

United States Army
Fort Monmouth, New Jersey

COPY

Underground Storage Tank Closure and Site Investigation Report

***Building 270
Main Post-West Area***

**NJDEP UST Registration No. 81533-54
Dicar No. 94-07-06-1417-48**

December 1998

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

BUILDING 270

**MAIN POST-WEST AREA
NJDEP UST REGISTRATION NO. 81533-54
DICAR NO. 94-07-06-1417-48**

DECEMBER 1998

PREPARED FOR:

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

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PROJECT NO. 2429-308

270.DOC

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iv
1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES	1
1.1 OVERVIEW	1
1.2 SITE DESCRIPTION	2
1.2.1 Geological/Hydrogeological Setting	2
1.3 HEALTH AND SAFETY	4
1.4 REMOVAL OF UNDERGROUND STORAGE TANK	4
1.4.1 General Procedures	4
1.4.2 Underground Storage Tank Excavation and Cleaning	4
1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL	5
1.6 MANAGEMENT OF EXCAVATED SOILS	5
2.0 SITE INVESTIGATION ACTIVITIES	6
2.1 OVERVIEW	6
2.2 FIELD SCREENING/MONITORING	6
2.3 SOIL SAMPLING	7
2.4 GROUNDWATER SAMPLING	7
3.0 CONCLUSIONS AND RECOMMENDATIONS	8
3.1 SOIL SAMPLING RESULTS	8
3.2 GROUNDWATER SAMPLING RESULTS	
3.3 CONCLUSIONS AND RECOMMENDATIONS	9

TABLE OF CONTENTS (CONTINUED)

TABLES

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

FIGURES

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Cross Sectional View
Figure 4	Soil Sampling Location Map
Figure 5	Groundwater Sampling Location Map

APPENDICES

Appendix A	NJDEP Closure Approval Letter
Appendix B	Site Assessment Summary
Appendix C	Waste Manifest
Appendix D	UST Disposal Certificate
Appendix E	Soil Analytical Data Package
Appendix F	Groundwater Analytical Data Package
Appendix G	Photographs

EXECUTIVE SUMMARY

UST Closure

On July 6, 1994, a steel underground storage tank (UST) was closed by removal in accordance with New Jersey Department of Environmental Protection (NJDEP) underground storage tank closure procedures at the Main Post-West area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 81533-54 (Fort Monmouth ID No. 270), was located southeast of Building 270. UST No. 81533-54 was a 3,000-gallon No. 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 for evidence of contamination. OVA readings could not be taken during the assessment due to erratic readings caused by the heat and humidity. Following removal, the UST was inspected for corrosion holes. The UST had several holes located in the sides and bottom. Soil at the location of the holes was dark in color and appeared to be contaminated. The NJDEP hotline was notified and the case was assigned DICAR No. 94-07-06-1417-48. On July 6, 1994, potentially contaminated soil was removed from the excavation area. In total, approximately 20 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area. Soil samples that were collected after the removal of the potentially contaminated soil contained TPHC concentrations ranging from non-detect to 686.00 mg/kg. Groundwater was not encountered.

All post excavation soil samples collected from the UST excavation at Building 270 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 270. On October 13, 1998, and November 12, 1998, Building 270 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. 81533-54 at Building 270.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-54, was closed at Building 270 at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on July 6, 1994. 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 August 26, 1993. The UST was a steel 3,000-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 81533-54 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. DPW personnel who are registered and certified by the NJDEP for performing UST closure activities conducted the decommissioning activities.

Closure of UST No. 81533-54 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The NJDEP Closure Approval Letter and signed Site Assessment Summary form for UST No. 81533-54 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-BUST regulations. The applicable NJDEP-BUST regulations at the date of closure were the *Interim Closure Requirements for Underground Storage Tank Systems* (N.J.A.C. 7:14B-1 et seq. October 1990 and revisions dated November 1, 1991).

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

1.2 SITE DESCRIPTION

Building 270 is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 81533-54 was located southeast of Building 270 and appurtenant copper piping ran approximately five (5) feet northwest from the excavation. The fuel lines appeared to have been cut and crimped when the new natural gas lines were installed. 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 270. 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 270 is located approximately 600 feet south of Parkers Creek, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 270 is anticipated to be to the north.

1.3 HEALTH AND SAFETY

Before, during, and after all decommissioning activities, hazards at the work site which may have posed a threat to the Health and Safety of all personnel who were involved with, or were affected by, the decommissioning of the UST system were minimized.

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 125 gallons of liquid from the UST and its associated piping were transported by Freehold Cartage to Lionetti Oil Recovery Company, Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifest.

