected | --        | 20                        | no                  |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | 1.29          | Not Detected | --        | 30                        | no                  |
| 117-84-0  | Di-n-octylphthalate        | 1.30          | Not Detected | --        | 100                       | no                  |
| 205-99-2  | Benzo[b]fluoranthene       | 1.31          | Not Detected | --        | 10                        | no                  |
| 207-08-9  | Benzo[k]fluoranthene       | 1.57          | Not Detected | --        | 2                         | no                  |
| 50-32-8   | Benzo[a]pyrene             | 1.36          | Not Detected | --        | 20                        | no                  |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     | 1.22          | Not Detected | --        | 20                        | no                  |
| 53-70-3   | Dibenz[a,h]anthracene      | 3.12          | Not Detected | --        | 20                        | no                  |
| 191-24-2  | Benzo[g,h,i]perylene       | 1.13          | Not Detected | --        | nle                       | no                  |

TABLE 3  
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER  
Date Sampled: 10/24/98 Location: 718 Lab Sample ID: 4003.04(Bldg 718)

| CAS NO.  | COMPOUND NAME               | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|----------|-----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 110-86-1 | Pyridine                    | 2.52          | Not Detected | --        | nle                       | no                  |
| 62-75-9  | N-nitroso-dimethylamine     | 2.64          | Not Detected | --        | 20                        | no                  |
| 62-53-3  | Aniline                     | 2.90          | Not Detected | --        | nle                       | no                  |
| 111-44-4 | bis(2-Chloroethyl)ether     | 2.45          | Not Detected | --        | 10                        | no                  |
| 541-73-1 | 1,3-Dichlorobenzene         | 2.65          | Not Detected | --        | 600                       | no                  |
| 106-46-7 | 1,4-Dichlorobenzene         | 2.50          | Not Detected | --        | 75                        | no                  |
| 100-51-6 | Benzyl alcohol              | 2.09          | Not Detected | --        | nle                       | no                  |
| 95-50-1  | 1,2-Dichlorobenzene         | 2.44          | Not Detected | --        | 600                       | no                  |
| 108-60-1 | bis(2-chloroisopropyl)ether | 2.96          | Not Detected | --        | 300                       | no                  |
| 621-64-7 | n-Nitroso-di-n-propylamine  | 2.22          | Not Detected | --        | 20                        | no                  |
| 67-72-1  | Hexachloroethane            | 2.59          | Not Detected | --        | 10                        | no                  |
| 98-95-3  | Nitrobenzene                | 2.45          | Not Detected | --        | 10                        | no                  |
| 78-59-1  | Isophorone                  | 2.31          | Not Detected | --        | 100                       | no                  |
| 111-91-1 | bis(2-Chloroethoxy)methane  | 2.54          | Not Detected | --        | nle                       | no                  |
| 120-82-1 | 1,2,4-Trichlorobenzene      | 2.58          | Not Detected | --        | 9                         | no                  |
| 91-20-3  | Naphthalene                 | 3.03          | Not Detected | --        | nle                       | no                  |
| 106-47-8 | 4-Chloroaniline             | 2.55          | Not Detected | --        | nle                       | no                  |
| 87-68-3  | Hexachlorobutadiene         | 0.64          | Not Detected | --        | 1                         | no                  |
| 91-57-6  | 2-Methylnaphthalene         | 2.49          | Not Detected | --        | nle                       | no                  |
| 77-47-4  | Hexachlorocyclopentadiene   | 1.59          | Not Detected | --        | 50                        | no                  |
| 91-58-7  | 2-Chloronaphthalene         | 2.15          | Not Detected | --        | nle                       | no                  |
| 88-74-4  | 2-Nitroaniline              | 1.62          | Not Detected | --        | nle                       | no                  |
| 131-11-3 | Dimethylphthalate           | 2.74          | Not Detected | --        | 7000                      | no                  |
| 208-96-8 | Acenaphthylene              | 2.35          | Not Detected | --        | nle                       | no                  |

**TABLE 3**  
**SEMI-VOLATILE ANALYSIS DATA SHEET**

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER  
Date Sampled: 10/24/98 Location: 718 Lab Sample ID: 4003.04(Bldg 718)

| CAS NO.   | COMPOUND NAME              | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|-----------|----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 606-20-2  | 2,6-Dinitrotoluene         | 1.54          | Not Detected | --        | nle                       | no                  |
| 99-09-2   | 3-Nitroaniline             | 1.62          | Not Detected | --        | nle                       | no                  |
| 83-32-9   | Acenaphthene               | 1.98          | Not Detected | --        | 400                       | no                  |
| 132-64-9  | Dibenzofuran               | 2.13          | Not Detected | --        | nle                       | no                  |
| 121-14-2  | 2,4-Dinitrotoluene         | 1.22          | Not Detected | --        | 10                        | no                  |
| 84-66-2   | Diethylphthalate           | 1.68          | Not Detected | --        | 5000                      | no                  |
| 86-73-7   | Fluorene                   | 1.93          | Not Detected | --        | 300                       | no                  |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1.53          | Not Detected | --        | nle                       | no                  |
| 100-01-6  | 4-Nitroaniline             | 2.70          | Not Detected | --        | nle                       | no                  |
| 86-30-6   | n-Nitrosodiphenylamine     | 1.73          | Not Detected | --        | 20                        | no                  |
| 103-33-3  | Azobenzene                 | 1.92          | Not Detected | --        | nle                       | no                  |
| 101-55-3  | 4-Bromophenyl-phenylether  | 1.54          | Not Detected | --        | nle                       | no                  |
| 118-74-1  | Hexachlorobenzene          | 1.88          | Not Detected | --        | 10                        | no                  |
| 85-01-8   | Phenanthrene               | 1.67          | Not Detected | --        | nle                       | no                  |
| 120-12-7  | Anthracene                 | 1.79          | Not Detected | --        | 2000                      | no                  |
| 84-74-2   | Di-n-butylphthalate        | 1.83          | Not Detected | --        | 900                       | no                  |
| 206-44-0  | Fluoranthene               | 1.85          | Not Detected | --        | 300                       | no                  |
| 92-87-5   | Benzidine                  | 4.11          | Not Detected | --        | 50                        | no                  |
| 129-00-0  | Pyrene                     | 1.02          | Not Detected | --        | 200                       | no                  |
| 85-68-7   | Butylbenzylphthalate       | 1.15          | Not Detected | --        | 100                       | no                  |
| 56-55-3   | Benzo[a]anthracene         | 1.57          | Not Detected | --        | 10                        | no                  |
| 91-94-1   | 3,3'-Dichlorobenzidine     | 2.28          | Not Detected | --        | 60                        | no                  |
| 218-01-9  | Chrysene                   | 2.32          | Not Detected | --        | 20                        | no                  |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | 1.29          | Not Detected | --        | 30                        | no                  |
| 117-84-0  | Di-n-octylphthalate        | 1.30          | Not Detected | --        | 100                       | no                  |
| 205-99-2  | Benzo[b]fluoranthene       | 1.31          | Not Detected | --        | 10                        | no                  |
| 207-08-9  | Benzo[k]fluoranthene       | 1.57          | Not Detected | --        | 2                         | no                  |
| 50-32-8   | Benzo[a]pyrene             | 1.36          | Not Detected | --        | 20                        | no                  |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     | 1.22          | Not Detected | --        | 20                        | no                  |
| 53-70-3   | Dibenz[a,h]anthracene      | 3.12          | Not Detected | --        | 20                        | no                  |
| 191-24-2  | Benzo[g,h,i]perylene       | 1.13          | Not Detected | --        | nle                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 12/7/98Location: 718Lab Sample ID: 4116.01(Trip Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 107028     | Acrolein                  | 1.85          | Not Detected | --        | 50                        | no                  |
| 107131     | Acrylonitrile             | 2.78          | Not Detected | --        | 50                        | no                  |
| 75650      | tert-Butyl alcohol        | 8.52          | Not Detected | --        | nle                       | no                  |
| 1634044    | Methyl-tert-Butyl ether   | 0.16          | Not Detected | --        | nle                       | no                  |
| 108203     | Di-isopropyl ether        | 0.25          | Not Detected | --        | nle                       | no                  |
|            | Dichlorodifluoromethane   | 1.68          | Not Detected | --        | nle                       | no                  |
| 74-87-3    | Chloromethane             | 1.16          | Not Detected | --        | 30                        | no                  |
| 75-01-4    | Vinyl Chloride            | 1.06          | Not Detected | --        | 5                         | no                  |
| 74-83-9    | Bromomethane              | 1.10          | Not Detected | --        | 10                        | no                  |
| 75-00-3    | Chloroethane              | 1.01          | Not Detected | --        | nle                       | no                  |
| 75-69-4    | Trichlorofluoromethane    | 0.50          | Not Detected | --        | nle                       | no                  |
| 75-35-4    | 1, 1-Dichloroethene       | 0.24          | Not Detected | --        | 2                         | no                  |
| 67-64-1    | Acetone                   | 1.36          | Not Detected | --        | 700                       | no                  |
| 75-15-0    | Carbon Disulfide          | 0.46          | Not Detected | --        | nle                       | no                  |
| 75-09-2    | Methylene Chloride        | 0.24          | Not Detected | --        | 2                         | no                  |
| 156-60-5   | trans-1,2-Dichloroethene  | 0.16          | Not Detected | --        | 100                       | no                  |
| 75-35-3    | 1,1-Dichloroethane        | 0.12          | Not Detected | --        | 70                        | no                  |
| 108-05-4   | Vinyl Acetate             | 0.78          | Not Detected | --        | nle                       | no                  |
| 78-93-3    | 2-Butanone                | 0.62          | Not Detected | --        | 300                       | no                  |
| 156-59-2   | cis-1,2-Dichloroethene    | 0.17          | Not Detected | --        | 10                        | no                  |
| 67-66-3    | Chloroform                | 0.30          | Not Detected | --        | 6                         | no                  |
| 75-55-6    | 1,1,1-Trichloroethane     | 0.23          | Not Detected | --        | 30                        | no                  |
| 56-23-5    | Carbon Tetrachloride      | 0.47          | Not Detected | --        | 2                         | no                  |
| 71-43-2    | Benzeze                   | 0.23          | Not Detected | --        | 1                         | no                  |
| 107-06-2   | 1,2-Dichloroethane        | 0.18          | Not Detected | --        | 2                         | no                  |
| 79-01-6    | Trichloroethene           | 0.23          | Not Detected | --        | 1                         | no                  |
| 78-87-5    | 1, 2-Dichloropropane      | 0.40          | Not Detected | --        | 1                         | no                  |
| 75-27-4    | Bromodichloromethane      | 0.55          | Not Detected | --        | 1                         | no                  |
| 110-75-8   | 2-Chloroethyl vinyl ether | 0.65          | Not Detected | --        | nle                       | no                  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.69          | Not Detected | --        | nle                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 12/7/98Location: 718Lab Sample ID: 4116.01(Trip Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 108-10-1   | 4-Methyl-2-Pentanone      | 0.59          | Not Detected | —         | 400                       | no                  |
| 108-88-3   | Toluene                   | 0.37          | Not Detected | —         | 1000                      | no                  |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.87          | Not Detected | —         | nle                       | no                  |
| 79-00-5    | 1,1,2-Trichloroethane     | 0.48          | Not Detected | --        | 3                         | no                  |
| 127-18-4   | Tetrachloroethene         | 0.32          | Not Detected | —         | 1                         | no                  |
| 591-78-6   | 2-Hexanone                | 0.71          | Not Detected | --        | nle                       | no                  |
| 126-48-1   | Dibromochloromethane      | 0.86          | Not Detected | —         | 10                        | no                  |
| 108-90-7   | Chlorobenzene             | 0.39          | Not Detected | —         | 4                         | no                  |
| 100-41-4   | Ethylbenzene              | 0.65          | Not Detected | --        | 700                       | no                  |
| 1330-20-7  | m+p-Xylenes               | 1.14          | Not Detected | —         | nle                       | no                  |
| 1330-20-7  | o-Xylene                  | 0.62          | Not Detected | --        | nle                       | no                  |
| 100-42-5   | Styrene                   | 0.56          | Not Detected | —         | 100                       | no                  |
| 75-25-2    | Bromoform                 | 0.70          | Not Detected | —         | 4                         | no                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 0.47          | Not Detected | --        | 2                         | no                  |
| 541-73-1   | 1,3-Dichlorobenzene       | 0.55          | Not Detected | --        | 600                       | no                  |
| 106-46-7   | 1,4-Dichlorobenzene       | 0.57          | Not Detected | —         | 75                        | no                  |
| 95-50-1    | 1,2-Dichlorobenzene       | 0.64          | Not Detected | —         | 600                       | no                  |



TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 12/7/98Location: 718Lab Sample ID: 4116.02(Field Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 107028     | Acrolein                  | 1.85          | Not Detected | --        | 50                        | no                  |
| 107131     | Acrylonitrile             | 2.78          | Not Detected | --        | 50                        | no                  |
| 75650      | tert-Butyl alcohol        | 8.52          | Not Detected | --        | nle                       | no                  |
| 1634044    | Methyl-tert-Butyl ether   | 0.16          | Not Detected | --        | nle                       | no                  |
| 108203     | Di-isopropyl ether        | 0.25          | Not Detected | --        | nle                       | no                  |
|            | Dichlorodifluoromethane   | 1.68          | Not Detected | --        | nle                       | no                  |
| 74-87-3    | Chloromethane             | 1.16          | Not Detected | --        | 30                        | no                  |
| 75-01-4    | Vinyl Chloride            | 1.06          | Not Detected | --        | 5                         | no                  |
| 74-83-9    | Bromomethane              | 1.10          | Not Detected | --        | 10                        | no                  |
| 75-00-3    | Chloroethane              | 1.01          | Not Detected | --        | nle                       | no                  |
| 75-69-4    | Trichlorofluoromethane    | 0.50          | Not Detected | --        | nle                       | no                  |
| 75-35-4    | 1, 1-Dichloroethene       | 0.24          | Not Detected | --        | 2                         | no                  |
| 67-64-1    | Acetone                   | 1.36          | Not Detected | --        | 700                       | no                  |
| 75-15-0    | Carbon Disulfide          | 0.46          | Not Detected | --        | nle                       | no                  |
| 75-09-2    | Methylene Chloride        | 0.24          | Not Detected | --        | 2                         | no                  |
| 156-60-5   | trans-1,2-Dichloroethene  | 0.16          | Not Detected | --        | 100                       | no                  |
| 75-35-3    | 1,1-Dichloroethane        | 0.12          | Not Detected | --        | 70                        | no                  |
| 108-05-4   | Vinyl Acetate             | 0.78          | Not Detected | --        | nle                       | no                  |
| 78-93-3    | 2-Butanone                | 0.62          | Not Detected | --        | 300                       | no                  |
| 156-59-2   | cis-1,2-Dichloroethene    | 0.17          | Not Detected | --        | 10                        | no                  |
| 67-66-3    | Chloroform                | 0.30          | Not Detected | --        | 6                         | no                  |
| 75-55-6    | 1,1,1-Trichloroethane     | 0.23          | Not Detected | --        | 30                        | no                  |
| 56-23-5    | Carbon Tetrachloride      | 0.47          | Not Detected | --        | 2                         | no                  |
| 71-43-2    | Benzeze                   | 0.23          | Not Detected | --        | 1                         | no                  |
| 107-06-2   | 1,2-Dichloroethane        | 0.18          | Not Detected | --        | 2                         | no                  |
| 79-01-6    | Trichloroethene           | 0.23          | Not Detected | --        | 1                         | no                  |
| 78-87-5    | 1, 2-Dichloropropane      | 0.40          | Not Detected | --        | 1                         | no                  |
| 75-27-4    | Bromodichloromethane      | 0.55          | Not Detected | --        | 1                         | no                  |
| 110-75-8   | 2-Chloroethyl vinyl ether | 0.65          | Not Detected | --        | nle                       | no                  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.69          | Not Detected | --        | nle                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 12/7/98Location: 718Lab Sample ID: 4116.02(Field Blank)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 108-10-1   | 4-Methyl-2-Pentanone      | 0.59          | Not Detected | --        | 400                       | no                  |
| 108-88-3   | Toluene                   | 0.37          | Not Detected | --        | 1000                      | no                  |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.87          | Not Detected | --        | nle                       | no                  |
| 79-00-5    | 1,1,2-Trichloroethane     | 0.48          | Not Detected | --        | 3                         | no                  |
| 127-18-4   | Tetrachloroethene         | 0.32          | Not Detected | --        | 1                         | no                  |
| 591-78-6   | 2-Hexanone                | 0.71          | Not Detected | --        | nle                       | no                  |
| 126-48-1   | Dibromochloromethane      | 0.86          | Not Detected | --        | 10                        | no                  |
| 108-90-7   | Chlorobenzene             | 0.39          | Not Detected | --        | 4                         | no                  |
| 100-41-4   | Ethylbenzene              | 0.65          | Not Detected | --        | 700                       | no                  |
| 1330-20-7  | m+p-Xylenes               | 1.14          | Not Detected | --        | nle                       | no                  |
| 1330-20-7  | o-Xylene                  | 0.62          | Not Detected | --        | nle                       | no                  |
| 100-42-5   | Styrene                   | 0.56          | Not Detected | --        | 100                       | no                  |
| 75-25-2    | Bromoform                 | 0.70          | Not Detected | --        | 4                         | no                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 0.47          | Not Detected | --        | 2                         | no                  |
| 541-73-1   | 1,3-Dichlorobenzene       | 0.55          | Not Detected | --        | 600                       | no                  |
| 106-46-7   | 1,4-Dichlorobenzene       | 0.57          | Not Detected | --        | 75                        | no                  |
| 95-50-1    | 1,2-Dichlorobenzene       | 0.64          | Not Detected | --        | 600                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 12/7/98Location: 720Lab Sample ID: 4117.01(Bldg 718)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 107028     | Acrolein                  | 1.85          | Not Detected | --        | 50                        | no                  |
| 107131     | Acrylonitrile             | 2.78          | Not Detected | --        | 50                        | no                  |
| 75650      | tert-Butyl alcohol        | 8.52          | Not Detected | --        | nle                       | no                  |
| 1634044    | Methyl-tert-Butyl ether   | 0.16          | Not Detected | --        | nle                       | no                  |
| 108203     | Di-isopropyl ether        | 0.25          | Not Detected | --        | nle                       | no                  |
|            | Dichlorodifluoromethane   | 1.68          | Not Detected | --        | nle                       | no                  |
| 74-87-3    | Chloromethane             | 1.16          | Not Detected | --        | 30                        | no                  |
| 75-01-4    | Vinyl Chloride            | 1.06          | Not Detected | --        | 5                         | no                  |
| 74-83-9    | Bromomethane              | 1.10          | Not Detected | --        | 10                        | no                  |
| 75-00-3    | Chloroethane              | 1.01          | Not Detected | --        | nle                       | no                  |
| 75-69-4    | Trichlorofluoromethane    | 0.50          | Not Detected | --        | nle                       | no                  |
| 75-35-4    | 1, 1-Dichloroethene       | 0.24          | Not Detected | --        | 2                         | no                  |
| 67-64-1    | Acetone                   | 1.36          | Not Detected | --        | 700                       | no                  |
| 75-15-0    | Carbon Disulfide          | 0.46          | Not Detected | --        | nle                       | no                  |
| 75-09-2    | Methylene Chloride        | 0.24          | Not Detected | --        | 2                         | no                  |
| 156-60-5   | trans-1,2-Dichloroethene  | 0.16          | Not Detected | --        | 100                       | no                  |
| 75-35-3    | 1,1-Dichloroethane        | 0.12          | Not Detected | --        | 70                        | no                  |
| 108-05-4   | Vinyl Acetate             | 0.78          | Not Detected | --        | nle                       | no                  |
| 78-93-3    | 2-Butanone                | 0.62          | Not Detected | --        | 300                       | no                  |
| 156-59-2   | cis-1,2-Dichloroethene    | 0.17          | Not Detected | --        | 10                        | no                  |
| 67-66-3    | Chloroform                | 0.30          | Not Detected | --        | 6                         | no                  |
| 75-55-6    | 1,1,1-Trichloroethane     | 0.23          | Not Detected | --        | 30                        | no                  |
| 56-23-5    | Carbon Tetrachloride      | 0.47          | Not Detected | --        | 2                         | no                  |
| 71-43-2    | Benzeze                   | 0.23          | Not Detected | --        | 1                         | no                  |
| 107-06-2   | 1,2-Dichloroethane        | 0.18          | Not Detected | --        | 2                         | no                  |
| 79-01-6    | Trichloroethene           | 0.23          | Not Detected | --        | 1                         | no                  |
| 78-87-5    | 1, 2-Dichloropropane      | 0.40          | Not Detected | --        | 1                         | no                  |
| 75-27-4    | Bromodichloromethane      | 0.55          | Not Detected | --        | 1                         | no                  |
| 110-75-8   | 2-Chloroethyl vinyl ether | 0.65          | Not Detected | --        | nle                       | no                  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.69          | Not Detected | --        | nle                       | no                  |

TABLE 3

## VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 12/7/98Location: 718Lab Sample ID: 4117.01(Bldg 718)

| CAS NO.    | COMPOUND NAME             | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|------------|---------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 108-10-1   | 4-Methyl-2-Pentanone      | 0.59          | Not Detected | --        | 400                       | no                  |
| 108-88-3   | Toluene                   | 0.37          | Not Detected | --        | 1000                      | no                  |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.87          | Not Detected | --        | nle                       | no                  |
| 79-00-5    | 1,1,2-Trichloroethane     | 0.48          | Not Detected | --        | 3                         | no                  |
| 127-18-4   | Tetrachloroethene         | 0.32          | Not Detected | --        | 1                         | no                  |
| 591-78-6   | 2-Hexanone                | 0.71          | Not Detected | --        | nle                       | no                  |
| 126-48-1   | Dibromochloromethane      | 0.86          | Not Detected | --        | 10                        | no                  |
| 108-90-7   | Chlorobenzene             | 0.39          | Not Detected | --        | 4                         | no                  |
| 100-41-4   | Ethylbenzene              | 0.65          | Not Detected | --        | 700                       | no                  |
| 1330-20-7  | m+p-Xylenes               | 1.14          | Not Detected | --        | nle                       | no                  |
| 1330-20-7  | o-Xylene                  | 0.62          | Not Detected | --        | nle                       | no                  |
| 100-42-5   | Styrene                   | 0.56          | Not Detected | --        | 100                       | no                  |
| 75-25-2    | Bromoform                 | 0.70          | Not Detected | --        | 4                         | no                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 0.47          | Not Detected | --        | 2                         | no                  |
| 541-73-1   | 1,3-Dichlorobenzene       | 0.55          | Not Detected | --        | 600                       | no                  |
| 106-46-7   | 1,4-Dichlorobenzene       | 0.57          | Not Detected | --        | 75                        | no                  |
| 95-50-1    | 1,2-Dichlorobenzene       | 0.64          | Not Detected | --        | 600                       | no                  |

**TABLE 3**  
**SEMI-VOLATILE ANALYSIS DATA SHEET**

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER  
Date Sampled: 12/7/98 Location: 718 Lab Sample ID: 4116.02(Field Blank)

| CAS NO.  | COMPOUND NAME               | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|----------|-----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 110-86-1 | Pyridine                    | 2.52          | Not Detected | --        | nle                       | no                  |
| 62-75-9  | N-nitroso-dimethylamine     | 2.64          | Not Detected | --        | 20                        | no                  |
| 62-53-3  | Aniline                     | 2.90          | Not Detected | --        | nle                       | no                  |
| 111-44-4 | bis(2-Chloroethyl)ether     | 2.45          | Not Detected | --        | 10                        | no                  |
| 541-73-1 | 1,3-Dichlorobenzene         | 2.65          | Not Detected | --        | 600                       | no                  |
| 106-46-7 | 1,4-Dichlorobenzene         | 2.50          | Not Detected | --        | 75                        | no                  |
| 100-51-6 | Benzyl alcohol              | 2.09          | Not Detected | --        | nle                       | no                  |
| 95-50-1  | 1,2-Dichlorobenzene         | 2.44          | Not Detected | --        | 600                       | no                  |
| 108-60-1 | bis(2-chloroisopropyl)ether | 2.96          | Not Detected | --        | 300                       | no                  |
| 621-64-7 | n-Nitroso-di-n-propylamine  | 2.22          | Not Detected | --        | 20                        | no                  |
| 67-72-1  | Hexachloroethane            | 2.59          | Not Detected | --        | 10                        | no                  |
| 98-95-3  | Nitrobenzene                | 2.45          | Not Detected | --        | 10                        | no                  |
| 78-59-1  | Isophorone                  | 2.31          | Not Detected | --        | 100                       | no                  |
| 111-91-1 | bis(2-Chloroethoxy)methane  | 2.54          | Not Detected | --        | nle                       | no                  |
| 120-82-1 | 1,2,4-Trichlorobenzene      | 2.58          | Not Detected | --        | 9                         | no                  |
| 91-20-3  | Naphthalene                 | 3.03          | Not Detected | --        | nle                       | no                  |
| 106-47-8 | 4-Chloroaniline             | 2.55          | Not Detected | --        | nle                       | no                  |
| 87-68-3  | Hexachlorobutadiene         | 0.64          | Not Detected | --        | 1                         | no                  |
| 91-57-6  | 2-Methylnaphthalene         | 2.49          | Not Detected | --        | nle                       | no                  |
| 77-47-4  | Hexachlorocyclopentadiene   | 1.59          | Not Detected | --        | 50                        | no                  |
| 91-58-7  | 2-Chloronaphthalene         | 2.15          | Not Detected | --        | nle                       | no                  |
| 88-74-4  | 2-Nitroaniline              | 1.62          | Not Detected | --        | nle                       | no                  |
| 131-11-3 | Dimethylphthalate           | 2.74          | Not Detected | --        | 7000                      | no                  |
| 208-96-8 | Acenaphthylene              | 2.35          | Not Detected | --        | nle                       | no                  |

TABLE 3  
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL

NJDEP # 13461

Matrix: (soil/water) WATER

Date Sampled: 12/7/98

Location: 718

Lab Sample ID: 4116.02(Field Blank)

| CAS NO.   | COMPOUND NAME              | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|-----------|----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 606-20-2  | 2,6-Dinitrotoluene         | 1.54          | Not Detected | --        | nle                       | no                  |
| 99-09-2   | 3-Nitroaniline             | 1.62          | Not Detected | --        | nle                       | no                  |
| 83-32-9   | Acenaphthene               | 1.98          | Not Detected | --        | 400                       | no                  |
| 132-64-9  | Dibenzofuran               | 2.13          | Not Detected | --        | nle                       | no                  |
| 121-14-2  | 2,4-Dinitrotoluene         | 1.22          | Not Detected | --        | 10                        | no                  |
| 84-66-2   | Diethylphthalate           | 1.68          | Not Detected | --        | 5000                      | no                  |
| 86-73-7   | Fluorene                   | 1.93          | Not Detected | --        | 300                       | no                  |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1.53          | Not Detected | --        | nle                       | no                  |
| 100-01-6  | 4-Nitroaniline             | 2.70          | Not Detected | --        | nle                       | no                  |
| 86-30-6   | n-Nitrosodiphenylamine     | 1.73          | Not Detected | --        | 20                        | no                  |
| 103-33-3  | Azobenzene                 | 1.92          | Not Detected | --        | nle                       | no                  |
| 101-55-3  | 4-Bromophenyl-phenylether  | 1.54          | Not Detected | --        | nle                       | no                  |
| 118-74-1  | Hexachlorobenzene          | 1.88          | Not Detected | --        | 10                        | no                  |
| 85-01-8   | Phenanthrene               | 1.67          | Not Detected | --        | nle                       | no                  |
| 120-12-7  | Anthracene                 | 1.79          | Not Detected | --        | 2000                      | no                  |
| 84-74-2   | Di-n-butylphthalate        | 1.83          | Not Detected | --        | 900                       | no                  |
| 206-44-0  | Fluoranthene               | 1.85          | Not Detected | --        | 300                       | no                  |
| 92-87-5   | Benzidine                  | 4.11          | Not Detected | --        | 50                        | no                  |
| 129-00-0  | Pyrene                     | 1.02          | Not Detected | --        | 200                       | no                  |
| 85-68-7   | Butylbenzylphthalate       | 1.15          | Not Detected | --        | 100                       | no                  |
| 56-55-3   | Benzo[a]anthracene         | 1.57          | Not Detected | --        | 10                        | no                  |
| 91-94-1   | 3,3'-Dichlorobenzidine     | 2.28          | Not Detected | --        | 60                        | no                  |
| 218-01-9  | Chrysene                   | 2.32          | Not Detected | --        | 20                        | no                  |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | 1.29          | Not Detected | --        | 30                        | no                  |
| 117-84-0  | Di-n-octylphthalate        | 1.30          | Not Detected | --        | 100                       | no                  |
| 205-99-2  | Benzo[b]fluoranthene       | 1.31          | Not Detected | --        | 10                        | no                  |
| 207-08-9  | Benzo[k]fluoranthene       | 1.57          | Not Detected | --        | 2                         | no                  |
| 50-32-8   | Benzo[a]pyrene             | 1.36          | Not Detected | --        | 20                        | no                  |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     | 1.22          | Not Detected | --        | 20                        | no                  |
| 53-70-3   | Dibenz[a,h]anthracene      | 3.12          | Not Detected | --        | 20                        | no                  |
| 191-24-2  | Benzo[g,h,i]perylene       | 1.13          | Not Detected | --        | nle                       | no                  |

TABLE 3  
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL

NJDEP # 13461

Matrix: (soil/water) WATER

Date Sampled: 12/7/98

Location: 718

Lab Sample ID: 4117.02(Bldg 718)

| CAS NO.  | COMPOUND NAME               | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|----------|-----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 110-86-1 | Pyridine                    | 2.52          | Not Detected | --        | nle                       | no                  |
| 62-75-9  | N-nitroso-dimethylamine     | 2.64          | Not Detected | --        | 20                        | no                  |
| 62-53-3  | Aniline                     | 2.90          | Not Detected | --        | nle                       | no                  |
| 111-44-4 | bis(2-Chloroethyl)ether     | 2.45          | Not Detected | --        | 10                        | no                  |
| 541-73-1 | 1,3-Dichlorobenzene         | 2.65          | Not Detected | --        | 600                       | no                  |
| 106-46-7 | 1,4-Dichlorobenzene         | 2.50          | Not Detected | --        | 75                        | no                  |
| 100-51-6 | Benzyl alcohol              | 2.09          | Not Detected | --        | nle                       | no                  |
| 95-50-1  | 1,2-Dichlorobenzene         | 2.44          | Not Detected | --        | 600                       | no                  |
| 108-60-1 | bis(2-chloroisopropyl)ether | 2.96          | Not Detected | --        | 300                       | no                  |
| 621-64-7 | n-Nitroso-di-n-propylamine  | 2.22          | Not Detected | --        | 20                        | no                  |
| 67-72-1  | Hexachloroethane            | 2.59          | Not Detected | --        | 10                        | no                  |
| 98-95-3  | Nitrobenzene                | 2.45          | Not Detected | --        | 10                        | no                  |
| 78-59-1  | Isophorone                  | 2.31          | Not Detected | --        | 100                       | no                  |
| 111-91-1 | bis(2-Chloroethoxy)methane  | 2.54          | Not Detected | --        | nle                       | no                  |
| 120-82-1 | 1,2,4-Trichlorobenzene      | 2.58          | Not Detected | --        | 9                         | no                  |
| 91-20-3  | Naphthalene                 | 3.03          | Not Detected | --        | nle                       | no                  |
| 106-47-8 | 4-Chloroaniline             | 2.55          | Not Detected | --        | nle                       | no                  |
| 87-68-3  | Hexachlorobutadiene         | 0.64          | Not Detected | --        | 1                         | no                  |
| 91-57-6  | 2-Methylnaphthalene         | 2.49          | Not Detected | --        | nle                       | no                  |
| 77-47-4  | Hexachlorocyclopentadiene   | 1.59          | Not Detected | --        | 50                        | no                  |
| 91-58-7  | 2-Chloronaphthalene         | 2.15          | Not Detected | --        | nle                       | no                  |
| 88-74-4  | 2-Nitroaniline              | 1.62          | Not Detected | --        | nle                       | no                  |
| 131-11-3 | Dimethylphthalate           | 2.74          | Not Detected | --        | 7000                      | no                  |
| 208-96-8 | Acenaphthylene              | 2.35          | Not Detected | --        | nle                       | no                  |

TABLE 3  
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL

NJDEP # 13461

Matrix: (soil/water) WATER

Date Sampled: 12/7/98

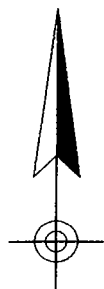
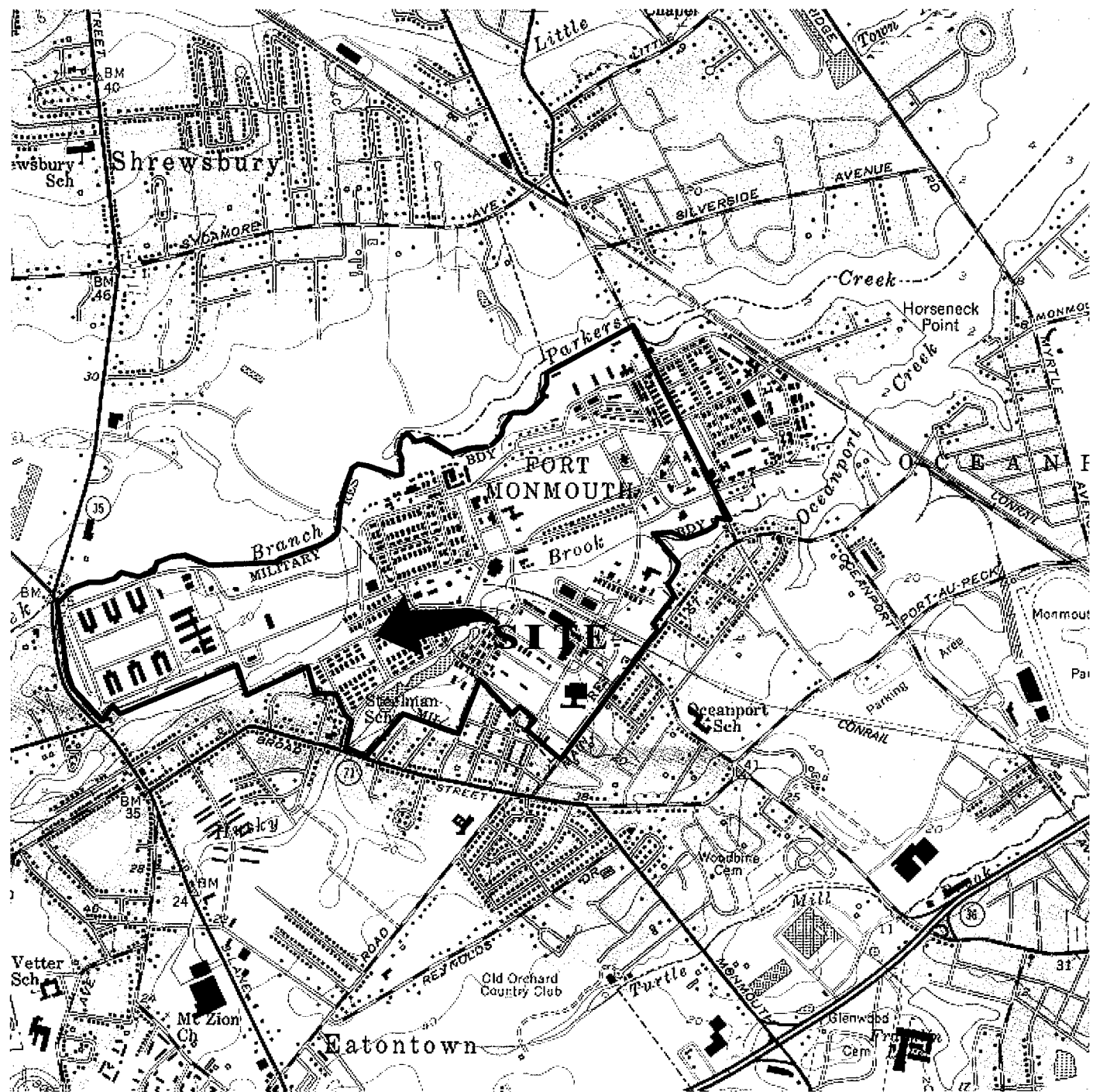
Location: 718

Lab Sample ID: 4117.02(Bldg 718)

| CAS NO.   | COMPOUND NAME              | MDL<br>(ug/L) | RESULTS      | QUALIFIER | REGULATORY<br>LEVEL(ug/L) | EXCEEDS<br>CRITERIA |
|-----------|----------------------------|---------------|--------------|-----------|---------------------------|---------------------|
| 606-20-2  | 2,6-Dinitrotoluene         | 1.54          | Not Detected | --        | nle                       | no                  |
| 99-09-2   | 3-Nitroaniline             | 1.62          | Not Detected | --        | nle                       | no                  |
| 83-32-9   | Acenaphthene               | 1.98          | Not Detected | --        | 400                       | no                  |
| 132-64-9  | Dibenzofuran               | 2.13          | Not Detected | --        | nle                       | no                  |
| 121-14-2  | 2,4-Dinitrotoluene         | 1.22          | Not Detected | --        | 10                        | no                  |
| 84-66-2   | Diethylphthalate           | 1.68          | Not Detected | --        | 5000                      | no                  |
| 86-73-7   | Fluorene                   | 1.93          | Not Detected | --        | 300                       | no                  |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1.53          | Not Detected | --        | nle                       | no                  |
| 100-01-6  | 4-Nitroaniline             | 2.70          | Not Detected | --        | nle                       | no                  |
| 86-30-6   | n-Nitrosodiphenylamine     | 1.73          | Not Detected | --        | 20                        | no                  |
| 103-33-3  | Azobenzene                 | 1.92          | Not Detected | --        | nle                       | no                  |
| 101-55-3  | 4-Bromophenyl-phenylether  | 1.54          | Not Detected | --        | nle                       | no                  |
| 118-74-1  | Hexachlorobenzene          | 1.88          | Not Detected | --        | 10                        | no                  |
| 85-01-8   | Phenanthrene               | 1.67          | Not Detected | --        | nle                       | no                  |
| 120-12-7  | Anthracene                 | 1.79          | Not Detected | --        | 2000                      | no                  |
| 84-74-2   | Di-n-butylphthalate        | 1.83          | Not Detected | --        | 900                       | no                  |
| 206-44-0  | Fluoranthene               | 1.85          | Not Detected | --        | 300                       | no                  |
| 92-87-5   | Benzidine                  | 4.11          | Not Detected | --        | 50                        | no                  |
| 129-00-0  | Pyrene                     | 1.02          | Not Detected | --        | 200                       | no                  |
| 85-68-7   | Butylbenzylphthalate       | 1.15          | Not Detected | --        | 100                       | no                  |
| 56-55-3   | Benzo[a]anthracene         | 1.57          | Not Detected | --        | 10                        | no                  |
| 91-94-1   | 3,3'-Dichlorobenzidine     | 2.28          | Not Detected | --        | 60                        | no                  |
| 218-01-9  | Chrysene                   | 2.32          | Not Detected | --        | 20                        | no                  |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | 1.29          | Not Detected | --        | 30                        | no                  |
| 117-84-0  | Di-n-octylphthalate        | 1.30          | Not Detected | --        | 100                       | no                  |
| 205-99-2  | Benzo[b]fluoranthene       | 1.31          | Not Detected | --        | 10                        | no                  |
| 207-08-9  | Benzo[k]fluoranthene       | 1.57          | Not Detected | --        | 2                         | no                  |
| 50-32-8   | Benzo[a]pyrene             | 1.36          | Not Detected | --        | 20                        | no                  |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     | 1.22          | Not Detected | --        | 20                        | no                  |
| 53-70-3   | Dibenz[a,h]anthracene      | 3.12          | Not Detected | --        | 20                        | no                  |
| 191-24-2  | Benzo[g,h,i]perylene       | 1.13          | Not Detected | --        | nle                       | no                  |



## FIGURES



LONG BRANCH, N. J.

40073-C8-TF-024

1954

PHOTOREVISED 1981  
DMA 6164 I SE-SERIES V822



QUADRANGLE LOCATION

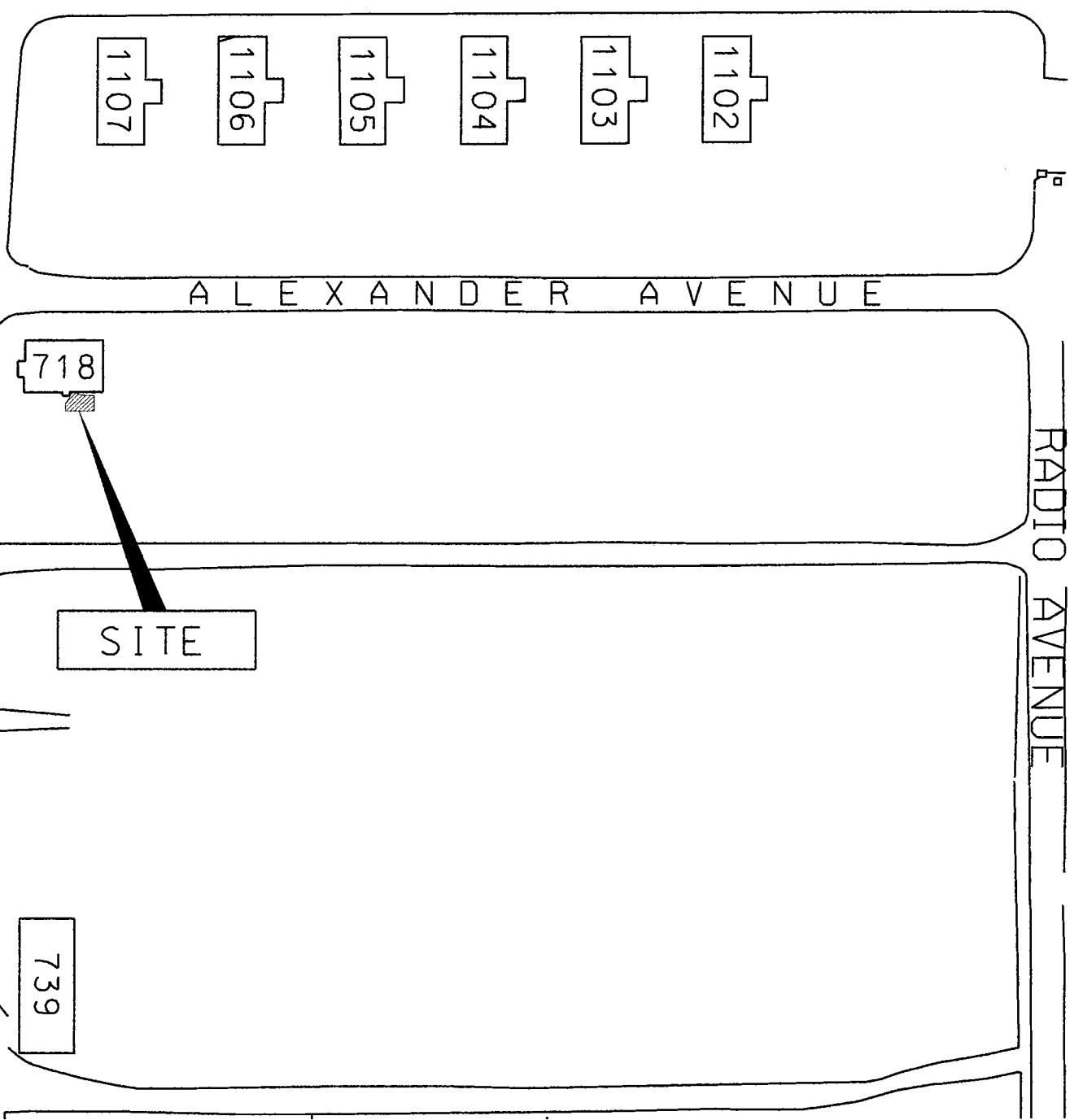
## FIGURE 1

LOCATION MAP  
Building 718  
Main-Post West  
Fort Monmouth Army Base  
Monmouth County, NJ

VERSAR  
Engineers, Managers, Scientists, & Planners  
Bristol, PA

Scale: 1" = 2000'

Date: JUNE 1998



|                                                                                        |                 |
|----------------------------------------------------------------------------------------|-----------------|
| FIGURE 2<br>SITE MAP<br>BUILDING 718<br>FORT MONMOUTH ARMY BASE<br>MONMOUTH COUNTY, NJ |                 |
| VERSAR<br>ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS<br>BRISTOL, PA.                   |                 |
| SCALE: 1"=100'                                                                         | DATE: JUNE 1998 |