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. Numerous holes were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually for evidence of contamination. Potentially contaminated soils were observed. Approximately 20 cubic yards of potentially contaminated soil were removed, respectively from the excavated area. Soil screening was also performed along the piping run associated with the UST closure. No contamination was noted anywhere along the piping length. Groundwater was not encountered. See Figure 3 for a cross-sectional view of the excavated area.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The steel tank was transported in compliance with all applicable regulations and laws to Mazza & Sons, Inc., Recycling Division. Refer to Appendix D for the UST disposal certificate and Appendix G for photographs of the UST.

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 observations, approximately 20 cubic yards of potentially contaminated soil were removed from the UST excavation. All potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were transported to the soil staging area. Soils that did not exhibit signs of contamination were used as backfill following the removal of the UST. Groundwater was not encountered.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with the NJDEP-BUST document *Interim Closure Requirements for Underground Storage Tank Systems* (October 1990 and revisions dated November 1, 1991) which was the applicable regulation at the date of the closure. 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: Dinker DeSai
Employer: U.S. Army, Fort Monmouth
Phone Number: (908) 532-0989
NJDEP Certification No.: 0010173
- 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: Freehold Cartage, Inc.
Contact Person: David Smith
Phone Number: (908) 721-0900
NJDEP Company Certification No.: 52265

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using visual observations to identify potentially contaminated material. Soil excavated from around the tank exhibited evidence of potential contamination. Soils were removed from the excavation until no evidence of contamination remained. Groundwater was not encountered.

2.3 SOIL SAMPLING

On July 6 and 7, 1994, following the removal of the UST and all potentially contaminated soils, post-excavation soil samples A, B, C, D, E, F, G (DUP A), H, and I were collected from a total of eight (8) locations of the UST excavation. Samples A, B, C, D, E, and G (DUP A), were collected along the excavation floor at a depth of 10.2 feet bgs. Sidewall samples F and H were collected at a depth of 9.9 feet bgs. Piping run sample I was collected at the crimped end of the fuel line. Piping sample I was collected at a depth of 1.0 feet bgs. All samples were analyzed for 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 13, 1998, and November 12, 1998, Building 270 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 July 6 and 7, 1994 from a total of eight (8) 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 July 6 and 7, 1994, from the UST excavation and from below piping associated with the UST contained concentrations of TPHC below the NJDEP soil cleanup criteria. Samples contained TPHC concentrations ranging from non-detect to 686.00 mg/kg.

3.2 GROUNDWATER SAMPLING RESULTS

No compounds were detected in the sample collected from Building 270 on October 13, 1998.

The sample collected from Building 270 on November 12, 1998, contained acetone at 5.81 ug/l and phenanthrene at 1.84 ug/l. No other compounds were detected. Methylene chloride was detected in the field blank at a concentration of 2.15 ug/l. No other compounds were detected in the field blank. The methylene chloride concentration exceeds the GWQS on account of laboratory contamination.

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,

Groundwater samples collected on October 13, 1998, and November 12, 1998, were either below the detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC).

3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 270 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 270 on October 13, 1998, and November 12, 1998, groundwater quality at Building 270 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. 81533-54 at Building 270.

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TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 270, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 1

| Sample ID | Date of Collection | Date Analysis Started | Matrix | Sample Type | Analytical Parameters* | NJDEP Method |
|-----------|--------------------|-----------------------|--------|-----------------|------------------------|--------------|
| A | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| B | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| C | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| D | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| E | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| F | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| G (DUPA) | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| H | 7/6/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |
| I | 7/7/94 | 7/7/94 | Soil | Post-Excavation | TPHC | 418.1 |

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF SAMPLING ACTIVITIES
BUILDING 270, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 2 of 2

| Sample ID | Date of Collection | Date Analysis Started | Matrix | Sample Type | Analytical Parameters* | Sampling Method** |
|-----------|--------------------|-----------------------|---------|-------------|------------------------|-------------------|
| 3973.03 | 10/13/98 | 10/21/98 | Aqueous | Groundwater | VOCs, SVOCs | PPNDP |
| 4052.04 | 11/12/98 | 11/17/98 | 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 270, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 1 of 1