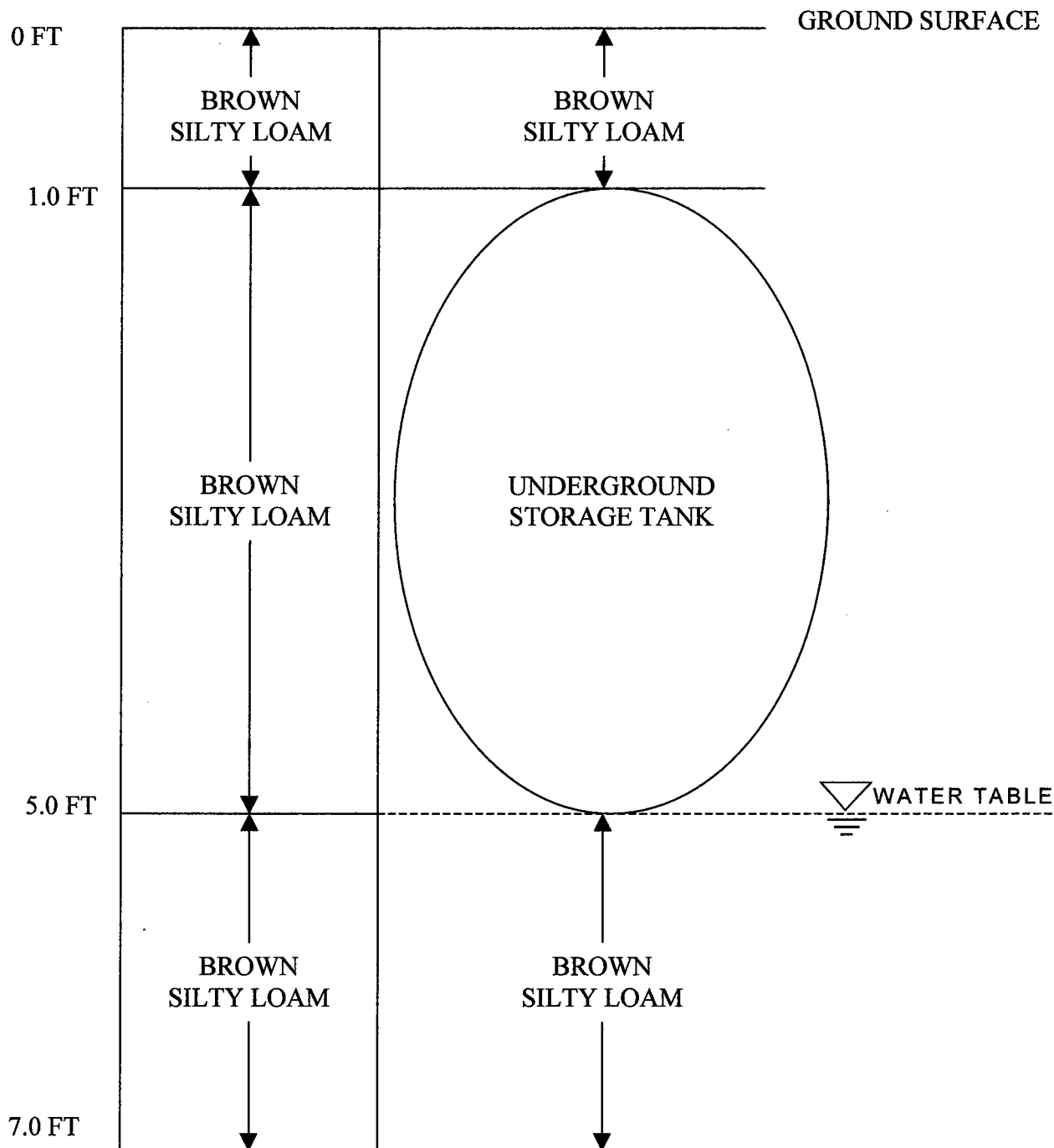


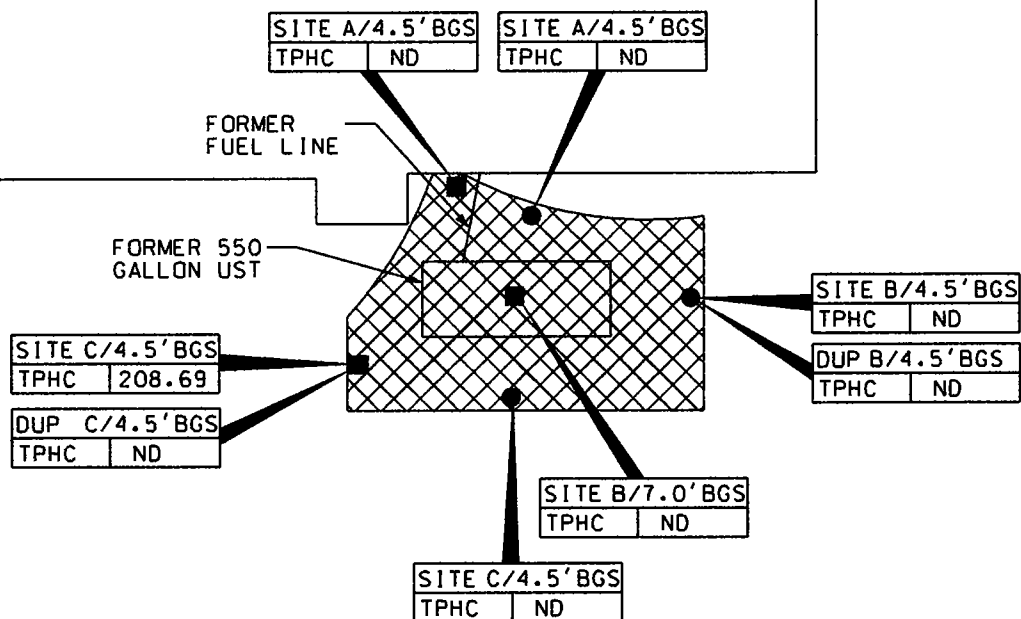
FIGURE 3  
CROSS SECTIONAL VIEW  
BUILDING 718  
FORT MONMOUTH ARMY BASE  
MONMOUTH COUNTY, NJ

**VERSAR**  
Engineers, Managers, Scientists & Planners  
Bristol, Pennsylvania

SCALE: NTS

DATE: JUNE 1998

# BUILDING 718



## LEGEND

- SOIL SAMPLE LOCATION (JUNE 18, 1998)
- SOIL SAMPLE LOCATION (JUNE 19, 1998)
- ▨ LIMIT OF EXCAVATION (JUNE 19, 1998)

## NOTES:

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

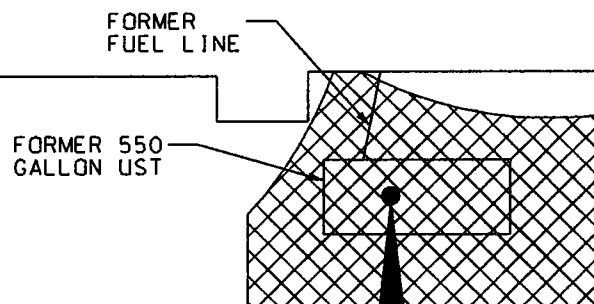
FIGURE 4  
SOIL SAMPLING LOCATION MAP  
BUILDING 718  
FORT MONMOUTH ARMY BASE  
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: JUNE 1998

# BUILDING 718



|                                 |            |          |               |
|---------------------------------|------------|----------|---------------|
| SAMPLING LOCATION:              | HIGHER OF  | BLDG 718 | BLDG 718      |
| SAMPLING DEPTH:                 | NJDEP GWOS | 6.0 'BGS | 5.0-10.0' BGS |
| SAMPLING DATE:                  | AND PQL    | 10/24/98 | 12/07/98      |
| VOLATILE ORGANIC COMPOUNDS:     |            | ND       | ND            |
| SEMIVOLATILE ORGANIC COMPOUNDS: |            | ND       | ND            |



## LEGEND

- GROUNDWATER SAMPLE LOCATION  
(OCTOBER 24, 1998 AND DECEMBER 7, 1998)
- ▨ LIMIT OF EXCAVATION  
(JUNE 19, 1998)

## NOTES:

1. ND=INDICATES COMPOUND NOT DETECTED
2. NLE= NO LIMIT ESTABLISHED
3. ALL RESULTS IN UG/L
4. BGS = BELOW GROUND SURFACE

FIGURE 5  
GROUNDWATER SAMPLING MAP  
BUILDING 718  
FORT MONMOUTH ARMY BASE  
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: JUNE 1998

**APPENDIX A**

**NJDEP-STANDARD REPORTING FORM**

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION  
BUREAU OF APPLICABILITY AND COMPLIANCE  
Registration and Billing Unit  
CN 028, Trenton, N.J. 08625-0028  
1-609-984-3156

FOR STATE USE ONLY

Check In ☐ Yes ☐

STATUS Active Inactive COMCODE

☐ ☐ ☐ ☐ ☐

UNDERGROUND STORAGE TANK  
FACILITY QUESTIONNAIRE

FACILITY UST # 0081533

Bldg 718

Completion of this Registration Questionnaire will satisfy the registration requirements of the Underground Storage of Hazardous Substances Act, N.J.S.A. 58:10A-21, and the Registration and Billing Regulations N.J.A.C. 7:14B-2.

[Check appropriate box(es)]

- A. ☐ Is this a registration of a proposed or newly installed underground storage tank? (This form must be filed at least 30 days prior to operation)
- B. ☐ Is this a registration of an existing underground storage tank not presently registered?
- C. ☒ Is this a correction or amendment to an existing facility registration? UST # 0081533
- D. ☐ There have been no changes to the facility registration since last submittal. UST # \_\_\_\_\_ (Go to certification page for signatures)

If "C" is checked above, please check the appropriate type of change(s) below

- |                                                                  |                                                                     |                                                                           |
|------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Facility Name and/or Address Change     | <input type="checkbox"/> Type of Product(s) Stored                  | <input type="checkbox"/> Financial Responsibility Change                  |
| <input type="checkbox"/> Owner Name and/or Address Change        | <input type="checkbox"/> Spills, Leaks, Releases                    | <input type="checkbox"/> Substantial Modification(s)                      |
| <input type="checkbox"/> Facility Operator and/or Address Change | <input checked="" type="checkbox"/> Tank(s) and/or Piping Changes   | <input type="checkbox"/> Sale or Transfer (Complete Questions 4,5,6 & 13) |
| <input type="checkbox"/> Owner Contact Person Change             | <input checked="" type="checkbox"/> Closure (Complete Question #13) | <input type="checkbox"/> Other (please specify)                           |

SECTION A - GENERAL FACILITY INFORMATION

1. Facility Name MAIN POST WEST

2. Facility Location Ft. Monmouth

NUMBER AND STREET

CITY OR MUNICIPALITY

COUNTY

N.J.  
STATE

ZIP CODE

BLOCK

LOT

3. Facility Operator \_\_\_\_\_

Contact \_\_\_\_\_

Tele. No. \_\_\_\_\_

(Area Code)

(Extension)

Operator Address \_\_\_\_\_

(if different than #2)

NUMBER AND STREET

CITY OR MUNICIPALITY

STATE

ZIP CODE

4. Tank Owner \_\_\_\_\_

5. Tank Owner \_\_\_\_\_

Address \_\_\_\_\_

NUMBER AND STREET

CITY OR MUNICIPALITY

STATE

ZIP CODE

Contact Person Charles Appleby

(Tank Owner)

Contact 732 532 6229

Tele. No. (Area Code) (Extension)

7. EPA ID # \_\_\_\_\_

8. Total number of regulated underground storage tanks at facility \_\_\_\_\_ (Complete Section B for each tank)



Bldg 718

- ### SECTION B - SPECIFIC TANK INFORMATION

| 1. Tank Identification Number <i>Blkg 718</i>                                       |  | TANK NO.<br><i>116</i>                                                  | TANK NO.                                          | TANK NO.                                          | TANK NO.                                          | TANK NO.                                          |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| 2. CAS Number (hazardous substances only)                                           |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| 3. Date Tank Installed (Month/Day/Year)                                             |  | Mo. Day Year                                                            | Mo. Day Year                                      | Mo. Day Year                                      | Mo. Day Year                                      | Mo. Day Year                                      |
| 4. Tank Size (gallons)                                                              |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| 5. Tank Contents (Mark one "X" for each tank)                                       |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| A. Leaded gasoline                                                                  |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| B. Unleaded gasoline                                                                |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| C. Alcohol endriched gasoline                                                       |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| D. Light diesel fuel (No. 1-D)                                                      |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| E. Medium diesel fuel (No. 2-D)                                                     |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| F. Waste Oil                                                                        |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| G. Kerosene (No. 1)                                                                 |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| H. Home heating oil (No. 2)                                                         |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| J. Heating oil (No. 4)                                                              |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| K. Heavy heating oil (No. 6)                                                        |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| L. Aviation fuel                                                                    |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| M. Motoroil                                                                         |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| N. Lubricating oil                                                                  |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| P. Sewage                                                                           |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| Q. Sewage sludge                                                                    |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| R. Other hazardous substances (specify)                                             |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| S. Hazardous waste (specify ID number)                                              |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| T. Mixtures (please specify)                                                        |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| U. Emergency spill tank (specify substance)                                         |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| V. Other petroleum products (please specify)                                        |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| W. Other (please specify)                                                           |  |                                                                         |                                                   |                                                   |                                                   |                                                   |
| Tank & Piping Construction<br>(Mark one each for both tank & piping)                |  | Tank Piping                                                             | Tank Piping                                       | Tank Piping                                       | Tank Piping                                       | Tank Piping                                       |
| A. Bare Steel                                                                       |  | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| B. Cathodically protected steel                                                     |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| C. Fiberglass-coated steel                                                          |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| D. Fiberglass-reinforced plastic <i>Listed</i>                                      |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| E. Internally lined                                                                 |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| F. Other (please specify)                                                           |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| Tank & Piping Structure<br>(Mark one each for both tank & piping)                   |  | Tank Piping                                                             | Tank Piping                                       | Tank Piping                                       | Tank Piping                                       | Tank Piping                                       |
| A. Single wall                                                                      |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| B. Double wall                                                                      |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| C. Other (please specify)                                                           |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| Type of Monitoring/Detection System<br>(Mark all that apply for both tank & piping) |  | Tank Piping                                                             | Tank Piping                                       | Tank Piping                                       | Tank Piping                                       | Tank Piping                                       |
| A. Statistical Inventory Reconciliation                                             |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| B. Manual Tank Gauging                                                              |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| C. Inventory Control                                                                |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| D. Interstitial                                                                     |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| E. Precision Test                                                                   |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| F. Ground water observation wells                                                   |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| G. Vapor observation wells                                                          |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| H. In-tank (automatic) monitoring gauge                                             |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| I. Periodic Tank Test                                                               |  | <input type="checkbox"/> <input type="checkbox"/>                       | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |

| Tank Identification Number                                                                            | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        |
|-------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 8. Type of Monitoring/Detection System<br>K. None<br>L. Other (please specify)                        | Tank Piping<br>[ ] [ ]          | Tank Piping<br>[ ] [ ]          | Tank Piping<br>[ ] [ ]          | Tank Piping<br>[ ] [ ]          | Tank Piping<br>[ ] [ ]          |
| 9. Overfill Protection (tank only)<br>(Mark one X for each tank)                                      |                                 |                                 |                                 |                                 |                                 |
| A. Yes                                                                                                | [ ]                             | [ ]                             | [ ]                             | [ ]                             | [ ]                             |
| B. No                                                                                                 | [ ]                             | [ ]                             | [ ]                             | [ ]                             | [ ]                             |
| 10. Spill Containment Around Fill Pipe<br>(Mark one X for each tank)                                  |                                 |                                 |                                 |                                 |                                 |
| A. Yes                                                                                                | [ ]                             | [ ]                             | [ ]                             | [ ]                             | [ ]                             |
| B. No                                                                                                 | [ ]                             | [ ]                             | [ ]                             | [ ]                             | [ ]                             |
| 11. Tank Status (Mark one X for each tank)                                                            | Tank Piping                     | Tank Piping                     | Tank Piping                     | Tank Piping                     | Tank Piping                     |
| A. In-use                                                                                             | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| B. Empty less than 12 months                                                                          | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| C. Empty 12 months or more                                                                            | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| D. Emergency spill tank (sump)                                                                        | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| E. Emergency backuo generator tank                                                                    | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| F. Abandoned in Place                                                                                 | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| G. Removed                                                                                            | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| H. Other (please specify)                                                                             | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         | [ ] [ ]                         |
| 12. If box 11B, C, or D above has been marked, indicate the estimated date last used (month/day/year) | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] |
| 13. Closure Information - Tank ID No.                                                                 | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        | TANK NO.<br>[ ][ ][ ][ ]        |
| A. Date abandoned in place                                                                            | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] | Mo. Day Year<br>[ ][ ][ ][ ][ ] |
| B. Date taken temporarily out of service                                                              | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 |
| C. Date removed                                                                                       | 06/17/1998                      | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 |
| D. Date of Sale or Transfer                                                                           | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 |
| E. TMS # (if applicable)                                                                              | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 |
| F. ISRA # (if applicable)                                                                             | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 | [ ][ ][ ][ ][ ]                 |

## SECTION C - FINANCIAL RESPONSIBILITY

Type \_\_\_\_\_ Carrier / Issuing Agency \_\_\_\_\_  
 Effective Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Expiration Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Policy Number \_\_\_\_\_ \$ \_\_\_\_\_ Amount \_\_\_\_\_

Does this facility have a release detection monitoring system which is in compliance with N.J.A.C. 7:14B-6?  
If "No", please be aware that the facility must meet the appropriate deadline. (See "Dates to Know" on Page 4)

## SECTION E - RECORDKEEPING/COMPLIANCE

## IMPORTANT INFORMATION

FEE:

Please make checks payable to: "Treasurer, State of New Jersey". Use of the enclosed return envelope will expedite processing. Registration and Billing Schedule can be found in N.J.A.C. 7:14B.  
All Initial Registration fees are \$100 per facility.

PENALTY:

Failure by owner or operator of a regulated underground storage tank to comply with any requirement of the State UST Act or regulations may result in the penalties set forth in N.J.S.A. 58:10A-10.

EMERGENCY:

If a discharge or spill occurs, the NJDEP Hotline at (609) 292-7172 must be called IMMEDIATELY - 24 hours a day.

UPGRADE EXEMPTION:

Residential heating oil underground storage tanks are exempt from all upgrade requirements.

## DATES TO KNOW (critical deadlines)

- |                   |   |                                                                                                        |
|-------------------|---|--------------------------------------------------------------------------------------------------------|
| December 22, 1988 | — | All new federally regulated tank systems must have cathodic protection and spill/overflow protection.  |
| September 4, 1990 | — | All new State-only regulated tank systems must have cathodic protection and spill/overflow protection. |
| December 22, 1990 | — | All federally regulated piping must have begun leak detection.                                         |
| February 19, 1993 | — | All federally regulated tank systems must maintain financial responsibility assurance.                 |
| December 22, 1993 | — | All federally regulated tank systems must have begun leak detection.                                   |
| December 22, 1998 | — | All regulated tanks shall install cathodic protection and spill/overflow protection.                   |

## CERTIFICATIONS

NOTE: IF THE PERSON SIGNING CERTIFICATION NO. 2 IS THE SAME AS THE PERSON SIGNING CERTIFICATION NO. 1, THEN CERTIFICATION NO. 2 NEED NOT BE SIGNED. (If different persons are required to sign No. 1 and No. 2, then they must do so.)

### CERTIFICATION NO. 1:

Must be signed by the highest ranking individual at the facility with overall responsibility

"I certify under penalty of law that the information provided in this document is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant civil and criminal penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

MR. James OTT

(Typed / Printed Name)

Director of Public Works

(Title)

[Signature]

(Signature)

6/23/98

(Date)

### CERTIFICATION NO. 2:

Must be signed as follows:

- For a corporation, by a principal executive officer of at least the level of vice president
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively
- For a municipality, State, Federal or other public agency, by either a principal executive officer or ranking elected official
- For persons other than indicated above, by the person with legal responsibility for the site

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

NA

(Typed / Printed Name)

(Title)

(Signature)

(Date)

### CERTIFICATION NO. 3:

If applicable, must be signed by the individual who is certified to perform services.

"I certify under penalty of law that the information provided in this document is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant civil and criminal penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Charles Appleby Env. Prot. Sp.

(Typed / Printed Name)

(Title)

U.S. Army

(Name of Firm, if applicable)

(Signature)

6/12/98

(Date)

(N.J. Certification Number)

**APPENDIX B**

**SITE ASSESSMENT SUMMARY**

## Site Remediation Program

## UST Site/Remedial Investigation Report Certification Form

**A. Facility Name :** U.S. Army Fort Monmouth New JerseyFacility Street Address : Directorate of Public Works Building 173Municipality: Oceanport County : MonmouthBlock: \_\_\_\_\_ Lot(s): \_\_\_\_\_ Telephone Number : 732-532-6224**B. Owner (RP)'s Name:** \_\_\_\_\_

Street Address: \_\_\_\_\_ City : \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone Number : \_\_\_\_\_

**C. (Check as appropriate)**

☐ Site Investigation  
Report (SIR) \$500 Fee

☐ Remedial Investigation  
Report (RIR) \$1000 Fee

☒ NA – Federal  
Agreement

**D. (Complete all that apply)**

- Assigned Case Manager : Ian Curtis, Federal Case Manager
- UST Registration Number : 81533-116 (7 digits)
- Incident Report Number 98 – 06 – 17 – 1650 – 28 (10 or 12 digits)
- Tank Closure Number : Federal Case Manager

**E. Certification by the Subsurface Evaluator:**

The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E .....Yes No

Name: Charles Appleby Signature: \_\_\_\_\_ UST Cert. No.: 2056Firm: U.S. Army Fort Monmouth Firm's UST Cert. Number: NA-U.S. ArmyFirm Address: Directorate of Public Works Building 173 City: Fort MonmouthState: NJ Zip: 07703 Telephone Number : 732-532-6224

(NOTE: Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21 et seq.)