| Sample ID/
Depth | Sample
Laboratory ID | Sample
Date | Analysis
Date | Analytical
Parameters | Method
Detection
Limit
(mg/kg) | Compound
of
Concern | Results
(mg/kg) * | NJDEP
Soil Cleanup
Criteria **
(mg/kg) | Exceeds
Cleanup
Criteria |
|---------------------|-------------------------|----------------|------------------|--------------------------|---|---------------------------|----------------------|---|--------------------------------|
| A/10.2' | 1552.1 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 82.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | ND | 10,000 | No |
| B/10.2' | 1552.2 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 83.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | 10.7 | 10,000 | No |
| C/10.2' | 1552.3 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 82.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | ND | 10,000 | No |
| D/10.2' | 1552.4 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 81.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | 7.69 | 10,000 | No |
| E/10.2' | 1552.5 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 81.0 % | -- | -- |
| | | | | TPHC | 9.9 | yes | 126.00 | 10,000 | No |
| F/9.9' | 1552.6 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 85.0 % | -- | -- |
| | | | | TPHC | 9.9 | yes | 686.00 | 10,000 | No |
| G(DUPA)/10.2' | 1552.7 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 81.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | 7.68 | 10,000 | No |
| H/9.9' | 1552.8 | 7/6/94 | 7/7/94 | Total Solid | -- | -- | 81.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | ND | 10,000 | No |
| I/1.0' | 1553.1 | 7/7/94 | 7/7/94 | Total Solid | -- | -- | 85.0 % | -- | -- |
| | | | | TPHC | 6.6 | yes | 51.8 | 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
 -- Not Applicable

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/13/98Location: 270Lab Sample ID: 3973.01(Trip Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 10/13/98 Location: 270 Lab Sample ID: 3973.01(Trip Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 10/13/98Location: 270Lab Sample ID: 3973.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/13/98 Location: 270 Lab Sample ID: 3973.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 10/13/98Location: 270Lab Sample ID: 3973.03(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/13/98 Location: 270 Lab Sample ID: 3973.03(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/13/98Location: 270Lab Sample ID: 3973.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 10/13/98Location: 270Lab Sample ID: 3973.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 10/13/98Location: 270Lab Sample ID: 3973.03(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 10/13/98Location: 270Lab Sample ID: 3973.03(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 11/12/98Location: 270Lab Sample ID: 4052.01(Trip Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 11/12/98Location: 270Lab Sample ID: 4052.01(Trip Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 11/12/98Location: 270Lab Sample ID: 4052.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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 | 2-15 | -- | 2 | yes |
| 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 |

Note:

* Compound exceeds criteria due to laboratory contamination

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 11/12/98Location: 270Lab Sample ID: 4052.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 11/12/98Location: 270Lab Sample ID: 4052.04(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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 | 5.81 | -- | 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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/12/98 Location: 270 Lab Sample ID: 4052.04(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 11/12/98Location: 270Lab Sample ID: 4052.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 11/12/98Location: 270Lab Sample ID: 4052.02(Field Blank)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: FMETLNJDEP # 13461Matrix: (soil/water) WATERDate Sampled: 11/12/98Location: 270Lab Sample ID: 4052.04(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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: 11/12/98Location: 270Lab Sample ID: 4052.04(Bldg 270)

| CAS NO. | COMPOUND NAME | MDL
(ug/L) | RESULTS | QUALIFIER | REGULATORY
LEVEL(ug/L) | EXCEEDS
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 | 1.84 | -- | 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 |