**F. Certification by the Responsible Party(ies) of the Facility:**

The following certification shall be signed [according to the requirements of N.J.A.C. 7:14B-1.7(b)] as follows:

1. For a Corporation by a person authorized by a resolution of the board of directors to sign the document. A copy of the resolution, certified as a true copy by the secretary of the corporation, shall be submitted along with the certification; or
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, federal or other public agency by either a principal executive officer or ranking elected Official.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Name (Print or Type): James Ott Title: Directorate of Public Works

Signature: \_\_\_\_\_

Company Name: U.S. Army Fort MonmouthDate: 9/4/00

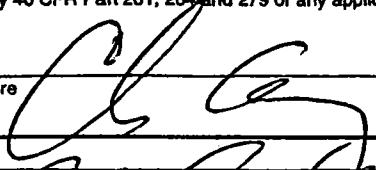
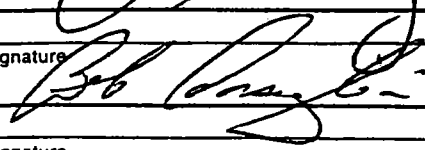
**APPENDIX C**  
**WASTE MANIFEST**

# CASIE / PROTANK

## ENVIRONMENTAL SERVICES

718

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                   |  |                                                                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------|--|
| <b>NON-HAZARDOUS MANIFEST</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 1. Generator's US EPA ID No.<br>NJ 32100205971                                                    |  | 2. Page 1 of 1                                                  |  |
| 3. Generator's Name and Mailing Address<br>U.S. Army Com. Elec. Command<br>Main Post Bldg 173/Attn:<br>Fort Monmouth NJ 07703                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                   |  | A. Non-hazardous Manifest Document Number<br><b>NH020 16448</b> |  |
| 4. Generator's Phone (732) 532-6223                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | 6. US EPA ID Number                                                                               |  | B. State Generator's ID<br>c/o James Shirghior<br>Joe Fallon    |  |
| 5. Transporter 1 Company Name<br>Casie Ecology Oil Salvage, Inc. NJ D 045995693                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 8. US EPA ID Number                                                                               |  | C. State Trans. ID 16931                                        |  |
| 7. Transporter 2 Company Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 10. US EPA ID Number                                                                              |  | D. Transporter's Phone (609) 696-4401                           |  |
| 9. Designated Facility Name and Site Address<br>Casie Ecology Oil Salvage, Inc. T/A<br>3209 N. Mill Rd / Casie Protank<br>Vineland NJ 08360 NJ D 045995693                                                                                                                                                                                                                                                                                                                                               |  | 12. Containers                                                                                    |  | E. State Trans. ID                                              |  |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)                                                                                                                                                                                                                                                                                                                                                                                                                     |  | 13. Total Quantity                                                                                |  | F. Transporter's Phone ( )                                      |  |
| a. Combustible liquid, n.o.s. (Fuel Oil)<br>NA1993, PGIII                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | No. Type                                                                                          |  | G. State Facility's ID 0614D1HP05                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 0 0 1 T T                                                                                         |  | H. Facility's Phone (609) 696-4401                              |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                   |  |                                                                 |  |
| c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                   |  |                                                                 |  |
| d.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                   |  |                                                                 |  |
| J. Additional Descriptions for Materials Listed Above<br>L, T %oil/sed. %wtr.                                                                                                                                                                                                                                                                                                                                                                                                                            |  | K. Handling Codes for Wastes Listed Above                                                         |  |                                                                 |  |
| a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | a.                                                                                                |  | c.                                                              |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | b.                                                                                                |  | d.                                                              |  |
| 15. Special Handling Instructions and Additional Information<br><br>a. 24 Hr. Emergency Response #609 696-4401 K. Ambrosia NAERG# 127                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                   |  |                                                                 |  |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.<br>I hereby certify that the above-named material is not hazardous waste as defined by 40 CFR Part 261, 264 and 279 or any applicable state law. |  |                                                                                                   |  |                                                                 |  |
| Printed/Typed Name<br>Charles Appleby SELF-MAN-EV                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Signature<br> |  | Month Day Year<br>07/01/98                                      |  |
| 17. Transporter 1 Acknowledgement of Receipt of Materials<br>Printed/Typed Name<br>Bob Consistent                                                                                                                                                                                                                                                                                                                                                                                                        |  | Signature<br> |  | Month Day Year<br>07/01/98                                      |  |
| 18. Transporter 2 Acknowledgement of Receipt of Materials<br>Printed/Typed Name                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Signature                                                                                         |  | Month Day Year                                                  |  |
| 19. Discrepancy Indication Space                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                   |  |                                                                 |  |
| 20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 19.<br>Printed/Typed Name Signature Month Day Year                                                                                                                                                                                                                                                                                                                  |  |                                                                                                   |  |                                                                 |  |

GENERATOR

TRANSPORTER

FACILITY

1-GENERATOR COPY

SIGNATURE AND INFORMATION **MUST** BE LEGIBLE ON ALL COPIES

# #1 CASIE / PROTANK

## ENVIRONMENTAL SERVICES

718

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------|--|-----------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------|---------------|----------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------|-----------|--|-----|----|-------|---|-------|----|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------------------------------|--|
| <b>NON-HAZARDOUS MANIFEST</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               | 1. Generator's US EPA ID No.<br>NJ321002059714888 |  | 2. Page 1 of 1                                                        |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 3. Generator's Name and Mailing Address<br>U.S. Army Com. Elec. Command<br>Main Post Bldg 173/Attn: Joe Fallon<br>Fort Monmouth NJ 07703                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                                                   |  | A. Non-hazardous Manifest Document Number<br>NHZ020 19288             |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 4. Generator's Phone (732) 532-6223                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |               | 6. US EPA ID Number                               |  | B. State Generator's ID<br>S.L. c/o James Shirghior<br>c/o JOE FALLON |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 5. Transporter 1 Company Name<br>Casie Ecology Oil Salvage, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               | NJD045995693                                      |  | C. State Trans. ID 1693180                                            |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 7. Transporter 2 Company Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               | 8. US EPA ID Number                               |  | D. Transporter's Phone ((609) 696-4401                                |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 9. Designated Facility Name and Site Address<br>Casie Ecology Oil Salvage, Inc. T/A<br>3209 N. Mill Rd / Casie Protank<br>Vineland NJ 08360                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |               | 10. US EPA ID Number<br>NJD045995693              |  | E. State Trans. ID                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |               |                                                   |  | F. Transporter's Phone ( )                                            |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">a.</td> <td style="width: 60%;">Combustible liquid, n.o.s.(Fuel Oil)<br/>NA1993, III</td> <td style="width: 10%;">12. Containers<br/>No.</td> <td style="width: 10%;">Type</td> <td style="width: 10%;">13. Total<br/>Quantity</td> <td style="width: 10%;">14. Unit<br/>Wt/Vol</td> <td style="width: 10%;">L<br/>Waste No.</td> </tr> <tr> <td>b.</td> <td></td> <td>001</td> <td>TT</td> <td>00001</td> <td>G</td> <td>IDL72</td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> |               |                                                   |  | a.                                                                    | Combustible liquid, n.o.s.(Fuel Oil)<br>NA1993, III | 12. Containers<br>No.                           | Type          | 13. Total<br>Quantity                                                                        | 14. Unit<br>Wt/Vol | L<br>Waste No.                                                                  | b.        |  | 001 | TT | 00001 | G | IDL72 | c. |  |  |  |  |  |  | d. |  |  |  |  |  |  |  |  |  |  |  |  |  | G. State Facility's ID 0614D1HP05 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  | a.                                                                    | Combustible liquid, n.o.s.(Fuel Oil)<br>NA1993, III | 12. Containers<br>No.                           | Type          | 13. Total<br>Quantity                                                                        | 14. Unit<br>Wt/Vol | L<br>Waste No.                                                                  |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  | b.                                                                    |                                                     | 001                                             | TT            | 00001                                                                                        | G                  | IDL72                                                                           |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  | c.                                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  | d.                                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                                                   |  | H. Facility's Phone (609) 696-4401                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| J. Additional Descriptions for Materials Listed Above<br>(L,T)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                                                   |  | K. Handling Codes for Wastes Listed Above                             |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                                                   |  | a.                                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                                                   |  | b.                                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                                                   |  | c.                                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| d.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                                                   |  | d.                                                                    |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 15. Special Handling Instructions and Additional Information<br>Bldg. # 286, 233, 235, 237, 239<br>a. ERG# 128<br>b. 24 hr emergency response #609-696-4401 K. Ambrosia<br>UST Closure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.<br>I hereby certify that the above-named material is not hazardous waste as defined by 40 CFR Part 261, 264 and 279 or any applicable state law.                                                                                                                                                                                                                                                                                                  |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Printed/Typed Name<br/>Charles Appleby SELF-PROV</td> <td style="width: 50%;">Signature<br/></td> </tr> <tr> <td>17. Transporter 1 Acknowledgement of Receipt of Materials<br/>Printed/Typed Name<br/>Shawn Lee</td> <td>Signature<br/></td> </tr> <tr> <td>18. Transporter 2 Acknowledgement of Receipt of Materials<br/>Printed/Typed Name</td> <td>Signature</td> </tr> </table>                                                                                                                                                                                                                                                                                                                       |               |                                                   |  |                                                                       |                                                     | Printed/Typed Name<br>Charles Appleby SELF-PROV | Signature<br> | 17. Transporter 1 Acknowledgement of Receipt of Materials<br>Printed/Typed Name<br>Shawn Lee | Signature<br>      | 18. Transporter 2 Acknowledgement of Receipt of Materials<br>Printed/Typed Name | Signature |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| Printed/Typed Name<br>Charles Appleby SELF-PROV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Signature<br> |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 17. Transporter 1 Acknowledgement of Receipt of Materials<br>Printed/Typed Name<br>Shawn Lee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Signature<br> |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 18. Transporter 2 Acknowledgement of Receipt of Materials<br>Printed/Typed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Signature     |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 19. Discrepancy Indication Space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| 20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest except as noted in Item 19.<br>Printed/Typed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |
| Month Day Year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                                                   |  |                                                                       |                                                     |                                                 |               |                                                                                              |                    |                                                                                 |           |  |     |    |       |   |       |    |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |                                   |  |

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In case of an emergency or spill, immediately call CASIE (800) 354-2584



**APPENDIX D**

**UST DISPOSAL CERTIFICATE**

**MAZZA & SONS, INC.**

**Metal Recyclers**  
3230 Shafto Rd.  
Tinton Falls, NJ  
(908) 922-9292

NO. 075

DATE. 22 June 78

Customer's Name TruCom - VINIVZ LLC

**Address** \_\_\_\_\_

| Weight | Price |
|--------|-------|
|--------|-------|

## Cast Iron

## Steel

Tanks  
Lt. Iron

Copper #1

**Copper #2**

15000 LB

13180 23

1820

\* Check NOT Picked up

6/24/28

**JUL 6 1998**

C/15/1978

Weigher

## Customer

[illegible]

Lt. Copper

## Brass

## Alum Clean

## Lead

## Stainless

### Battery

**TOTAL AMOUNT:**

50.05

[illegible]

**MAZZA & SONS, INC.**  
RECYCLING DIVISION  
P.O. BOX 246  
OAKHURST, NJ 07755

1978

DATE \_\_\_\_\_

7/15/98

55-7233/2212

**PAY  
TO THE  
ORDER OF**

PAY TO THE ORDER OF TEVIN VINNELL  
FIFTY + 05/100

\$ 57.05

**DOLLARS**  Security feature included. Details on back. Sovereign Bank

001978 1:22127233 21:000 1091099/286

**APPENDIX E**

**SOIL ANALYTICAL DATA PACKAGE**

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY  
NJDEPE # 13461

REPORT OF ANALYSIS

Client: U.S. Army  
DPW, SELFM-PW-EV  
Bldg. 173  
Ft. Monmouth, NJ 07703

Project: Total Petroleum Hydrocarbons  
98-0001  
Bldg. 718

Project # 3670  
Date Rec. 06/18/98  
Date Compl. 06/18/98  
Released by:

  
Daniel K. Wright Date: 7-6-98  
Laboratory Director

## **Method Summary**

### **NJDEP Method OQA-QAM-025-10/97**

#### **Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil**

Fifteen grams (15g)(wet weight) of a soil sample is added to a 125 mL acid cleaned, solvent rinsed, capped Erlenmeyer flask. 15g anhydrous sodium sulfate is added to dry sample. Surrogate standard spiking solution is then added to the flask.

Twenty five milliliters(25mL) Methylene Chloride is added to the flask and it is secured on a gyrotory shaker table. The agitation rate is set to 400rpm and the sample is shaken for 30 minutes. The flask is the removed from the table and the particulate matter is allowed to settle. The extract is transferred to a Teflon capped vial. A second 25mL of Methylene Chloride is added to the flask and shaken for an additional 30 minutes. The flask is again removed and allowed to settle. The extracts are combined in the vial then transferred to a 1mL autosampler vial.

The extract is then injected directly into a GC-FID for analysis. The sample is analyzed for petroleum hydrocarbons covering a range of C8-C42 including pristane and phytane. Total Petroleum Hydrocarbon concentration is determined by integrating between 5 minutes and 22 minutes. The baseline is established by starting the integration after the end of the solvent peak and stopping after the last peak.

The final concentration of Total Petroleum Hydrocarbons is calculated using percent solid, sample weight and concentration.

## PHC Conformance/Non-conformance Summary Report

No   Yes

1. Method Detection Limits provided.

—   ☒

2. Method Blank Contamination - If yes, list the sample and the corresponding concentrations in each blank

☒   —

\_\_\_\_\_

\_\_\_\_\_

3. Matrix Spike Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

—   ☒

\_\_\_\_\_

\_\_\_\_\_

4. Duplicate Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

—   ☒

\_\_\_\_\_

\_\_\_\_\_

5. IR Spectra submitted for standards, blanks, & samples

—   NA   —

6. Chromatograms submitted for standards, blanks, and samples if GC fingerprinting was conducted.

—   ☒

7. Analysis holding time met.

(If not met, list number of days exceeded for each sample)

—   ☒

\_\_\_\_\_

\_\_\_\_\_

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Laboratory Authentication Statement

I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analysis. I have personally examined the information contained in this report, and to the best of my knowledge, I believe that the submitted information is true, accurate, complete, and meets the above referenced standards where applicable. I am aware that there are significant penalties for purposefully submitting falsified information, including the possibility of a fine and imprisonment.

  
\_\_\_\_\_  
Daniel K. Wright  
Laboratory Manager

# Fort Monmouth Environmental Testing Laboratory

**Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703**

Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil

**NJDEP Certification #13461**

## Chain of Custody Record

[illegible]

Report of Analysis  
U.S. Army, Fort Monmouth Environmental Laboratory  
NJDEP Certification # 13461

Client : U.S. Army Lab. ID # : 3670  
DPW. SELFM-PW-EV Date Rec'd: 18-Jun-98  
Bldg. 173 Analysis Start: 18-Jun-98  
Ft. Monmouth, NJ 07703 Analysis Complete: 18-Jun-98

Analysis: OQA-QAM-025 UST Reg. #:  
Matrix: Soil Closure #:  
Analyst: D.DEINHARDT DICAR #:  
Ext. Meth: Shake Location #: BLDG. 718

| Sample       | Field ID | Dilution Factor | Weight (g) | % Solid | MDL (mg/kg) | TPHC Result (mg/kg) |
|--------------|----------|-----------------|------------|---------|-------------|---------------------|
| 3670.01      | A-4.5' D | 1.00            | 15.32      | 78.22   | 196         | ND                  |
| 3670.02      | B-4.5' D | 1.00            | 15.28      | 83.97   | 183         | ND                  |
| 3670.03      | C-4.5' D | 1.00            | 15.30      | 84.10   | 183         | ND                  |
| 3670.04      | DUPE     | 1.00            | 15.41      | 82.55   | 185         | ND                  |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
| METHOD BLANK | TBLK 117 | 1.00            | 15.00      | 100.00  | 157         | ND                  |

ND = Not Detected  
MDL = Method Detection Limit

Daniel K. Wright  
Laboratory Director



## LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT  
AND ACCOMPANY ALL DATA SUBMISSIONS

The following Laboratory Deliverables checklist and Non-Conformance Summary shall be included in the data submission. All deviations from the accepted methodology and procedures, of performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The Technical Requirements for Site Remediation, effective June 7, 1993, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits, practical quantitation limits, and the laboratory and/or sample numbers be included in one section of the data package and in the main body of the report.

- |                                                                                                              |                                     |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1. Cover page, Title Page listing Lab Certification #, facility name and address, & date of report submitted | <input checked="" type="checkbox"/> |
| 2. Table of Contents submitted                                                                               | <input checked="" type="checkbox"/> |
| 3. Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted           | <input checked="" type="checkbox"/> |
| 4. Document paginated and legible                                                                            | <input checked="" type="checkbox"/> |
| 5. Chain of Custody submitted                                                                                | <input checked="" type="checkbox"/> |
| 6. Samples submitted to lab within 48 hours of sample collection                                             | <input checked="" type="checkbox"/> |
| 7. Methodology Summary submitted                                                                             | <input checked="" type="checkbox"/> |
| 8. Laboratory Chronicle and Holding Time Check submitted                                                     | <input checked="" type="checkbox"/> |
| 9. Results submitted on a dry weight basis                                                                   | <input checked="" type="checkbox"/> |
| 10. Method Detection Limits submitted                                                                        | <input checked="" type="checkbox"/> |
| 11. Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP | <input checked="" type="checkbox"/> |

Laboratory Manager or Environmental Consultant's Signature

Date 7/6/94

Laboratory Certification #13461

\*Refer to NJAC 7:26E - Appendix A, Section IV - Reduced Data Deliverables - Non-USEPA/CLP  
Methods for further guidance.

**US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY**  
**NJDEPE # 13461**

**REPORT OF ANALYSIS**

**Client:** U.S. Army  
DPW, SELFM-PW-EV  
Bldg. 173  
Ft. Monmouth, NJ 07703

**Project:** Total Petroleum Hydrocarbons  
98-0001  
Bldg. 718

Project # 3675  
Date Rec. 06/19/98  
Date Compl. 06/22/98  
Released by:

  
Daniel K. Wright Date: 7-6-98  
Laboratory Director

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## **Method Summary**

### **NJDEP Method OQA-QAM-025-10/97**

#### **Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil**

Fifteen grams (15g)(wet weight) of a soil sample is added to a 125 mL acid cleaned, solvent rinsed, capped Erlenmeyer flask. 15g anhydrous sodium sulfate is added to dry sample. Surrogate standard spiking solution is then added to the flask.

Twenty five milliliters(25mL) Methylene Chloride is added to the flask and it is secured on a gyrotory shaker table. The agitation rate is set to 400rpm and the sample is shaken for 30 minutes. The flask is the removed from the table and the particulate matter is allowed to settle. The extract is transferred to a Teflon capped vial. A second 25mL of Methylene Chloride is added to the flask and shaken for an additional 30 minutes. The flask is again removed and allowed to settle. The extracts are combined in the vial then transferred to a 1mL autosampler vial.

The extract is then injected directly into a GC-FID for analysis. The sample is analyzed for petroleum hydrocarbons covering a range of C8-C42 including pristane and phytane. Total Petroleum Hydrocarbon concentration is determined by integrating between 5 minutes and 22 minutes. The baseline is established by starting the integration after the end of the solvent peak and stopping after the last peak.

The final concentration of Total Petroleum Hydrocarbons is calculated using percent solid, sample weight and concentration.

## PHC Conformance/Non-conformance Summary Report

No   Yes

1. Method Detection Limits provided.

—   ☒

2. Method Blank Contamination - If yes, list the sample and the corresponding concentrations in each blank

☒   —

3. Matrix Spike Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

—   ☒

4. Duplicate Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

—   ☒

5. IR Spectra submitted for standards, blanks, & samples

—   NA   —

6. Chromatograms submitted for standards, blanks, and samples if GC fingerprinting was conducted.

—   ☒

7. Analysis holding time met.

(If not met, list number of days exceeded for each sample)

—   ☒

Additional Comments: \_\_\_\_\_

### Laboratory Authentication Statement

I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analysis. I have personally examined the information contained in this report, and to the best of my knowledge, I believe that the submitted information is true, accurate, complete, and meets the above referenced standards where applicable. I am aware that there are significant penalties for purposefully submitting falsified information, including the possibility of a fine and imprisonment.

  
\_\_\_\_\_  
Daniel K. Wright  
Laboratory Manager



NJDEP Certification #13461

## Chain of Custody Record

[illegible]

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 # : 3675  
Date Rec'd: 19-Jun-98  
Analysis Start: 22-Jun-98  
Analysis Complete: 22-Jun-98

Analysis: OQA-QAM-025  
Matrix: Soil  
Analyst: D.DEINHARDT  
Ext. Meth: Shake

UST Reg. #:  
Closure #:  
DICAR #:  
Location #: BLDG. 286

| Sample       | Field ID | Dilution Factor | Weight (g) | % Solid | MDL (mg/kg) | TPHC Result (mg/kg) |
|--------------|----------|-----------------|------------|---------|-------------|---------------------|
| 3675.01      | 718-A    | 1.00            | 15.08      | 78.34   | 199         | ND                  |
| 3675.02      | 718-B    | 1.00            | 15.86      | 75.86   | 195         | ND                  |
| 3675.03      | 718-C    | 1.00            | 15.04      | 77.04   | 203         | 208.69              |
| 3675.04      | 718-DUP  | 1.00            | 15.26      | 75.32   | 204         | ND                  |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
|              |          |                 |            |         |             |                     |
| METHOD BLANK | TBLK 118 | 1.00            | 15.00      | 100.00  | 157         | ND                  |

ND = Not Detected

MDL = Method Detection Limit



Daniel K. Wright  
Laboratory Director

## LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT  
AND ACCOMPANY ALL DATA SUBMISSIONS

The following Laboratory Deliverables checklist and Non-Conformance Summary shall be included in the data submission. All deviations from the accepted methodology and procedures, of performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The Technical Requirements for Site Remediation, effective June 7, 1993, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits, practical quantitation limits, and the laboratory and/or sample numbers be included in one section of the data package and in the main body of the report.

- |                                                                                                              |                                     |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1. Cover page, Title Page listing Lab Certification #, facility name and address, & date of report submitted | <input checked="" type="checkbox"/> |
| 2. Table of Contents submitted                                                                               | <input checked="" type="checkbox"/> |
| 3. Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted           | <input checked="" type="checkbox"/> |
| 4. Document paginated and legible                                                                            | <input checked="" type="checkbox"/> |
| 5. Chain of Custody submitted                                                                                | <input checked="" type="checkbox"/> |
| 6. Samples submitted to lab within 48 hours of sample collection                                             | <input checked="" type="checkbox"/> |
| 7. Methodology Summary submitted                                                                             | <input checked="" type="checkbox"/> |
| 8. Laboratory Chronicle and Holding Time Check submitted                                                     | <input checked="" type="checkbox"/> |
| 9. Results submitted on a dry weight basis                                                                   | <input checked="" type="checkbox"/> |
| 10. Method Detection Limits submitted                                                                        | <input checked="" type="checkbox"/> |
| 11. Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP | <input checked="" type="checkbox"/> |

Laboratory Manager or Environmental Consultant's Signature

Date 7/6/96

Laboratory Certification #13461

\*Refer to NJAC 7:26E - Appendix A, Section IV - Reduced Data Deliverables - Non-USEPA/CLP  
Methods for further guidance.



**APPENDIX F**

**GROUNDWATER ANALYTICAL DATA PACKAGE**

# FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732)532-6224 FAX: (732)532-3484

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

NJDEP LABORATORY CERTIFICATION # 13461



ANALYTICAL DATA REPORT  
Fort Monmouth Environmental Laboratory  
ENVIRONMENTAL DIVISION  
Fort Monmouth, New Jersey  
PROJECT: UST Program

## BLDG. 718

| Field Location No. &<br>Location | Laboratory<br>Sample ID# | Matrix  | Date and Time<br>Of Collection | Date Received |
|----------------------------------|--------------------------|---------|--------------------------------|---------------|
| Trip Blank                       | 4003.01                  | Aqueous | 24-Oct-98                      | 10/26/98      |
| Field Blank                      | 4003.02                  | Aqueous | 24-Oct-98 08:45                | 10/26/98      |
| Bldg. 718 - 6.0'                 | 4003.04                  | Aqueous | 24-Oct-98 10:15                | 10/26/98      |

ANALYSIS:  
FORT MONMOUTH ENVIRONMENTAL LAB.  
VOA+15, BN+15

  
Daniel Wright/Date  
Laboratory Director

ENCLOSURE:  
CHAIN OF CUSTODY  
FIELD DOCUMENTATION  
RESULTS

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# Fort Monmouth Environmental Testing Laboratory

**Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703**

Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doim6.monmouth.army.mil

**NJDEP Certification #13461**

## Chain of Custody Record

[illegible]

All samples were preserved in the field immediately after collection and submitted to the laboratory as soon as possible and no later than 48 hours after sample collection.

The acquisition of samples and water level measurements were performed as recommended and described in the May 1992 edition of NJDEP Field Sampling Procedures Manual.

## 5. Quality Assurance/Quality Control

### A. Decontamination

The associated equipment (bull point, riser pipe, etc.) was decontaminated between borings using the following procedure:

1. Remove all adherent soil material.
2. Wash with a laboratory grade glassware detergent.
3. Rinsed with potable water.
4. Rinse with distilled and deionized ASTM Type II water.

### B. Field Blanks

1 Field blank was shared with bldg. 671 taken on same day.

C. Sample bottles: Supplied by Environmental Sampling Supply, Oakland, Calif. The sample bottles are certified clean and are sealed upon delivery.

D. P.V.C. Screens: Supplied by Bedrock Enterprises, Forked River N.J.

Geoprobe Operator: Mark Laura  
Employer: U.S. Army, Fort Monmouth  
Phone Number: [732] 532-8990  
NJDEP License #: J-1486

Mark Laura 12-2-98  
Mark Laura / Date

# METHODOLOGY SUMMARY

## **Methodology Summary**

### **EPA Method 624**

#### **Gas Chromatographic Determination of Volatiles in Water**

Surrogates and internal standards are added to a 5 ml aliquot of sample. The sample is then purged and desorbed into a GC/MS system. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer. Volatiles are identified and quantitated.

### **EPA Method 3510/8270**

#### **Gas Chromatographic Determination of Semi-volatiles in Water**

Surrogates are added to a measured volume of sample, usually 1 liter, at a specified pH. The sample is serially extracted with Methylene Chloride using a separatory funnel. The extract concentrated and internal standards are added. The sample is injected into a GC/MS system. Semi-volatiles are identified and quantitated.

# CONFORMANCE/ NON-CONFORMANCE SUMMARY

0008



# GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate  
Yes, No, N/A

1. Chromatograms labeled/Compounds identified  
(Field samples and method blanks) yes
2. Retention times for chromatograms provided yes
3. GC/MS Tune Specifications
  - a. BFB Meet Criteria yes
  - b. DFTPP Meet Criteria yes
4. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series yes
5. GC/MS Calibration – Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series yes
6. GC/MS Calibration requirements
  - a. Calibration Check Compounds Meet Criteria yes
  - b. System Performance Check Compounds Meet Criteria yes
7. Blank Contamination – If yes, List compounds and concentrations in each blank: NO
  - a. VOA Fraction \_\_\_\_\_
  - b. B/N Fraction \_\_\_\_\_
  - c. Acid Fraction NA
8. Surrogate Recoveries Meet Criteria yes

If not met, list those compounds and their recoveries, which fall outside the acceptable range:

  - a. VOA Fraction \_\_\_\_\_
  - b. B/N Fraction \_\_\_\_\_
  - c. Acid Fraction NA

If not met, were the calculations checked and the results qualified as “estimated”?

\_\_\_\_\_
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria yes

(If not met, list those compounds and their recoveries, which fall outside the acceptable range)

  - a. VOA Fraction \_\_\_\_\_
  - b. B/N Fraction \_\_\_\_\_
  - c. Acid Fraction NA

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (cont.)

Indicate  
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria  
(If not met, list those compounds, which fall outside the acceptable range)

yes

- a. VOA Fraction \_\_\_\_\_  
b. B/N Fraction \_\_\_\_\_  
c. Acid Fraction \_\_\_\_\_

11. Extraction Holding Time Met

yes

If not met, list the number of days exceeded for each sample: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Analysis Holding Time Met

yes

If not met, list the number of days exceeded for each sample: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Additional Comments:

Field duplicate performed on 4003.05 (Bldg 906)  
\_\_\_\_\_  
\_\_\_\_\_

Laboratory Manager: \_\_\_\_\_

Date: 12/3/98

# LABORATORY CHRONICLE

# Laboratory Chronicle

**Lab ID:** 4003

**Site:** Bldg. 718

|                              | <b>Date</b>       | <b>Hold Time</b> |
|------------------------------|-------------------|------------------|
| <b>Date Sampled</b>          | 10/24/98          | NA               |
| <b>Receipt/Refrigeration</b> | 10/26/98          | NA               |
| <b>Extractions</b>           |                   |                  |
| 1. Base Neutrals             | 10/27/98          | 14 days          |
| <b>Analyses</b>              |                   |                  |
| 1. Volatiles                 | 10/28,29/98       | 14 days          |
| 2. Base Neutrals             | 10/31/98,11/04/98 | 40 days          |

# VOLATILE ORGANICS

**US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY**  
**NJDEPE # 13461**

**Definition of Qualifiers**

**MDL** : Method Detection Limit  
**J** : Compound identified below detection limit  
**B** : Compound in both sample and blank  
**D** : Results from dilution of sample  
**U** : Compound searched for but not detected

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam vb01881.d  
 Operator Skelton  
 Date Acquired 28 Oct 98 9:12 am

Sample Name VBLK61  
 Field ID VBLK61  
 Sample Multiplier 1

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethan   |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane            |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride           |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane             |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane             |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane   |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                  |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide         |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane       |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate            |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone               |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene   |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform               |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane    |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride     |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                  |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane       |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene          |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane      |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane     |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

**Vblk61**

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4003 SDG No        Location UST  
Matrix (soil/water) WATER Lab Sample ID: VBLK61  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01881.D  
Level: (low/med) LOW Date Received: 10/26/98  
% Moisture: not dec.        Date Analyzed: 10/28/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|



**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam **vb01898.d**  
 Operator **Skelton**  
 Date Acquired **28 Oct 98 10:08 pm**

Sample Name **4003.01**  
 Field ID **Trip Blank**  
 Sample Multiplier **1**

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethan   |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane            |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride           |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane             |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane             |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane   |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                  |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide         |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane       |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate            |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone               |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene   |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform               |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane    |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride     |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                  |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane       |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene          |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane      |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane     |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

0017

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

**Trip Blank**

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4003 SDG No        Location UST  
Matrix (soil/water) WATER Lab Sample ID: 4003.01  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01898.D  
Level: (low/med) LOW Date Received: 10/26/98  
% Moisture: not dec.        Date Analyzed: 10/28/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam vb01899.d  
 Operator Skelton  
 Date Acquired 28 Oct 98 10:53 pm

Sample Name 4003.02  
 Field ID Field Blank  
 Sample Multiplier 1

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethan   |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane            |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride           |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane             |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane             |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane   |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                  |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide         |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane       |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate            |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone               |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene   |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform               |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane    |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride     |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                  |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane       |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene          |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane      |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane     |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Blank

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4003 SDG No        Location UST  
Matrix (soil/water) WATER Lab Sample ID: 4003.02  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01899.D  
Level: (low/med) LOW Date Received: 10/26/98  
% Moisture: not dec.        Date Analyzed: 10/28/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam vb01901.d  
 Operator Skelton  
 Date Acquired 29 Oct 98 12:23 am

Sample Name 4003.04  
 Field ID Bldg 718 6.0'  
 Sample Multiplier 1

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethane  |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane            |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride           |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane             |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane             |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane   |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                  |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide         |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane       |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate            |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone               |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene   |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform               |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane    |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride     |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                  |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane       |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene          |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane      |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane     |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

0021

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg718

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4003 SDG No        Location UST  
Matrix (soil/water) WATER Lab Sample ID: 4003.04  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01901.D  
Level: (low/med) LOW Date Received: 10/26/98  
% Moisture: not dec.        Date Analyzed: 10/29/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

# BASE NEUTRALS

**Semi-Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Name   bna01125.d  
 Operator         Skelton  
 Date Acquired    4 Nov 1998  1:02 am

Sample Name       SBLK153  
 Misc Info         SBLK153 A 981027  
 Sample Multiplier   1

| CAS#     | Name                        | R.T. | Response | Result       | GW<br>Criteria | MDL       | Qualifiers |
|----------|-----------------------------|------|----------|--------------|----------------|-----------|------------|
| 110-86-1 | Pyridine                    |      |          | not detected | NLE            | 2.52 ug/L |            |
| 62-75-9  | N-nitroso-dimethylamine     |      |          | not detected | 20             | 2.64 ug/L |            |
| 62-53-3  | Aniline                     |      |          | not detected | NLE            | 2.90 ug/L |            |
| 111-44-4 | bis(2-Chloroethyl)ether     |      |          | not detected | 10             | 2.45 ug/L |            |
| 541-73-1 | 1,3-Dichlorobenzene         |      |          | not detected | 600            | 2.65 ug/L |            |
| 106-46-7 | 1,4-Dichlorobenzene         |      |          | not detected | 75             | 2.50 ug/L |            |
| 100-51-6 | Benzyl alcohol              |      |          | not detected | NLE            | 2.09 ug/L |            |
| 95-50-1  | 1,2-Dichlorobenzene         |      |          | not detected | 600            | 2.44 ug/L |            |
| 108-60-1 | bis(2-chloroisopropyl)ether |      |          | not detected | 300            | 2.96 ug/L |            |
| 621-64-7 | n-Nitroso-di-n-propylamine  |      |          | not detected | 20             | 2.22 ug/L |            |
| 67-72-1  | Hexachloroethane            |      |          | not detected | 10             | 2.59 ug/L |            |
| 98-95-3  | Nitrobenzene                |      |          | not detected | 10             | 2.45 ug/L |            |
| 111-91-1 | bis(2-Chloroethoxy)methane  |      |          | not detected | NLE            | 2.54 ug/L |            |
| 120-82-1 | 1,2,4-Trichlorobenzene      |      |          | not detected | 9              | 2.58 ug/L |            |
| 91-20-3  | Naphthalene                 |      |          | not detected | NLE            | 3.03 ug/L |            |
| 106-47-8 | 4-Chloroaniline             |      |          | not detected | NLE            | 2.55 ug/L |            |
| 87-68-3  | Hexachlorobutadiene         |      |          | not detected | 1              | 0.64 ug/L |            |
| 91-57-6  | 2-Methylnaphthalene         |      |          | not detected | NLE            | 2.49 ug/L |            |
| 77-47-4  | Hexachlorocyclopentadiene   |      |          | not detected | 50             | 1.59 ug/L |            |
| 91-58-7  | 2-Chloronaphthalene         |      |          | not detected | NLE            | 2.15 ug/L |            |
| 88-74-4  | 2-Nitroaniline              |      |          | not detected | NLE            | 1.62 ug/L |            |
| 131-11-3 | Dimethylphthalate           |      |          | not detected | 7000           | 2.74 ug/L |            |
| 208-96-8 | Acenaphthylene              |      |          | not detected | NLE            | 2.35 ug/L |            |
| 606-20-2 | 2,6-Dinitrotoluene          |      |          | not detected | NLE            | 1.54 ug/L |            |
| 99-09-2  | 3-Nitroaniline              |      |          | not detected | NLE            | 1.62 ug/L |            |
| 83-32-9  | Acenaphthene                |      |          | not detected | 400            | 1.98 ug/L |            |
| 132-64-9 | Dibenzofuran                |      |          | not detected | NLE            | 2.13 ug/L |            |



# Semi-Volatile Analysis Report

## Page 2

Data File Name **bna01125.d**  
 Operator **Skelton**  
 Date Acquired **4 Nov 1998 1:02 am**

Sample Name **SBLK153**  
 Misc Info **SBLK153 A 981027**  
 Sample Multiplier **1**

|           |                            |  |              |      |      |      |
|-----------|----------------------------|--|--------------|------|------|------|
| 121-14-2  | 2,4-Dinitrotoluene         |  | not detected | 10   | 1.22 | ug/L |
| 84-66-2   | Diethylphthalate           |  | not detected | 5000 | 1.68 | ug/L |
| 86-73-7   | Fluorene                   |  | not detected | 300  | 1.93 | ug/L |
| 7005-72-3 | 4-Chlorophenyl-phenylether |  | not detected | NLE  | 1.53 | ug/L |
| 100-01-6  | 4-Nitroaniline             |  | not detected | NLE  | 2.70 | ug/L |
| 86-30-6   | n-Nitrosodiphenylamine     |  | not detected | 20   | 1.73 | ug/L |
| 103-33-3  | Azobenzene                 |  | not detected | NLE  | 1.92 | ug/L |
| 101-55-3  | 4-Bromophenyl-phenylether  |  | not detected | NLE  | 1.54 | ug/L |
| 118-74-1  | Hexachlorobenzene          |  | not detected | 10   | 1.88 | ug/L |
| 85-01-8   | Phenanthrene               |  | not detected | NLE  | 1.67 | ug/L |
| 120-12-7  | Anthracene                 |  | not detected | 2000 | 1.79 | ug/L |
| 84-74-2   | Di-n-butylphthalate        |  | not detected | 900  | 1.83 | ug/L |
| 206-44-0  | Fluoranthene               |  | not detected | 300  | 1.85 | ug/L |
| 92-87-5   | Benzidine                  |  | not detected | 50   | 4.11 | ug/L |
| 129-00-0  | Pyrene                     |  | not detected | 200  | 1.02 | ug/L |
| 85-68-7   | Butylbenzylphthalate       |  | not detected | 100  | 1.15 | ug/L |
| 56-55-3   | Benzo[a]anthracene         |  | not detected | 10   | 1.57 | ug/L |
| 91-94-1   | 3,3'-Dichlorobenzidine     |  | not detected | 60   | 2.28 | ug/L |
| 218-01-9  | Chrysene                   |  | not detected | 20   | 2.32 | ug/L |
| 117-81-7  | bis(2-Ethylhexyl)phthalate |  | not detected | 30   | 1.29 | ug/L |
| 117-84-0  | Di-n-octylphthalate        |  | not detected | 100  | 1.30 | ug/L |
| 205-99-2  | Benzo[b]fluoranthene       |  | not detected | 10   | 1.31 | ug/L |
| 207-08-9  | Benzo[k]fluoranthene       |  | not detected | 2    | 1.57 | ug/L |
| 50-32-8   | Benzo[a]pyrene             |  | not detected | 20   | 1.36 | ug/L |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     |  | not detected | 20   | 1.22 | ug/L |
| 53-70-3   | Dibenz[a,h]anthracene      |  | not detected | 20   | 3.12 | ug/L |
| 191-24-2  | Benzo[g,h,i]perylene       |  | not detected | NLE  | 1.13 | ug/L |

### Qualifiers

E = Value exceeded linear range  
 D = Value from dilution  
 B = Compound in related blank  
 MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET      FIELD ID  
TENTATIVELY IDENTIFIED COMPOUNDS

**Sblk153**

Lab Name: FMETL      Lab Code 13461  
Project 980932      Case No.: 4003      Location UST      SDG No.: \_\_\_\_\_  
Matrix: (soil/water) WATER      Lab Sample ID: SBLK153  
Sample wt/vol: 1000 (g/ml) ML      Lab File ID: BNA01125.D  
Level: (low/med) LOW      Date Received: 10/26/98  
% Moisture: \_\_\_\_\_ decanted: (Y/N) N      Date Extracted: 10/27/98  
Concentrated Extract Volume: 1000 (uL)      Date Analyzed: 11/04/98  
Injection Volume: 1.0 (uL)      Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N      pH: 7

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 **bn01078.d**  
 Operator **Skelton**  
 Date Acquired **31 Oct 1998 5:56 am**

Sample Name **4003.02**  
 Misc Info **Field Blank**  
 Sample Multiplier **1**

| CAS#     | Name                        | R.T. | Response | Result       | GW<br>Criteria | MDL       | Qualifiers |
|----------|-----------------------------|------|----------|--------------|----------------|-----------|------------|
| 110-86-1 | Pyridine                    |      |          | not detected | NLE            | 2.52 ug/L |            |
| 62-75-9  | N-nitroso-dimethylamine     |      |          | not detected | 20             | 2.64 ug/L |            |
| 62-53-3  | Aniline                     |      |          | not detected | NLE            | 2.90 ug/L |            |
| 111-44-4 | bis(2-Chloroethyl)ether     |      |          | not detected | 10             | 2.45 ug/L |            |
| 541-73-1 | 1,3-Dichlorobenzene         |      |          | not detected | 600            | 2.65 ug/L |            |
| 106-46-7 | 1,4-Dichlorobenzene         |      |          | not detected | 75             | 2.50 ug/L |            |
| 100-51-6 | Benzyl alcohol              |      |          | not detected | NLE            | 2.09 ug/L |            |
| 95-50-1  | 1,2-Dichlorobenzene         |      |          | not detected | 600            | 2.44 ug/L |            |
| 108-60-1 | bis(2-chloroisopropyl)ether |      |          | not detected | 300            | 2.96 ug/L |            |
| 621-64-7 | n-Nitroso-di-n-propylamine  |      |          | not detected | 20             | 2.22 ug/L |            |
| 67-72-1  | Hexachloroethane            |      |          | not detected | 10             | 2.59 ug/L |            |
| 98-95-3  | Nitrobenzene                |      |          | not detected | 10             | 2.45 ug/L |            |
| 111-91-1 | bis(2-Chloroethoxy)methane  |      |          | not detected | NLE            | 2.54 ug/L |            |
| 120-82-1 | 1,2,4-Trichlorobenzene      |      |          | not detected | 9              | 2.58 ug/L |            |
| 91-20-3  | Naphthalene                 |      |          | not detected | NLE            | 3.03 ug/L |            |
| 106-47-8 | 4-Chloroaniline             |      |          | not detected | NLE            | 2.55 ug/L |            |
| 87-68-3  | Hexachlorobutadiene         |      |          | not detected | 1              | 0.64 ug/L |            |
| 91-57-6  | 2-Methylnaphthalene         |      |          | not detected | NLE            | 2.49 ug/L |            |
| 77-47-4  | Hexachlorocyclopentadiene   |      |          | not detected | 50             | 1.59 ug/L |            |
| 91-58-7  | 2-Chloronaphthalene         |      |          | not detected | NLE            | 2.15 ug/L |            |
| 88-74-4  | 2-Nitroaniline              |      |          | not detected | NLE            | 1.62 ug/L |            |
| 131-11-3 | Dimethylphthalate           |      |          | not detected | 7000           | 2.74 ug/L |            |
| 208-96-8 | Acenaphthylene              |      |          | not detected | NLE            | 2.35 ug/L |            |
| 606-20-2 | 2,6-Dinitrotoluene          |      |          | not detected | NLE            | 1.54 ug/L |            |
| 99-09-2  | 3-Nitroaniline              |      |          | not detected | NLE            | 1.62 ug/L |            |
| 83-32-9  | Acenaphthene                |      |          | not detected | 400            | 1.98 ug/L |            |
| 132-64-9 | Dibenzofuran                |      |          | not detected | NLE            | 2.13 ug/L |            |

# Semi-Volatile Analysis Report Page 2

Data File Name   bna01078.d  
Operator       Skelton  
Date Acquired   31 Oct 1998  5:56 am

Sample Name     4003.02  
Misc Info       Field Blank  
Sample Multiplier   1

|           |                            |  |  |              |      |      |      |  |
|-----------|----------------------------|--|--|--------------|------|------|------|--|
| 121-14-2  | 2,4-Dinitrotoluene         |  |  | not detected | 10   | 1.22 | ug/L |  |
| 84-66-2   | Diethylphthalate           |  |  | not detected | 5000 | 1.68 | ug/L |  |
| 86-73-7   | Fluorene                   |  |  | not detected | 300  | 1.93 | ug/L |  |
| 7005-72-3 | 4-Chlorophenyl-phenylether |  |  | not detected | NLE  | 1.53 | ug/L |  |
| 100-01-6  | 4-Nitroaniline             |  |  | not detected | NLE  | 2.70 | ug/L |  |
| 86-30-6   | n-Nitrosodiphenylamine     |  |  | not detected | 20   | 1.73 | ug/L |  |
| 103-33-3  | Azobenzene                 |  |  | not detected | NLE  | 1.92 | ug/L |  |
| 101-55-3  | 4-Bromophenyl-phenylether  |  |  | not detected | NLE  | 1.54 | ug/L |  |
| 118-74-1  | Hexachlorobenzene          |  |  | not detected | 10   | 1.88 | ug/L |  |
| 85-01-8   | Phenanthrene               |  |  | not detected | NLE  | 1.67 | ug/L |  |
| 120-12-7  | Anthracene                 |  |  | not detected | 2000 | 1.79 | ug/L |  |
| 84-74-2   | Di-n-butylphthalate        |  |  | not detected | 900  | 1.83 | ug/L |  |
| 206-44-0  | Fluoranthene               |  |  | not detected | 300  | 1.85 | ug/L |  |
| 92-87-5   | Benidine                   |  |  | not detected | 50   | 4.11 | ug/L |  |
| 129-00-0  | Pyrene                     |  |  | not detected | 200  | 1.02 | ug/L |  |
| 85-68-7   | Butylbenzylphthalate       |  |  | not detected | 100  | 1.15 | ug/L |  |
| 56-55-3   | Benzo[a]anthracene         |  |  | not detected | 10   | 1.57 | ug/L |  |
| 91-94-1   | 3,3'-Dichlorobenzidine     |  |  | not detected | 60   | 2.28 | ug/L |  |
| 218-01-9  | Chrysene                   |  |  | not detected | 20   | 2.32 | ug/L |  |
| 117-81-7  | bis(2-Ethylhexyl)phthalate |  |  | not detected | 30   | 1.29 | ug/L |  |
| 117-84-0  | Di-n-octylphthalate        |  |  | not detected | 100  | 1.30 | ug/L |  |
| 205-99-2  | Benzo[b]fluoranthene       |  |  | not detected | 10   | 1.31 | ug/L |  |
| 207-08-9  | Benzo[k]fluoranthene       |  |  | not detected | 2    | 1.57 | ug/L |  |
| 50-32-8   | Benzo[a]pyrene             |  |  | not detected | 20   | 1.36 | ug/L |  |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     |  |  | not detected | 20   | 1.22 | ug/L |  |
| 53-70-3   | Dibenz[a,h]anthracene      |  |  | not detected | 20   | 3.12 | ug/L |  |
| 191-24-2  | Benzo[g,h,i]perylene       |  |  | not detected | NLE  | 1.13 | ug/L |  |

## Qualifiers

E = Value exceded linear range  
D = Value from dilution  
B = Compound in related blank  
MDL = Method Detection Limit  
NLE = No Limit Established  
R.T. = Retention Time

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Blank

Lab Name: FMETL Lab Code 13461  
Project 980932 Case No.: 4003 Location UST SDG No.:             
Matrix: (soil/water) WATER Lab Sample ID: 4003.02  
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01078.D  
Level: (low/med) LOW Date Received: 10/26/98  
% Moisture:            decanted: (Y/N) N Date Extracted: 10/27/98  
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/31/98  
Injection Volume: 1.0 (uL) Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: 7

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   bna01080.d  
 Operator         Skelton  
 Date Acquired    31 Oct 1998  7:19 am