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FIGURES

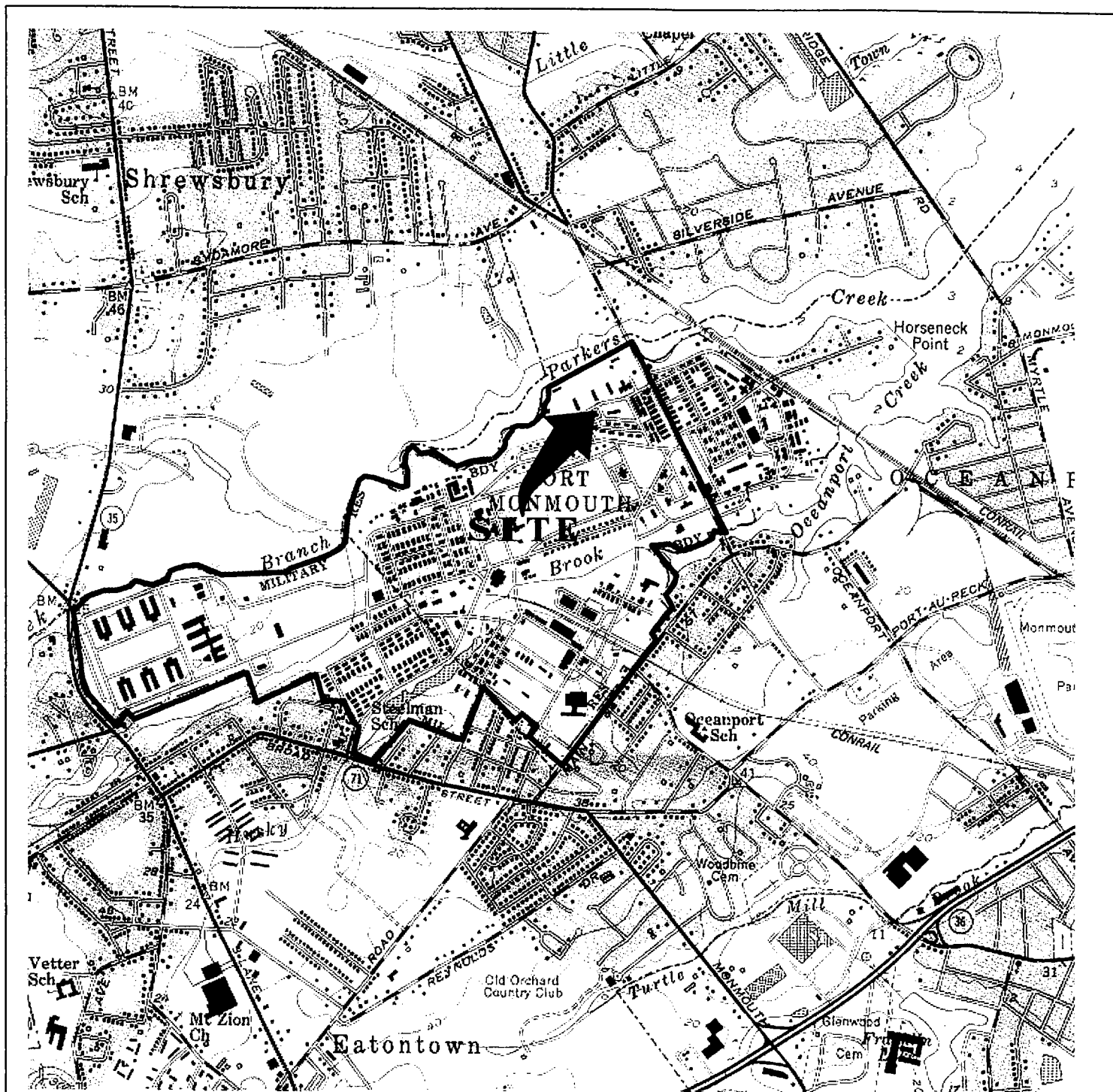


FIGURE 1

LOCATION MAP
 Building 270
 Main-Post West
 Fort Monmouth Army Base
 Monmouth County, NJ

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

Scale; 1" = 2000'

Date: JULY 1994

LONG BRANCH, N. J.