Sample Name       4003.04  
 Misc Info         Bldg 718 6.0'  
 Sample Multiplier   1

| CAS#     | Name                        | R.T. | Response | Result       | GW<br>Criteria | MDL       | Qualifiers |
|----------|-----------------------------|------|----------|--------------|----------------|-----------|------------|
| 110-86-1 | Pyridine                    |      |          | not detected | NLE            | 2.52 ug/L |            |
| 62-75-9  | N-nitroso-dimethylamine     |      |          | not detected | 20             | 2.64 ug/L |            |
| 62-53-3  | Aniline                     |      |          | not detected | NLE            | 2.90 ug/L |            |
| 111-44-4 | bis(2-Chloroethyl)ether     |      |          | not detected | 10             | 2.45 ug/L |            |
| 541-73-1 | 1,3-Dichlorobenzene         |      |          | not detected | 600            | 2.65 ug/L |            |
| 106-46-7 | 1,4-Dichlorobenzene         |      |          | not detected | 75             | 2.50 ug/L |            |
| 100-51-6 | Benzyl alcohol              |      |          | not detected | NLE            | 2.09 ug/L |            |
| 95-50-1  | 1,2-Dichlorobenzene         |      |          | not detected | 600            | 2.44 ug/L |            |
| 108-60-1 | bis(2-chloroisopropyl)ether |      |          | not detected | 300            | 2.96 ug/L |            |
| 621-64-7 | n-Nitroso-di-n-propylamine  |      |          | not detected | 20             | 2.22 ug/L |            |
| 67-72-1  | Hexachloroethane            |      |          | not detected | 10             | 2.59 ug/L |            |
| 98-95-3  | Nitrobenzene                |      |          | not detected | 10             | 2.45 ug/L |            |
| 111-91-1 | bis(2-Chloroethoxy)methane  |      |          | not detected | NLE            | 2.54 ug/L |            |
| 120-82-1 | 1,2,4-Trichlorobenzene      |      |          | not detected | 9              | 2.58 ug/L |            |
| 91-20-3  | Naphthalene                 |      |          | not detected | NLE            | 3.03 ug/L |            |
| 106-47-8 | 4-Chloroaniline             |      |          | not detected | NLE            | 2.55 ug/L |            |
| 87-68-3  | Hexachlorobutadiene         |      |          | not detected | 1              | 0.64 ug/L |            |
| 91-57-6  | 2-Methylnaphthalene         |      |          | not detected | NLE            | 2.49 ug/L |            |
| 77-47-4  | Hexachlorocyclopentadiene   |      |          | not detected | 50             | 1.59 ug/L |            |
| 91-58-7  | 2-Chloronaphthalene         |      |          | not detected | NLE            | 2.15 ug/L |            |
| 88-74-4  | 2-Nitroaniline              |      |          | not detected | NLE            | 1.62 ug/L |            |
| 131-11-3 | Dimethylphthalate           |      |          | not detected | 7000           | 2.74 ug/L |            |
| 208-96-8 | Acenaphthylene              |      |          | not detected | NLE            | 2.35 ug/L |            |
| 606-20-2 | 2,6-Dinitrotoluene          |      |          | not detected | NLE            | 1.54 ug/L |            |
| 99-09-2  | 3-Nitroaniline              |      |          | not detected | NLE            | 1.62 ug/L |            |
| 83-32-9  | Acenaphthene                |      |          | not detected | 400            | 1.98 ug/L |            |
| 132-64-9 | Dibenzofuran                |      |          | not detected | NLE            | 2.13 ug/L |            |

# Semi-Volatile Analysis Report Page 2

Data File Name **bna01080.d**  
Operator **Skelton**  
Date Acquired **31 Oct 1998 7:19 am**

Sample Name **4003.04**  
Misc Info **Bldg 718 6.0'**  
Sample Multiplier **1**

|           |                            |  |  |              |      |      |      |  |
|-----------|----------------------------|--|--|--------------|------|------|------|--|
| 121-14-2  | 2,4-Dinitrotoluene         |  |  | not detected | 10   | 1.22 | ug/L |  |
| 84-66-2   | Diethylphthalate           |  |  | not detected | 5000 | 1.68 | ug/L |  |
| 86-73-7   | Fluorene                   |  |  | not detected | 300  | 1.93 | ug/L |  |
| 7005-72-3 | 4-Chlorophenyl-phenylether |  |  | not detected | NLE  | 1.53 | ug/L |  |
| 100-01-6  | 4-Nitroaniline             |  |  | not detected | NLE  | 2.70 | ug/L |  |
| 86-30-6   | n-Nitrosodiphenylamine     |  |  | not detected | 20   | 1.73 | ug/L |  |
| 103-33-3  | Azobenzene                 |  |  | not detected | NLE  | 1.92 | ug/L |  |
| 101-55-3  | 4-Bromophenyl-phenylether  |  |  | not detected | NLE  | 1.54 | ug/L |  |
| 118-74-1  | Hexachlorobenzene          |  |  | not detected | 10   | 1.88 | ug/L |  |
| 85-01-8   | Phenanthrene               |  |  | not detected | NLE  | 1.67 | ug/L |  |
| 120-12-7  | Anthracene                 |  |  | not detected | 2000 | 1.79 | ug/L |  |
| 84-74-2   | Di-n-butylphthalate        |  |  | not detected | 900  | 1.83 | ug/L |  |
| 206-44-0  | Fluoranthene               |  |  | not detected | 300  | 1.85 | ug/L |  |
| 92-87-5   | Benzidine                  |  |  | not detected | 50   | 4.11 | ug/L |  |
| 129-00-0  | Pyrene                     |  |  | not detected | 200  | 1.02 | ug/L |  |
| 85-68-7   | Butylbenzylphthalate       |  |  | not detected | 100  | 1.15 | ug/L |  |
| 56-55-3   | Benzo[a]anthracene         |  |  | not detected | 10   | 1.57 | ug/L |  |
| 91-94-1   | 3,3'-Dichlorobenzidine     |  |  | not detected | 60   | 2.28 | ug/L |  |
| 218-01-9  | Chrysene                   |  |  | not detected | 20   | 2.32 | ug/L |  |
| 117-81-7  | bis(2-Ethylhexyl)phthalate |  |  | not detected | 30   | 1.29 | ug/L |  |
| 117-84-0  | Di-n-octylphthalate        |  |  | not detected | 100  | 1.30 | ug/L |  |
| 205-99-2  | Benzo[b]fluoranthene       |  |  | not detected | 10   | 1.31 | ug/L |  |
| 207-08-9  | Benzo[k]fluoranthene       |  |  | not detected | 2    | 1.57 | ug/L |  |
| 50-32-8   | Benzo[a]pyrene             |  |  | not detected | 20   | 1.36 | ug/L |  |
| 193-39-5  | Indeno[1,2,3-cd]pyrene     |  |  | not detected | 20   | 1.22 | ug/L |  |
| 53-70-3   | Dibenz[a,h]anthracene      |  |  | not detected | 20   | 3.12 | ug/L |  |
| 191-24-2  | Benzo[g,h,i]perylene       |  |  | not detected | NLE  | 1.13 | ug/L |  |

## Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET      FIELD ID  
TENTATIVELY IDENTIFIED COMPOUNDS

Bldg 718

Lab Name: FMETL      Lab Code 13461

Project 980932      Case No.: 4003      Location UST      SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER      Lab Sample ID: 4003.04

Sample wt/vol: 1000 (g/ml) ML      Lab File ID: BNA01080.D

Level: (low/med) LOW      Date Received: 10/26/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N      Date Extracted: 10/27/98

Concentrated Extract Volume: 1000 (uL)      Date Analyzed: 10/31/98

Injection Volume: 1.0 (uL)      Dilution Factor: 1.0

GPC Cleanup: (Y/N) N      pH: 7

CONCENTRATION UNITS:

Number TICs found: 0      (ug/L or ug/Kg)      UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|



## LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT  
AND ACCOMPANY ALL DATA SUBMISSIONS

The following Laboratory Deliverables checklist and Non-Conformance Summary shall be included in the data submission. All deviations from the accepted methodology and procedures, of performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The Technical Requirements for Site Remediation, effective June 7, 1993, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits, practical quantitation limits, and the laboratory and/or sample numbers be included in one section of the data package and in the main body of the report.

1. Cover page, Title Page listing Lab Certification #, facility name and address, & date of report submitted
2. Table of Contents submitted
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted
4. Document paginated and legible
5. Chain of Custody submitted
6. Samples submitted to lab within 48 hours of sample collection
7. Methodology Summary submitted
8. Laboratory Chronicle and Holding Time Check submitted
9. Results submitted on a dry weight basis
10. Method Detection Limits submitted
11. Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP

✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓

Laboratory Manager or Environmental Consultant's Signature

Date 12/3/96



Laboratory Certification #13461

\*Refer to NJAC 7:26E - Appendix A, Section IV - Reduced Data Deliverables - Non-USEPA/CLP  
Methods for further guidance.

## **Laboratory Authentication Statement**

I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW-846 for Solid Waste Analysis. I have personally examined the information contained in this report and to the best of my knowledge, I believe that the submitted information is true, accurate, complete and meets the above referenced standards where applicable. I am aware that there are significant penalties for purposefully submitting falsified information, including the possibility of a fine and imprisonment.



**Daniel K. Wright**  
**Laboratory Manager**

# FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732)632-6224 FAX: (732)632-3484

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

NJDEP LABORATORY CERTIFICATION # 13461



ANALYTICAL DATA REPORT  
Fort Monmouth Environmental Laboratory  
ENVIRONMENTAL DIVISION  
Fort Monmouth, New Jersey  
PROJECT: UST Program

## Bldg. 718

| Field Location No. &<br>Location | Laboratory<br>Sample ID# | Matrix  | Date and Time<br>Of Collection | Date Received |
|----------------------------------|--------------------------|---------|--------------------------------|---------------|
| Trip Blank                       | 4116.01                  | Aqueous | 07-Dec-98                      | 12/07/98      |
| Field Blank                      | 4116.02                  | Aqueous | 07-Dec-98 09:12                | 12/07/98      |
| Bldg. 718                        | 4117.01                  | Aqueous | 07-Dec-98 11:05                | 12/07/98      |
| Bldg. 718                        | 4117.02                  | Aqueous | 07-Dec-98 11:25                | 12/07/98      |

ANALYSIS:  
FORT MONMOUTH ENVIRONMENTAL LAB  
VOA+15, BN+15

  
Daniel Wright/Date  
Laboratory Director

2-7-99

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# CHAIN OF CUSTODY

000001





Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doin6.monmouth.army.mil

## Chain of Custody Record

**print legibly**

# FIELD DOCUMENTATION

000004



# Post Remedial Groundwater Sampling at Former Underground Storage Tank Site [ # 2 fuel oil ]

## FOR BLDG. # 718

### Ground Water Sampling with the use of a Passively Placed Narrow Diameter Point (PPNDP)

#### Objective:

To collect a representative groundwater sample utilizing a narrow diameter point [PPNDP] This is a small diameter [1-inch OD] screened casing passively placed in a borehole. The casing is of p.v.c. construction.

#### 1. Methods

- A. A solid push - rod (bull point) is used to create a narrow diameter hole to a depth below the water table. A piece of schedule 40 PVC screen with 0.010-inch slots and an end cap is placed to the bottom of the hole. Glues or adhesives are not used for joining the casing. Threaded PVC casing is used. No filter or gravel pack is used.

#### 2. Installation

- A. Using a Geoprobe, a borehole was advanced with a pre-probe with a diameter slightly larger than the casing. The hole was made to a depth 12 of feet. The water table was at 6 feet below ground surface.
- B. The screened section of PVC was placed into the borehole so the screened section was across the ground water table from 5 - 10 feet. Riser casing from 5 - 0 feet.

#### 3. Purging

- A. Three volumes of the standing water in the point were purged. The amount of water extracted was app. 0.123 gal. Three to five volumes are purged due to the potential for cross contamination of the screen from upper soil horizons. This was accomplished utilizing a peristaltic pump, and utilizing food grade tubing.

#### 4. Sampling

- A. Sampling methods, sample preservation requirements, sample handling times, decontamination procedure for field equipment, and frequency for field blanks, field duplicates and trip blanks conform to applicable industry methods such as those specified in the NJDEP "Field Sampling Procedures Manual" in effect as of the date on which sampling is performed. Any deviations from the methods in the "Field Sampling Procedures Manual" pursuant to N.J.A.C. 7:26E-1.6(c) has been approved by the person responsible for conducting the remediation.

000005

All samples were preserved in the field immediately after collection and submitted to the laboratory as soon as possible and no later than 48 hours after sample collection.

The acquisition of samples and water level measurements were performed as recommended and described in the May 1992 edition of NJDEP Field Sampling Procedures Manual.

## **5. Quality Assurance/Quality Control**

### **A. Decontamination**

The associated equipment (bull point, riser pipe, etc.) was decontaminated between borings using the following procedure:

1. Remove all adherent soil material.
2. Wash with a laboratory grade glassware detergent.
3. Rinsed with potable water.
4. Rinse with distilled and deionized ASTM Type II water.

### **B. Field Blanks**

1 Field blank was shared with bldg. 671 taken on same day.

C. Sample bottles: Supplied by Environmental Sampling Supply, Oakland, Calif.  
The sample bottles are certified clean and are sealed upon delivery.

D. P.V.C. Screens: Supplied by Bedrock Enterprises, Forked River N.J.

Geoprobe Operator: Mark Laura  
Employer: U.S. Army, Fort Monmouth  
Phone Number: [732] 532-8990  
NJDEP License #: J-1486

  
Mark Laura / Date

000006

# METHODOLOGY SUMMARY

000007

## **Methodology Summary**

### **EPA Method 624**

#### **Gas Chromatographic Determination of Volatiles in Water**

Surrogates and internal standards are added to a 5 ml aliquot of sample. The sample is then purged and desorbed into a GC/MS system. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer. Volatiles are identified and quantitated.

### **EPA Method 3510/8270**

#### **Gas Chromatographic Determination of Semi-volatiles in Water**

Surrogates are added to a measured volume of sample, usually 1 liter, at a specified pH. The sample is serially extracted with Methylene Chloride using a separatory funnel. The extract concentrated and internal standards are added. The sample is injected into a GC/MS system. Semi-volatiles are identified and quantitated.

# CONFORMANCE/ NON-CONFORMANCE SUMMARY

000009

## GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate  
Yes, No, N/A

1. Chromatograms labeled/Compounds identified  
(Field samples and method blanks) yes
2. Retention times for chromatograms provided yes
3. GC/MS Tune Specifications
  - a. BFB Meet Criteria yes
  - b. DFTPP Meet Criteria yes
4. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series yes
5. GC/MS Calibration – Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series yes
6. GC/MS Calibration requirements
  - a. Calibration Check Compounds Meet Criteria yes
  - b. System Performance Check Compounds Meet Criteria yes
7. Blank Contamination – If yes, List compounds and concentrations in each blank: no
  - a. VOA Fraction \_\_\_\_\_
  - b. B/N Fraction \_\_\_\_\_
  - c. Acid Fraction N/A
8. Surrogate Recoveries Meet Criteria yes

If not met, list those compounds and their recoveries, which fall outside the acceptable range:

  - a. VOA Fraction \_\_\_\_\_
  - b. B/N Fraction \_\_\_\_\_
  - c. Acid Fraction N/A

If not met, were the calculations checked and the results qualified as "estimated"? \_\_\_\_\_
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria yes

(If not met, list those compounds and their recoveries, which fall outside the acceptable range)

  - a. VOA Fraction \_\_\_\_\_
  - b. B/N Fraction \_\_\_\_\_
  - c. Acid Fraction N/A

000010

**GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (cont.)**

Indicate  
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria  
(If not met, list those compounds, which fall outside the acceptable range)

Yes

- a. VOA Fraction \_\_\_\_\_  
b. B/N Fraction \_\_\_\_\_  
c. Acid Fraction 100 \_\_\_\_\_

11. Extraction Holding Time Met

Yes

If not met, list the number of days exceeded for each sample: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Analysis Holding Time Met

Yes

If not met, list the number of days exceeded for each sample: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Additional Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Laboratory Manager: \_\_\_\_\_

Date: 2-7-99

000011

# LABORATORY CHRONICLE

000012



# Laboratory Chronicle

**Lab ID:** 4117

**Site:** Bldg. 718

|                              | <b>Date</b> | <b>Hold Time</b> |
|------------------------------|-------------|------------------|
| <b>Date Sampled</b>          | 12/07/98    | NA               |
| <b>Receipt/Refrigeration</b> | 12/07/98    | NA               |
| <b>Extractions</b>           |             |                  |
| 1. Base Neutrals             | 12/08/98    | 14 days          |
| <b>Analyses</b>              |             |                  |
| 1. Volatile Organics         | 12/10/98    | 14 days          |
| 2. Base Neutrals             | 12/19,21/98 | 40 days          |

000013

# VOLATILE ORGANICS

000014

**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**

**000015**

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam **vb02313.d**  
 Operator **Skelton**  
 Date Acquired **10 Dec 98 9:59 am**

Sample Name **Vblk72**  
 Field ID **Vblk72**  
 Sample Multiplier **1**

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethan   |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane            |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride           |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane             |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane             |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane   |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                  |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide         |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane       |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate            |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone               |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene   |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform               |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane    |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride     |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                  |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane       |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene          |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane      |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane     |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

000016

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Vblk72

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4117 SDG No        Location UST  
Matrix: (soil/water) WATER Lab Sample ID: Vblk72  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02313.D  
Level: (low/med) LOW Date Received: 12/07/98  
% Moisture: not dec.        Date Analyzed: 12/10/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam vb02322.d  
 Operator Skelton  
 Date Acquired 10 Dec 98 4:59 pm

Sample Name 4116.01  
 Field ID Trip Blank  
 Sample Multiplier 1

| CAS#       | Compound Name             | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|---------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                  |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile             |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol        |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether   |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether        |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethan    |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane             |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride            |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane              |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane              |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane    |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene        |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                   |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide          |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride        |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene  |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane        |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate             |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone                |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene    |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform                |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane     |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride      |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                   |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane        |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene           |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane       |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane      |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe  |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene   |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone      |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                   |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-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-Tetrachloroethan  |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene       |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene       |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene       |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

000018

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

**Trip Blank**

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4116 SDG No        Location UST  
Matrix: (soil/water) WATER Lab Sample ID: 4116.01  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02322.D  
Level: (low/med) LOW Date Received: 12/07/98  
% Moisture: not dec.        Date Analyzed: 12/10/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam **vb02323.d**  
 Operator **Skelton**  
 Date Acquired **10 Dec 98 5:44 pm**

Sample Name **4116.02**  
 Field ID **Field Blank**  
 Sample Multiplier **1**

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | 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 ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

**000020**



1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Blank

Lab Name: FMETL Project 980932  
 NJDEP# 13461 Case No.: 4116 SDG No        Location UST  
 Matrix: (soil/water) WATER Lab Sample ID: 4116.02  
 Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02323.D  
 Level: (low/med) LOW Date Received: 12/07/98  
 % Moisture: not dec.        Date Analyzed: 12/10/98  
 GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

**Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Nam vb02326.d  
 Operator Skelton  
 Date Acquired 10 Dec 98 7:58 pm

Sample Name 4117.01  
 Field ID Bldg718  
 Sample Multiplier 1

| CAS#       | Compound Name            | R.T. | Response | Result       | Regulatory Level (ug/l)* | MDL       | Qualifier |
|------------|--------------------------|------|----------|--------------|--------------------------|-----------|-----------|
| 107028     | Acrolein                 |      |          | not detected | 50                       | 1.85 ug/L |           |
| 107131     | Acrylonitrile            |      |          | not detected | 50                       | 2.78 ug/L |           |
| 75650      | tert-Butyl alcohol       |      |          | not detected | nle                      | 8.52 ug/L |           |
| 1634044    | Methyl-tert-Butyl ether  |      |          | not detected | nle                      | 0.16 ug/L |           |
| 108203     | Di-isopropyl ether       |      |          | not detected | nle                      | 0.25 ug/L |           |
|            | Dichlorodifluoromethan   |      |          | not detected | nle                      | 1.68 ug/L |           |
| 74-87-3    | Chloromethane            |      |          | not detected | 30                       | 1.16 ug/L |           |
| 75-01-4    | Vinyl Chloride           |      |          | not detected | 5                        | 1.06 ug/L |           |
| 74-83-9    | Bromomethane             |      |          | not detected | 10                       | 1.10 ug/L |           |
| 75-00-3    | Chloroethane             |      |          | not detected | nle                      | 1.01 ug/L |           |
| 75-69-4    | Trichlorofluoromethane   |      |          | not detected | nle                      | 0.50 ug/L |           |
| 75-35-4    | 1,1-Dichloroethene       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 67-64-1    | Acetone                  |      |          | not detected | 700                      | 1.36 ug/L |           |
| 75-15-0    | Carbon Disulfide         |      |          | not detected | nle                      | 0.46 ug/L |           |
| 75-09-2    | Methylene Chloride       |      |          | not detected | 2                        | 0.24 ug/L |           |
| 156-60-5   | trans-1,2-Dichloroethene |      |          | not detected | 100                      | 0.16 ug/L |           |
| 75-35-3    | 1,1-Dichloroethane       |      |          | not detected | 70                       | 0.12 ug/L |           |
| 108-05-4   | Vinyl Acetate            |      |          | not detected | nle                      | 0.78 ug/L |           |
| 78-93-3    | 2-Butanone               |      |          | not detected | 300                      | 0.62 ug/L |           |
|            | cis-1,2-Dichloroethene   |      |          | not detected | 10                       | 0.17 ug/L |           |
| 67-66-3    | Chloroform               |      |          | not detected | 6                        | 0.30 ug/L |           |
| 75-55-6    | 1,1,1-Trichloroethane    |      |          | not detected | 30                       | 0.23 ug/L |           |
| 56-23-5    | Carbon Tetrachloride     |      |          | not detected | 2                        | 0.47 ug/L |           |
| 71-43-2    | Benzene                  |      |          | not detected | 1                        | 0.23 ug/L |           |
| 107-06-2   | 1,2-Dichloroethane       |      |          | not detected | 2                        | 0.18 ug/L |           |
| 79-01-6    | Trichloroethene          |      |          | not detected | 1                        | 0.23 ug/L |           |
| 78-87-5    | 1,2-Dichloropropane      |      |          | not detected | 1                        | 0.40 ug/L |           |
| 75-27-4    | Bromodichloromethane     |      |          | not detected | 1                        | 0.55 ug/L |           |
| 110-75-8   | 2-Chloroethyl vinyl ethe |      |          | not detected | nle                      | 0.65 ug/L |           |
| 10061-01-5 | cis-1,3-Dichloropropene  |      |          | not detected | nle                      | 0.69 ug/L |           |
| 108-10-1   | 4-Methyl-2-Pentanone     |      |          | not detected | 400                      | 0.59 ug/L |           |
| 108-88-3   | Toluene                  |      |          | not detected | 1000                     | 0.37 ug/L |           |
| 10061-02-6 | trans-1,3-Dichloroprope  |      |          | not detected | nle                      | 0.87 ug/L |           |
| 79-00-5    | 1,1,2-Trichloroethane    |      |          | not detected | 3                        | 0.48 ug/L |           |
| 127-18-4   | Tetrachloroethene        |      |          | not detected | 1                        | 0.32 ug/L |           |
| 591-78-6   | 2-Hexanone               |      |          | not detected | nle                      | 0.71 ug/L |           |
| 126-48-1   | Dibromochloromethane     |      |          | not detected | 10                       | 0.86 ug/L |           |
| 108-90-7   | Chlorobenzene            |      |          | not detected | 4                        | 0.39 ug/L |           |
| 100-41-4   | Ethylbenzene             |      |          | not detected | 700                      | 0.65 ug/L |           |
| 1330-20-7  | m+p-Xylenes              |      |          | not detected | nle                      | 1.14 ug/L |           |
| 1330-20-7  | o-Xylene                 |      |          | not detected | nle                      | 0.62 ug/L |           |
| 100-42-5   | Styrene                  |      |          | not detected | 100                      | 0.56 ug/L |           |
| 75-25-2    | Bromoform                |      |          | not detected | 4                        | 0.70 ug/L |           |
| 79-34-5    | 1,1,2,2-Tetrachloroethan |      |          | not detected | 2                        | 0.47 ug/L |           |
| 541-73-1   | 1,3-Dichlorobenzene      |      |          | not detected | 600                      | 0.55 ug/L |           |
| 106-46-7   | 1,4-Dichlorobenzene      |      |          | not detected | 75                       | 0.57 ug/L |           |
| 95-50-1    | 1,2-Dichlorobenzene      |      |          | not detected | 600                      | 0.64 ug/L |           |

\* Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

**Qualifiers**

B = Compound found in related blank  
 E = Value above linear range  
 D = Value from dilution  
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit  
 NLE = No Limit Established  
 R.T. = Retention Time

000022

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg. 718

Lab Name: FMETL Project 980932  
NJDEP# 13461 Case No.: 4117 SDG No        Location UST  
Matrix: (soil/water) WATER Lab Sample ID: 4117.01  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02326.D  
Level: (low/med) LOW Date Received: 12/07/98  
% Moisture: not dec.        Date Analyzed: 12/10/98  
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

# BASE NEUTRAL

000050

**Semi-Volatile Analysis Report**  
**U.S. Army, Fort Monmouth Environmental Laboratory**  
**NJDEP Certification #13461**

Data File Name **BN02424.D**  
 Operator **Skelton**  
 Date Acquired **19-Dec-98**

Sample Name **Sblk177**  
 Misc Info **Sblk177 A 981208**  
 Sample Multiplier **1**

| CAS#      | Name                        | R.T. | Response | Result       | Regulatory Level (ug/L)* | MDL       | Qualifiers |
|-----------|-----------------------------|------|----------|--------------|--------------------------|-----------|------------|
| 110-86-1  | Pyridine                    |      |          | not detected | NLE                      | 5.00 ug/L |            |
| 62-75-9   | N-nitroso-dimethylamine     |      |          | not detected | 20                       | 0.94 ug/L |            |
| 62-53-3   | Aniline                     |      |          | not detected | NLE                      | 0.15 ug/L |            |
| 111-44-4  | bis(2-Chloroethyl)ether     |      |          | not detected | 10                       | 0.48 ug/L |            |
| 106-46-7  | 1,4-Dichlorobenzene         |      |          | not detected | 75                       | 0.23 ug/L |            |
| 100-51-6  | Benzyl alcohol              |      |          | not detected | NLE                      | 0.18 ug/L |            |
| 95-50-1   | 1,2-Dichlorobenzene         |      |          | not detected | 600                      | 0.16 ug/L |            |
| 108-60-1  | bis(2-chloroisopropyl)ether |      |          | not detected | 300                      | 0.61 ug/L |            |
| 67-72-1   | Hexachloroethane            |      |          | not detected | 10                       | 0.33 ug/L |            |
| 98-95-3   | Nitrobenzene                |      |          | not detected | 10                       | 0.46 ug/L |            |
| 78-59-1   | Isophorone                  |      |          | not detected | 100                      | 0.35 ug/L |            |
| 111-91-1  | bis(2-Chloroethoxy)methane  |      |          | not detected | NLE                      | 0.46 ug/L |            |
| 65-85-0   | Benzoic Acid                |      |          | not detected | NLE                      | 0.26 ug/L |            |
| 120-82-1  | 1,2,4-Trichlorobenzene      |      |          | not detected | 9                        | 0.25 ug/L |            |
| 91-20-3   | Naphthalene                 |      |          | not detected | NLE                      | 0.25 ug/L |            |
| 106-47-8  | 4-Chloroaniline             |      |          | not detected | NLE                      | 0.19 ug/L |            |
| 87-68-3   | Hexachlorobutadiene         |      |          | not detected | 1                        | 0.38 ug/L |            |
| 91-57-6   | 2-Methylnaphthalene         |      |          | not detected | NLE                      | 0.16 ug/L |            |
| 77-47-4   | Hexachlorocyclopentadiene   |      |          | not detected | 50                       | 1.50 ug/L |            |
| 91-58-7   | 2-Chloronaphthalene         |      |          | not detected | NLE                      | 0.32 ug/L |            |
| 88-74-4   | 2-Nitroaniline              |      |          | not detected | NLE                      | 0.21 ug/L |            |
| 131-11-3  | Dimethylphthalate           |      |          | not detected | 7000                     | 0.18 ug/L |            |
| 208-96-8  | Acenaphthylene              |      |          | not detected | NLE                      | 0.19 ug/L |            |
| 606-20-2  | 2,6-Dinitrotoluene          |      |          | not detected | NLE                      | 0.31 ug/L |            |
| 99-09-2   | 3-Nitroaniline              |      |          | not detected | NLE                      | 0.26 ug/L |            |
| 83-32-9   | Acenaphthene                |      |          | not detected | 400                      | 0.26 ug/L |            |
| 132-64-9  | Dibenzofuran                |      |          | not detected | NLE                      | 0.32 ug/L |            |
| 121-14-2  | 2,4-Dinitrotoluene          |      |          | not detected | 10                       | 0.36 ug/L |            |
| 84-66-2   | Diethylphthalate            |      |          | not detected | 5000                     | 0.82 ug/L |            |
| 86-73-7   | Fluorene                    |      |          | not detected | 300                      | 0.29 ug/L |            |
| 7005-72-3 | 4-Chlorophenyl-phenylether  |      |          | not detected | NLE                      | 0.31 ug/L |            |
| 100-01-6  | 4-Nitroaniline              |      |          | not detected | NLE                      | 0.90 ug/L |            |
| 86-30-6   | n-Nitrosodiphenylamine      |      |          | not detected | 20                       | 0.23 ug/L |            |
| 103-33-3  | Azobenzene                  |      |          | not detected | NLE                      | 0.80 ug/L |            |
| 101-55-3  | 4-Bromophenyl-phenylether   |      |          | not detected | NLE                      | 0.55 ug/L |            |
| 118-74-1  | Hexachlorobenzene           |      |          | not detected | 10                       | 0.82 ug/L |            |
| 85-01-8   | Phenanthrene                |      |          | not detected | NLE                      | 0.18 ug/L |            |
| 120-12-7  | Anthracene                  |      |          | not detected | 2000                     | 0.19 ug/L |            |
| 84-74-2   | Di-n-butylphthalate         |      |          | not detected | 900                      | 0.23 ug/L |            |
| 206-44-0  | Fluoranthene                |      |          | not detected | 300                      | 0.41 ug/L |            |
| 92-87-5   | Benzidine                   |      |          | not detected | 50                       | 1.45 ug/L |            |
| 129-00-0  | Pyrene                      |      |          | not detected | 200                      | 0.32 ug/L |            |
| 85-68-7   | Butylbenzylphthalate        |      |          | not detected | 100                      | 0.47 ug/L |            |
| 56-55-3   | Benzo[a]anthracene          |      |          | not detected | 10                       | 0.22 ug/L |            |
| 91-94-1   | 3,3'-Dichlorobenzidine      |      |          | not detected | 60                       | 0.46 ug/L |            |
| 218-01-9  | Chrysene                    |      |          | not detected | 20                       | 0.20 ug/L |            |
| 117-81-7  | bis(2-Ethylhexyl)phthalate  |      |          | not detected | 30                       | 0.51 ug/L |            |
| 117-84-0  | Di-n-octylphthalate         |      |          | not detected | 100                      | 0.82 ug/L |            |
| 205-99-2  | Benzo[b]fluoranthene        |      |          | not detected | 10                       | 0.37 ug/L |            |
| 207-08-9  | Benzo[k]fluoranthene        |      |          | not detected | 2                        | 0.32 ug/L |            |
| 50-32-8   | Benzo[a]pyrene              |      |          | not detected | 20                       | 0.31 ug/L |            |
| 193-39-5  | Indeno[1,2,3-cd]pyrene      |      |          | not detected | 20                       | 0.79 ug/L |            |
| 53-70-3   | Dibenz[a,h]anthracene       |      |          | not detected | 20                       | 0.28 ug/L |            |
| 191-24-2  | Benzo[g,h,i]perylene        |      |          | not detected | NLE                      | 0.40 ug/L |            |

\* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

**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

000051

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID:

**Sblk177**

Lab Name: FMETL Lab Cod 13461  
Project: 98-0932 Case No.: 4117 Location: UST SDG No: \_\_\_\_\_  
Matrix: (soil/water) WATER Lab Sample ID: Sblk177  
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02424.D  
Level: (low/med) LOW Date Received: 12/7/98  
% Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 12/8/98  
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/19/98  
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 **BN02429.D**  
 Operator **Skelton**  
 Date Acquired **19-Dec-98**

Sample Name **4116.02**  
 Misc Info **Field Blank**  
 Sample Multiplier **1**

| CAS#      | Name                        | R.T. | Response | Result       | Regulatory Level (ug/L)* | MDL       | Qualifiers |
|-----------|-----------------------------|------|----------|--------------|--------------------------|-----------|------------|
| 110-86-1  | Pyridine                    |      |          | not detected | NLE                      | 5.00 ug/L |            |
| 62-75-9   | N-nitroso-dimethylamine     |      |          | not detected | 20                       | 0.94 ug/L |            |
| 62-53-3   | Aniline                     |      |          | not detected | NLE                      | 0.15 ug/L |            |
| 111-44-4  | bis(2-Chloroethyl)ether     |      |          | not detected | 10                       | 0.48 ug/L |            |
| 106-46-7  | 1,4-Dichlorobenzene         |      |          | not detected | 75                       | 0.23 ug/L |            |
| 100-51-6  | Benzyl alcohol              |      |          | not detected | NLE                      | 0.18 ug/L |            |
| 95-50-1   | 1,2-Dichlorobenzene         |      |          | not detected | 600                      | 0.16 ug/L |            |
| 108-60-1  | bis(2-chloroisopropyl)ether |      |          | not detected | 300                      | 0.61 ug/L |            |
| 67-72-1   | Hexachloroethane            |      |          | not detected | 10                       | 0.33 ug/L |            |
| 98-95-3   | Nitrobenzene                |      |          | not detected | 10                       | 0.46 ug/L |            |
| 78-59-1   | Isophorone                  |      |          | not detected | 100                      | 0.35 ug/L |            |
| 111-91-1  | bis(2-Chloroethoxy)methane  |      |          | not detected | NLE                      | 0.46 ug/L |            |
| 65-85-0   | Benzoic Acid                |      |          | not detected | NLE                      | 0.26 ug/L |            |
| 120-82-1  | 1,2,4-Trichlorobenzene      |      |          | not detected | 9                        | 0.25 ug/L |            |
| 91-20-3   | Naphthalene                 |      |          | not detected | NLE                      | 0.25 ug/L |            |
| 106-47-8  | 4-Chloroaniline             |      |          | not detected | NLE                      | 0.19 ug/L |            |
| 87-68-3   | Hexachlorobutadiene         |      |          | not detected | 1                        | 0.38 ug/L |            |
| 91-57-6   | 2-Methylnaphthalene         |      |          | not detected | NLE                      | 0.16 ug/L |            |
| 77-47-4   | Hexachlorocyclopentadiene   |      |          | not detected | 50                       | 1.50 ug/L |            |
| 91-58-7   | 2-Chloronaphthalene         |      |          | not detected | NLE                      | 0.32 ug/L |            |
| 88-74-4   | 2-Nitroaniline              |      |          | not detected | NLE                      | 0.21 ug/L |            |
| 131-11-3  | Dimethylphthalate           |      |          | not detected | 7000                     | 0.18 ug/L |            |
| 208-96-8  | Acenaphthylene              |      |          | not detected | NLE                      | 0.19 ug/L |            |
| 606-20-2  | 2,6-Dinitrotoluene          |      |          | not detected | NLE                      | 0.31 ug/L |            |
| 99-09-2   | 3-Nitroaniline              |      |          | not detected | NLE                      | 0.26 ug/L |            |
| 83-32-9   | Acenaphthene                |      |          | not detected | 400                      | 0.26 ug/L |            |
| 132-64-9  | Dibenzofuran                |      |          | not detected | NLE                      | 0.32 ug/L |            |
| 121-14-2  | 2,4-Dinitrotoluene          |      |          | not detected | 10                       | 0.36 ug/L |            |
| 84-66-2   | Diethylphthalate            |      |          | not detected | 5000                     | 0.82 ug/L |            |
| 86-73-7   | Fluorene                    |      |          | not detected | 300                      | 0.29 ug/L |            |
| 7005-72-3 | 4-Chlorophenyl-phenylether  |      |          | not detected | NLE                      | 0.31 ug/L |            |
| 100-01-6  | 4-Nitroaniline              |      |          | not detected | NLE                      | 0.90 ug/L |            |
| 86-30-6   | n-Nitrosodiphenylamine      |      |          | not detected | 20                       | 0.23 ug/L |            |
| 103-33-3  | Azobenzene                  |      |          | not detected | NLE                      | 0.80 ug/L |            |
| 101-55-3  | 4-Bromophenyl-phenylether   |      |          | not detected | NLE                      | 0.55 ug/L |            |
| 118-74-1  | Hexachlorobenzene           |      |          | not detected | 10                       | 0.82 ug/L |            |
| 85-01-8   | Phenanthrene                |      |          | not detected | NLE                      | 0.18 ug/L |            |
| 120-12-7  | Anthracene                  |      |          | not detected | 2000                     | 0.19 ug/L |            |
| 84-74-2   | Di-n-butylphthalate         |      |          | not detected | 900                      | 0.23 ug/L |            |
| 206-44-0  | Fluoranthene                |      |          | not detected | 300                      | 0.41 ug/L |            |
| 92-87-5   | Benzidine                   |      |          | not detected | 50                       | 1.45 ug/L |            |
| 129-00-0  | Pyrene                      |      |          | not detected | 200                      | 0.32 ug/L |            |
| 85-68-7   | Butylbenzylphthalate        |      |          | not detected | 100                      | 0.47 ug/L |            |
| 56-55-3   | Benzo[a]anthracene          |      |          | not detected | 10                       | 0.22 ug/L |            |
| 91-94-1   | 3,3'-Dichlorobenzidine      |      |          | not detected | 60                       | 0.46 ug/L |            |
| 218-01-9  | Chrysene                    |      |          | not detected | 20                       | 0.20 ug/L |            |
| 117-81-7  | bis(2-Ethylhexyl)phthalate  |      |          | not detected | 30                       | 0.51 ug/L |            |
| 117-84-0  | Di-n-octylphthalate         |      |          | not detected | 100                      | 0.82 ug/L |            |
| 205-99-2  | Benzo[b]fluoranthene        |      |          | not detected | 10                       | 0.37 ug/L |            |
| 207-08-9  | Benzo[k]fluoranthene        |      |          | not detected | 2                        | 0.32 ug/L |            |
| 50-32-8   | Benzo[a]pyrene              |      |          | not detected | 20                       | 0.31 ug/L |            |
| 193-39-5  | Indeno[1,2,3-cd]pyrene      |      |          | not detected | 20                       | 0.79 ug/L |            |
| 53-70-3   | Dibenz[a,h]anthracene       |      |          | not detected | 20                       | 0.28 ug/L |            |
| 191-24-2  | Benzo[g,h,i]perylene        |      |          | not detected | NLE                      | 0.40 ug/L |            |

\* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

**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

000053

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID:

Field Blank

Lab Name: FMETL Lab Cod 13461  
 Project: 98-0932 Case No.: 4116 Location: UST SDG No:           
 Matrix: (soil/water) WATER Lab Sample ID: 4116.02  
 Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02429.D  
 Level: (low/med) LOW Date Received: 12/7/98  
 % Moisture:          decanted: (Y/N) N Date Extracted: 12/8/98  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/19/98  
 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 **BN02448.D**  
 Operator **Skelton**  
 Date Acquired **21-Dec-98**

Sample Name **4117.02**  
 Misc Info **Bldg718**  
 Sample Multiplier **1**

| CAS#      | Name                        | R.T. | Response | Result       | Regulatory Level (ug/L)* | MDL       | Qualifiers |
|-----------|-----------------------------|------|----------|--------------|--------------------------|-----------|------------|
| 110-86-1  | Pyridine                    |      |          | not detected | NLE                      | 5.00 ug/L |            |
| 62-75-9   | N-nitroso-dimethylamine     |      |          | not detected | 20                       | 0.94 ug/L |            |
| 62-53-3   | Aniline                     |      |          | not detected | NLE                      | 0.15 ug/L |            |
| 111-44-4  | bis(2-Chloroethyl)ether     |      |          | not detected | 10                       | 0.48 ug/L |            |
| 106-46-7  | 1,4-Dichlorobenzene         |      |          | not detected | 75                       | 0.23 ug/L |            |
| 100-51-6  | Benzyl alcohol              |      |          | not detected | NLE                      | 0.18 ug/L |            |
| 95-50-1   | 1,2-Dichlorobenzene         |      |          | not detected | 600                      | 0.16 ug/L |            |
| 108-60-1  | bis(2-chloroisopropyl)ether |      |          | not detected | 300                      | 0.61 ug/L |            |
| 67-72-1   | Hexachloroethane            |      |          | not detected | 10                       | 0.33 ug/L |            |
| 98-95-3   | Nitrobenzene                |      |          | not detected | 10                       | 0.46 ug/L |            |
| 78-59-1   | Isophorone                  |      |          | not detected | 100                      | 0.35 ug/L |            |
| 111-91-1  | bis(2-Chloroethoxy)methane  |      |          | not detected | NLE                      | 0.46 ug/L |            |
| 65-85-0   | Benzoic Acid                |      |          | not detected | NLE                      | 0.26 ug/L |            |
| 120-82-1  | 1,2,4-Trichlorobenzene      |      |          | not detected | 9                        | 0.25 ug/L |            |
| 91-20-3   | Naphthalene                 |      |          | not detected | NLE                      | 0.25 ug/L |            |
| 106-47-8  | 4-Chloroaniline             |      |          | not detected | NLE                      | 0.19 ug/L |            |
| 87-68-3   | Hexachlorobutadiene         |      |          | not detected | 1                        | 0.38 ug/L |            |
| 91-57-6   | 2-Methylnaphthalene         |      |          | not detected | NLE                      | 0.16 ug/L |            |
| 77-47-4   | Hexachlorocyclopentadiene   |      |          | not detected | 50                       | 1.50 ug/L |            |
| 91-58-7   | 2-Chloronaphthalene         |      |          | not detected | NLE                      | 0.32 ug/L |            |
| 88-74-4   | 2-Nitroaniline              |      |          | not detected | NLE                      | 0.21 ug/L |            |
| 131-11-3  | Dimethylphthalate           |      |          | not detected | 7000                     | 0.18 ug/L |            |
| 208-96-8  | Acenaphthylene              |      |          | not detected | NLE                      | 0.19 ug/L |            |
| 606-20-2  | 2,6-Dinitrotoluene          |      |          | not detected | NLE                      | 0.31 ug/L |            |
| 99-09-2   | 3-Nitroaniline              |      |          | not detected | NLE                      | 0.26 ug/L |            |
| 83-32-9   | Acenaphthene                |      |          | not detected | 400                      | 0.26 ug/L |            |
| 132-64-9  | Dibenzofuran                |      |          | not detected | NLE                      | 0.32 ug/L |            |
| 121-14-2  | 2,4-Dinitrotoluene          |      |          | not detected | 10                       | 0.36 ug/L |            |
| 84-66-2   | Diethylphthalate            |      |          | not detected | 5000                     | 0.82 ug/L |            |
| 86-73-7   | Fluorene                    |      |          | not detected | 300                      | 0.29 ug/L |            |
| 7005-72-3 | 4-Chlorophenyl-phenylether  |      |          | not detected | NLE                      | 0.31 ug/L |            |
| 100-01-6  | 4-Nitroaniline              |      |          | not detected | NLE                      | 0.90 ug/L |            |
| 86-30-6   | n-Nitrosodiphenylamine      |      |          | not detected | 20                       | 0.23 ug/L |            |
| 103-33-3  | Azobenzene                  |      |          | not detected | NLE                      | 0.80 ug/L |            |
| 101-55-3  | 4-Bromophenyl-phenylether   |      |          | not detected | NLE                      | 0.55 ug/L |            |
| 118-74-1  | Hexachlorobenzene           |      |          | not detected | 10                       | 0.82 ug/L |            |
| 85-01-8   | Phenanthrene                |      |          | not detected | NLE                      | 0.18 ug/L |            |
| 120-12-7  | Anthracene                  |      |          | not detected | 2000                     | 0.19 ug/L |            |
| 84-74-2   | Di-n-butylphthalate         |      |          | not detected | 900                      | 0.23 ug/L |            |
| 206-44-0  | Fluoranthene                |      |          | not detected | 300                      | 0.41 ug/L |            |
| 92-87-5   | Benzidine                   |      |          | not detected | 50                       | 1.45 ug/L |            |
| 129-00-0  | Pyrene                      |      |          | not detected | 200                      | 0.32 ug/L |            |
| 85-68-7   | Butylbenzylphthalate        |      |          | not detected | 100                      | 0.47 ug/L |            |
| 56-55-3   | Benzo[a]anthracene          |      |          | not detected | 10                       | 0.22 ug/L |            |
| 91-94-1   | 3,3'-Dichlorobenzidine      |      |          | not detected | 60                       | 0.46 ug/L |            |
| 218-01-9  | Chrysene                    |      |          | not detected | 20                       | 0.20 ug/L |            |
| 117-81-7  | bis(2-Ethylhexyl)phthalate  |      |          | not detected | 30                       | 0.51 ug/L |            |
| 117-84-0  | Di-n-octylphthalate         |      |          | not detected | 100                      | 0.82 ug/L |            |
| 205-99-2  | Benzo[b]fluoranthene        |      |          | not detected | 10                       | 0.37 ug/L |            |
| 207-08-9  | Benzo[k]fluoranthene        |      |          | not detected | 2                        | 0.32 ug/L |            |
| 50-32-8   | Benzo[a]pyrene              |      |          | not detected | 20                       | 0.31 ug/L |            |
| 193-39-5  | Indeno[1,2,3-cd]pyrene      |      |          | not detected | 20                       | 0.79 ug/L |            |
| 53-70-3   | Dibenz[a,h]anthracene       |      |          | not detected | 20                       | 0.28 ug/L |            |
| 191-24-2  | Benzo[g,h,i]perylene        |      |          | not detected | NLE                      | 0.40 ug/L |            |

\* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6

**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

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Field ID:

Bldg. 718

Lab Name: FMETL Lab Cod 13461  
Project: 98-0932 Case No.: 4117 Location: UST SDG No: \_\_\_\_\_  
Matrix: (soil/water) WATER Lab Sample ID: 4117.02  
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BN02448.D  
Level: (low/med) LOW Date Received: 12/7/98  
% Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 12/8/98  
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/21/98  
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 |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: FMETL Lab Cod 13461  
 Project: 98-0932 Case No.: 4117 Location: UST SDG No: \_\_\_\_\_  
 Lab File ID: BN02340.D DFTPP Injection Date: 12/15/98  
 Instrument ID: SVoa#1 DFTPP Injection Time: 15:49