40073-C8-TF-024

1954

PHOTOREVISED 1981

DMA 6164 I SE-SERIES V822

NEW
JERSEY

QUADRANGLE LOCATION

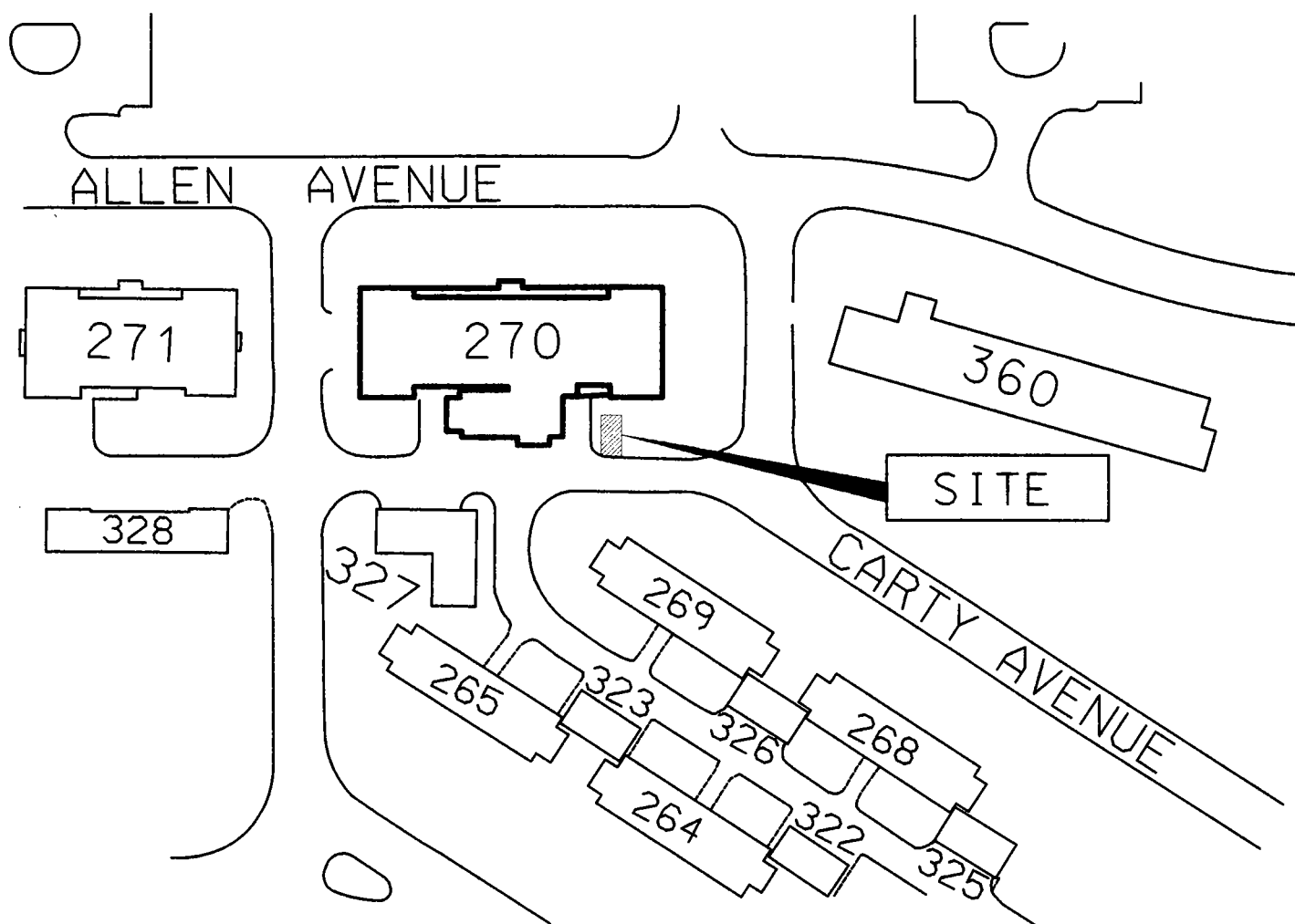
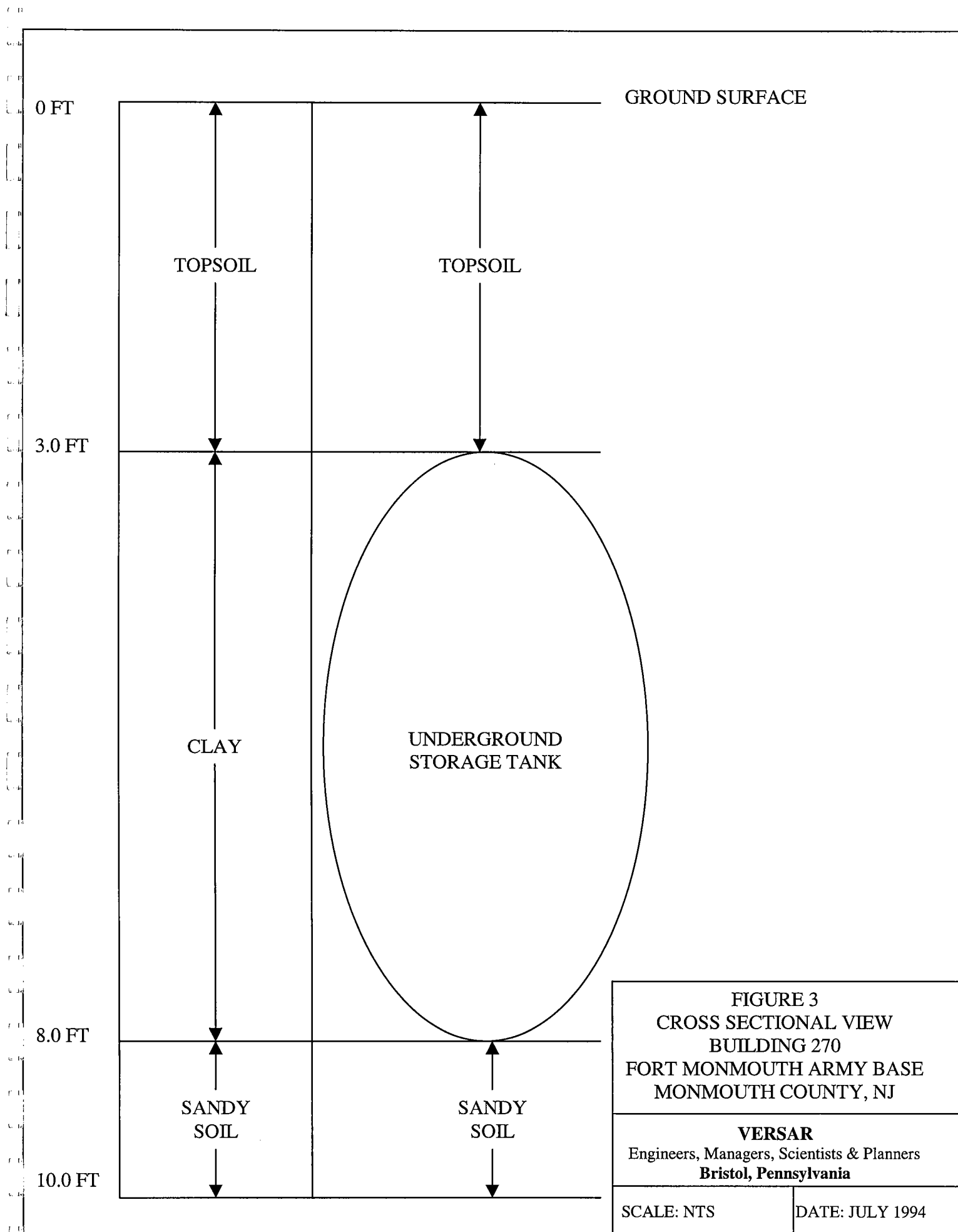