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 30.0 - 80.0% of mass 198           | 37.9                 |
| 68  | Less than 2.0% of mass 69          | 0.0 ( 0.0)1          |
| 69  | Mass 69 Relative abundance         | 58.9                 |
| 70  | Less than 2.0% of mass 69          | 0.0 ( 0.0)1          |
| 127 | 25.0 - 75.0% of mass 198           | 41.7                 |
| 197 | Less than 1.0% of mass 198         | 0.0                  |
| 198 | Base Peak, 100% relative abundance | 100.0                |
| 199 | 5.0 to 9.0% of mass 198            | 6.5                  |
| 275 | 10.0 - 30.0% of mass 198           | 17.3                 |
| 365 | Greater than 0.75% of mass 198     | 1.9                  |
| 441 | Present, but less than mass 443    | 6.4                  |
| 442 | 40.0 - 110.0% of mass 198          | 41.0                 |
| 443 | 15.0 - 24.0% of mass 442           | 7.8 ( 19.0)2         |

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

|    | Field ID: | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|----|-----------|------------------|----------------|------------------|------------------|
| 01 | SSTD120   | 120 PPM STD      | BN02341.D      | 12/15/98         | 16:13            |
| 02 | SSTD80    | 80 PPM STD       | BN02342.D      | 12/15/98         | 16:58            |
| 03 | SSTD50    | 50 PPM STD       | BN02343.D      | 12/15/98         | 17:43            |
| 04 | SSTD20    | 20 PPM STD       | BN02344.D      | 12/15/98         | 18:28            |
| 05 | SSTD10    | 10 PPM STD       | BN02345.D      | 12/15/98         | 19:13            |

## DFTPP

Data File : C:\HPCHEM\1\DATA\981215\BN02340.D

Vial: 1

Acq On : 15 Dec 1998 3:49 pm

Operator: Skelton

Sample : DFTPP Tune

Inst : GC/MS Ins

Misc :

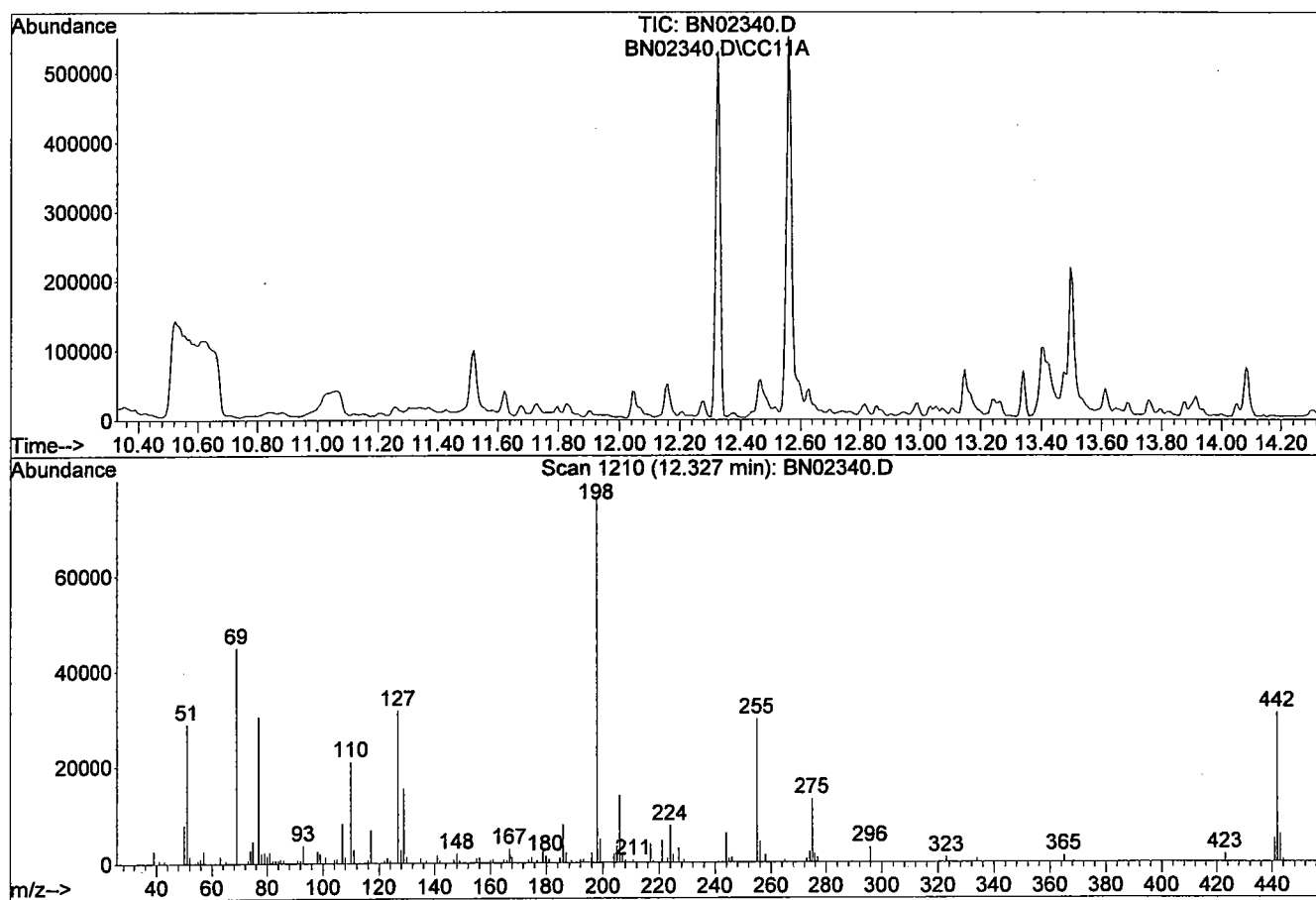
Multiplr: 1.00

MS Integration Params: RTEINT.P

GC Integration Params: rteint2.p

Method : C:\HPCHEM\1\METHODS\M62519.M (RTE Integrator)

Title : BNA Calibration



## Spectrum Information: Scan 1210

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|-------------|--------------|--------------|--------------|-----------|---------|------------------|
| 51          | 198          | 30           | 60           | 37.9      | 28912   | PASS             |
| 68          | 69           | 0.00         | 2            | 0.0       | 0       | PASS             |
| 69          | 198          | 0.00         | 100          | 58.9      | 44912   | PASS             |
| 70          | 69           | 0.00         | 2            | 0.0       | 0       | PASS             |
| 127         | 198          | 40           | 60           | 41.7      | 31784   | PASS             |
| 197         | 198          | 0.00         | 1            | 0.0       | 0       | PASS             |
| 198         | 198          | 100          | 100          | 100.0     | 76192   | PASS             |
| 199         | 198          | 5            | 9            | 6.5       | 4946    | PASS             |
| 275         | 198          | 10           | 30           | 17.3      | 13163   | PASS             |
| 365         | 198          | 1            | 100          | 1.9       | 1432    | PASS             |
| 441         | 443          | 1            | 99           | 82.9      | 4911    | PASS             |
| 442         | 198          | 40           | 100          | 41.0      | 31216   | PASS             |
| 443         | 442          | 17           | 23           | 19.0      | 5921    | PASS             |

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: FMETL Lab Cod 13461  
 Project: 98-0932 Case No.: 4117 Location: UST SDG No: \_\_\_\_\_  
 Lab File ID: BN02442.D DFTPP Injection Date: 12/21/98  
 Instrument ID: SVoa#1 DFTPP Injection Time: 14:36

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 30.0 - 80.0% of mass 198           | 58.9                 |
| 68  | Less than 2.0% of mass 69          | 0.0 ( 0.0)1          |
| 69  | Mass 69 Relative abundance         | 83.4                 |
| 70  | Less than 2.0% of mass 69          | 0.0 ( 0.0)1          |
| 127 | 25.0 - 75.0% of mass 198           | 50.4                 |
| 197 | Less than 1.0% of mass 198         | 0.0                  |
| 198 | Base Peak, 100% relative abundance | 100.0                |
| 199 | 5.0 to 9.0% of mass 198            | 7.0                  |
| 275 | 10.0 - 30.0% of mass 198           | 17.6                 |
| 365 | Greater than 0.75% of mass 198     | 3.6                  |
| 441 | Present, but less than mass 443    | 9.2                  |
| 442 | 40.0 - 110.0% of mass 198          | 58.7                 |
| 443 | 15.0 - 24.0% of mass 442           | 11.4 ( 19.5)2        |

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

|    | Field ID: | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|----|-----------|------------------|----------------|------------------|------------------|
| 01 | SSTD120   | 120 PPM STD      | BN02443.D      | 12/21/98         | 15:05            |
| 02 | SSTD80    | 80 PPM STD       | BN02444.D      | 12/21/98         | 15:46            |
| 03 | SSTD50    | 50 PPM STD       | BN02445.D      | 12/21/98         | 16:26            |
| 04 | SSTD20    | 20 PPM STD       | BN02446.D      | 12/21/98         | 17:07            |
| 05 | SSTD10    | 10 PPM STD       | BN02447.D      | 12/21/98         | 17:47            |
| 06 | BLDG. 718 | 4117.02          | BN02448.D      | 12/21/98         | 18:27            |

## LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT  
AND ACCOMPANY ALL DATA SUBMISSIONS

The following Laboratory Deliverables checklist and Non-Conformance Summary shall be included in the data submission. All deviations from the accepted methodology and procedures, of performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The Technical Requirements for Site Remediation, effective June 7, 1993, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits, practical quantitation limits, and the laboratory and/or sample numbers be included in one section of the data package and in the main body of the report.

1. Cover page, Title Page listing Lab Certification #, facility name and address, & date of report submitted
2. Table of Contents submitted
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted
4. Document paginated and legible
5. Chain of Custody submitted
6. Samples submitted to lab within 48 hours of sample collection
7. Methodology Summary submitted
8. Laboratory Chronicle and Holding Time Check submitted
9. Results submitted on a dry weight basis
10. Method Detection Limits submitted
11. Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP

✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓

Laboratory Manager or Environmental Consultant's Signature

Date 2/7/99

Laboratory Certification #13461

\*Refer to NJAC 7:26E - Appendix A, Section IV - Reduced Data Deliverables - Non-USEPA/CLP  
Methods for further guidance.

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## **Laboratory Authentication Statement**

I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW-846 for Solid Waste Analysis. I have personally examined the information contained in this report and to the best of my knowledge, I believe that the submitted information is true, accurate, complete and meets the above referenced standards where applicable. I am aware that there are significant penalties for purposefully submitting falsified information, including the possibility of a fine and imprisonment.

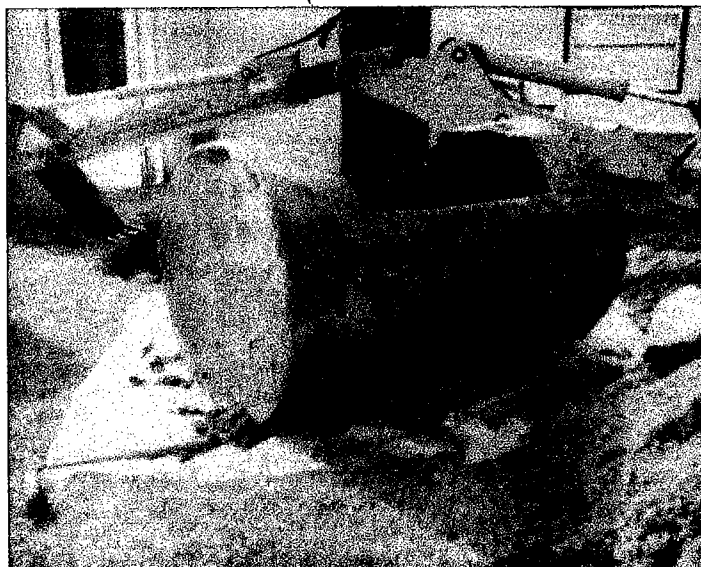


**Daniel K. Wright**  
**Laboratory Manager**

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**APPENDIX G**  
**PHOTOGRAPHS**





B. 718

6-18-98



B. 718

6-18-98

**JUNE 18, 1998**  
**PHOTOGRAPHIC LOG**

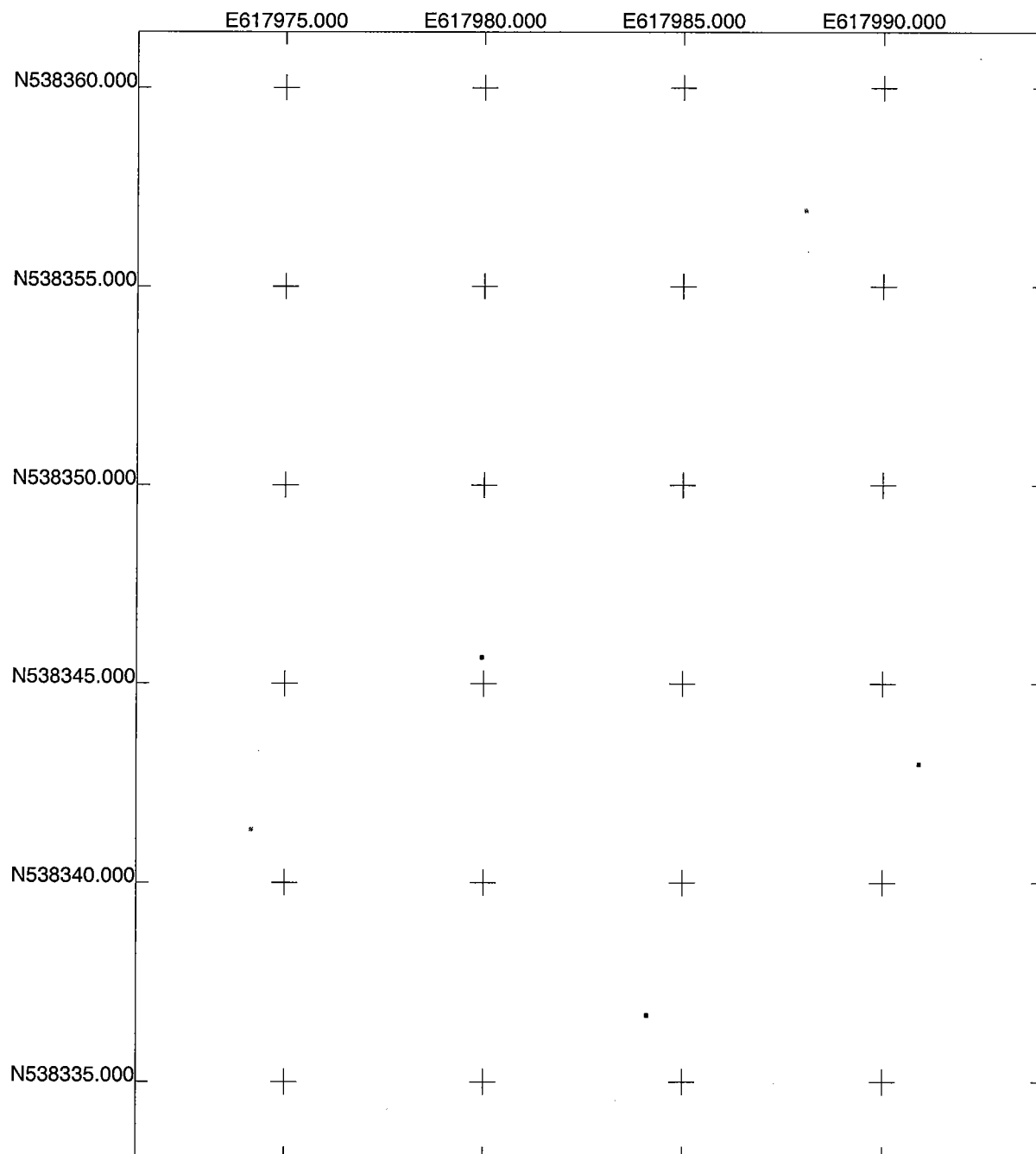
**UST NO. 81533-116**

**Building 718**  
**Main Post-West**  
**Fort Monmouth**

**VERSAR**  
Engineers, Managers, Scientists & Planners  
Bristol, PA

## **APPENDIX H**

# **ELECTRONIC DATA DELIVERABLES**



## Bldg. 718 UST Sample Location GPS Map

US State Plane 1983  
New Jersey (NY East) 2900  
NAD 1983 (Conus)



Scale 1:50  
0 6.000  
  
US Survey Feet

r121513a.cor  
3/20/2000  
Pathfinder Office  
 **Trimble**

**BLDG. 718 UST SAMPLE LOCATION GPS POSITIONS & COORDINATES**

US STATE PLANE 1983 NJ ( NY EAST ) 2900 NAD 1983 ( CONUS )

( IN US SURVEY FEET )

**SAMPLE POINTS**

**POSITION / DESC.**

**Y COORD. ( NORTHING )**

**X COORD. ( EASTING )**

*JUNE 18*

|       |            |            |
|-------|------------|------------|
| 718 A | 538345.683 | 617979.936 |
| 718 B | 538342.999 | 617990.893 |
| 718 C | 538336.684 | 617984.095 |

*DUP B*

**REFERENCE POINTS**

**POSITION / DESC.**

**Y COORD. ( NORTHING )**

**X COORD. ( EASTING )**

|                        |            |            |
|------------------------|------------|------------|
| 718 SE CORNER          | 538356.936 | 617988.045 |
| 718 S SIDE DOOR CORNER | 538341.346 | 617974.156 |

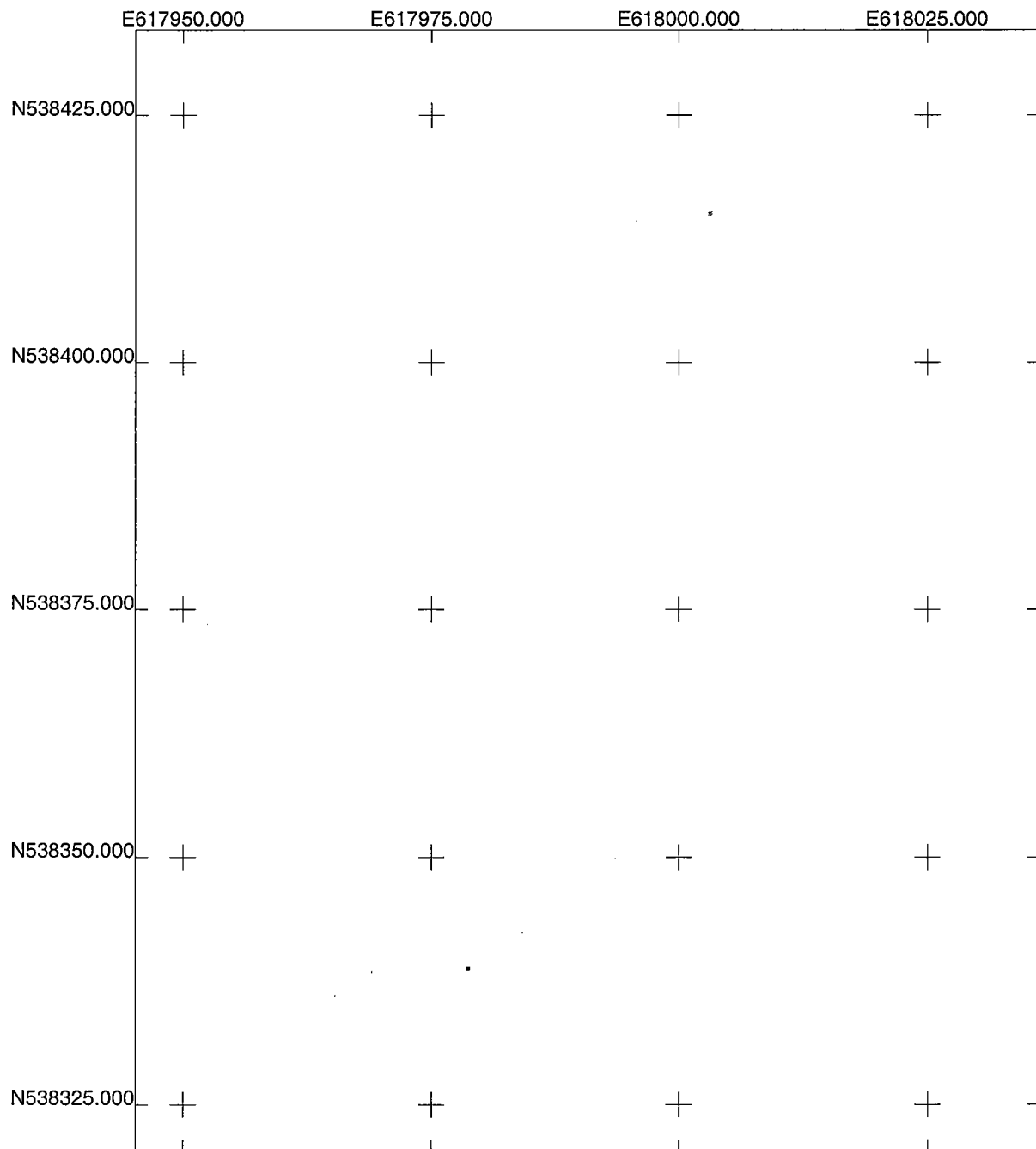
**GPS SAMPLE LOCATION MAP(BLDG.718)**

US STATE PLANE 1983 NJ(NY EAST) 2900 NAD 1983 (CONUS)

(IN US SURVEY FEET)

**SAMPLE POINT**

| <b><u>POSITION/DESC.</u></b> | <b><u>Y COORD.(NORTHING)</u></b> | <b><u>X COORD.(EASTING)</u></b> |
|------------------------------|----------------------------------|---------------------------------|
| 19-Jun-98                    |                                  |                                 |
| A                            | 538346.380                       | 617974.936                      |
| B                            | 538341.868                       | 617982.232                      |
| C                            | 538333.744                       | 617977.396                      |
| DUPC                         | 538333.744                       | 617977.396                      |



## Bldg. 718 UST Ground Water Sample GPS Location Map

US State Plane 1983  
New Jersey (NY East) 2900  
NAD 1983 (Conus)



Scale 1:200  
0 25.00  
US Survey Feet

r010814a.cor  
2/10/2000  
Pathfinder Office  
 **Trimble**

**BLDG. 718 UST GROUND WATER SAMPLE GPS POSITION & COORDINATES**

US STATE PLANE 1983 NJ ( NY EAST ) 2900 NAD 1983 ( CONUS )

( IN US SURVEY FEET )

**SAMPLE POINTS**

| <b><u>POSITION / DESC.</u></b>                        | <b><u>Y COORD. ( NORTHING )</u></b> | <b><u>X COORD. ( EASTING )</u></b> |
|-------------------------------------------------------|-------------------------------------|------------------------------------|
| 718 GW<br>( GW denotes <u>G</u> round <u>W</u> ater ) | 538338.789                          | 617978.644                         |

**REFERENCE POINT**

| <b><u>POSITION / DESC.</u></b> | <b><u>Y COORD. ( NORTHING )</u></b> | <b><u>X COORD. ( EASTING )</u></b> |
|--------------------------------|-------------------------------------|------------------------------------|
| 718 HYDRANT                    | 538415.148                          | 618003.141                         |