FIGURE 2
SITE MAP
BUILDING 270
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

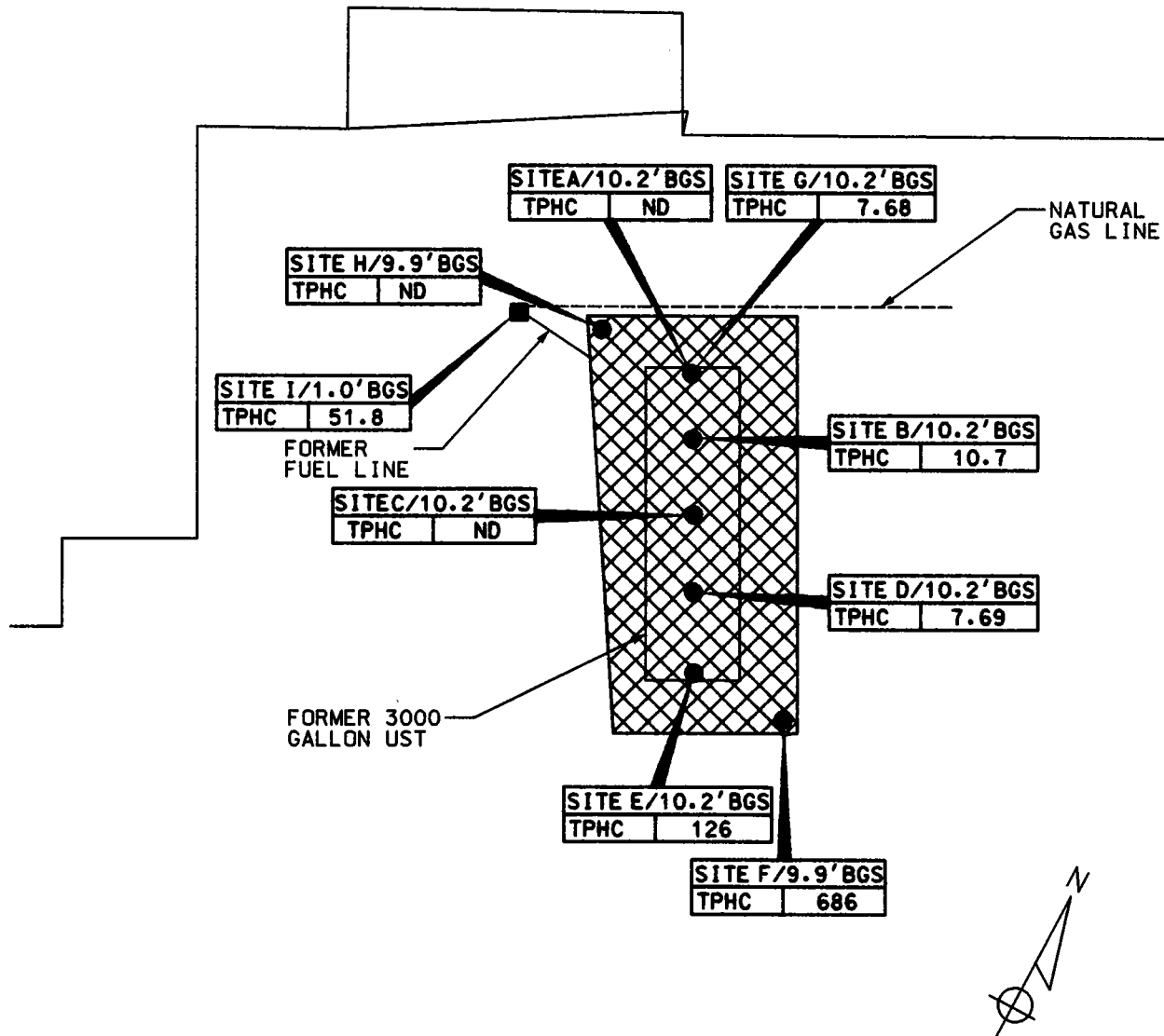
VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=100'

DATE: JULY 1994



BUILDING 270



LEGEND

- SOIL SAMPLE LOCATION (JULY 6, 1994)
- SOIL SAMPLE LOCATION (JULY 7, 1994)
- ▨ LIMIT OF EXCAVATION (JULY 7, 1994)

NOTES:

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

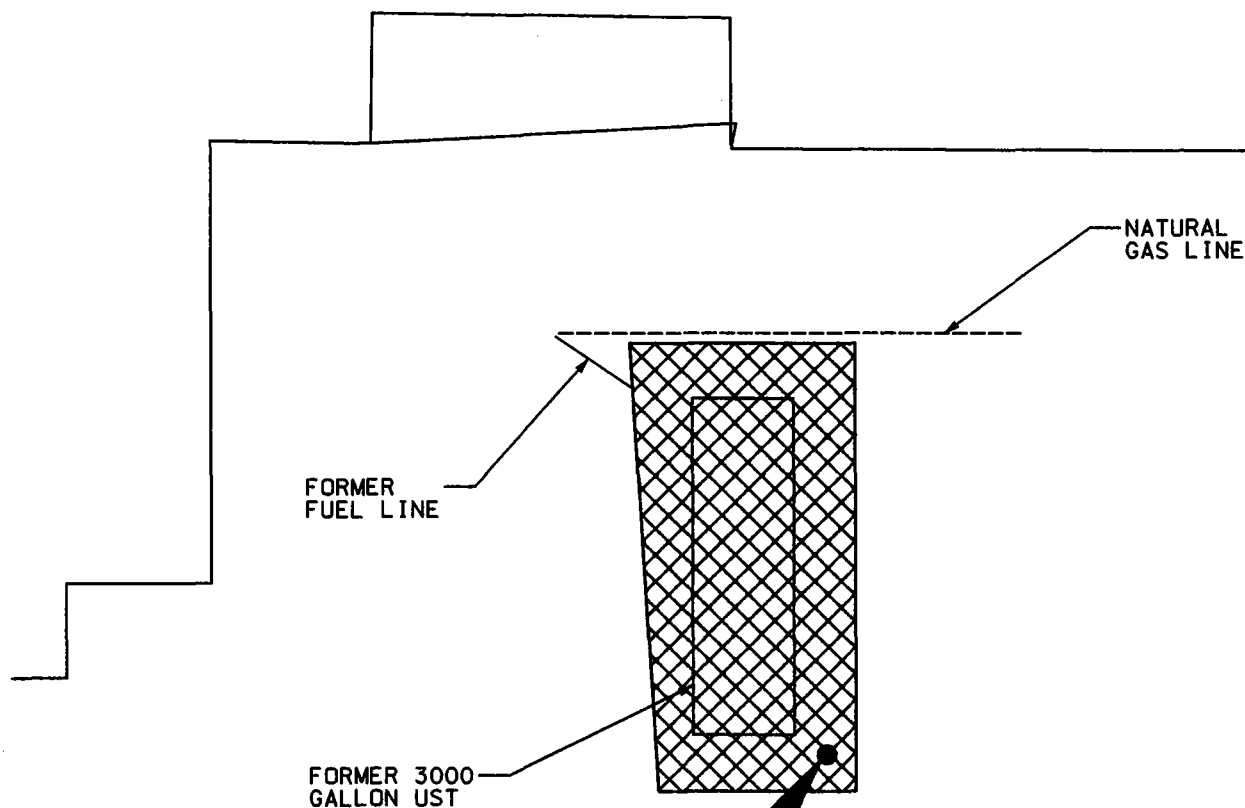
FIGURE 4
SOIL SAMPLING LOCATION MAP
BUILDING 270
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: JULY 1994

BUILDING 270



| | | | |
|---|------------------------------------|-----------------------------------|-----------------------------------|
| SAMPLING LOCATION:
SAMPLING DEPTH:
SAMPLING DATE: | HIGHER OF
NJDEP GWQS
AND PQL | BLDG 270
5-11' BGS
10/13/98 | BLDG 270
8-11' BGS
11/12/98 |
| VOLATILE ORGANIC COMPOUNDS: | | | |
| ACETONE: | 700 | ND | 5.81 |
| SEMIVOLATILE ORGANIC COMPOUNDS: | | | |
| PHENANTHRENE: | NLE | ND | 1.84 |



LEGEND

- GROUNDWATER SAMPLE LOCATION
(OCTOBER 13, 1998 AND NOVEMBER 11, 1998)
- ▨ LIMIT OF EXCAVATION
(JULY 7, 1994)

NOTES:

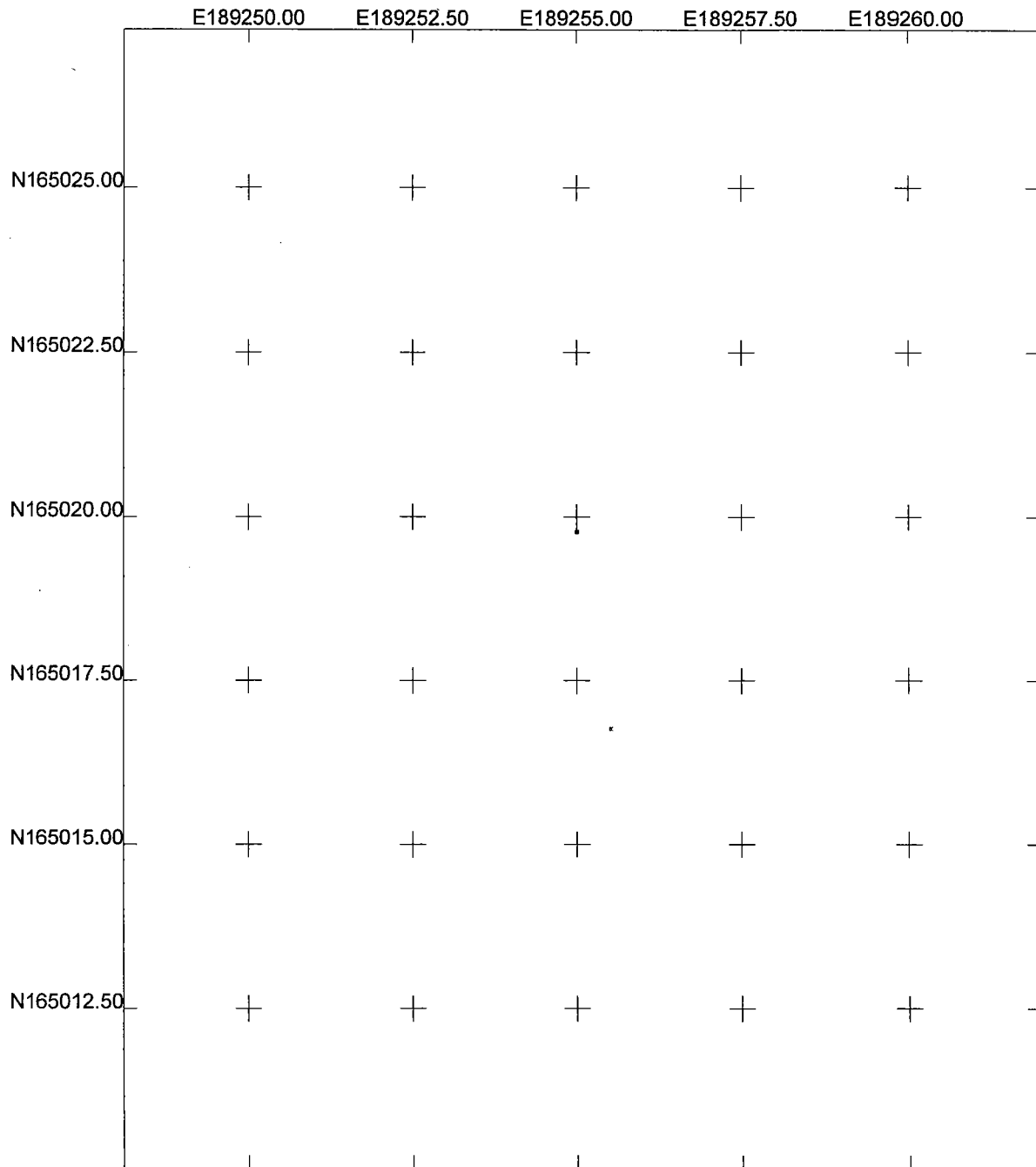
1. ND=INDICATES COMPOUND NOT DETECTED
2. NLE= NO LIMIT ESTABLISHED
3. ALL RESULTS IN UG/L
4. BGS = BELOW GROUND SURFACE

FIGURE 5
GROUNDWATER SAMPLING MAP
BUILDING 270
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: JULY 1994



**Figure 5 GPS Sample Locations Map
(Bldg 270)**

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



Scale 1:100
0 3.000
Meters

r010814a.cor
1/20/1999
Pathfinder Office
 **Trimble**

Figure 5 GPS Sample Point Location Data

US State Plane 1983 NJ (NY East) 2900 NAD 1983 (CONUS)

(in Meters)

Sample Point

| <u>Location / Desc.</u> | <u>Y Coord. (Northing)</u> | <u>X Coord. (Easting)</u> |
|---|-------------------------------------|------------------------------------|
| 270GW | 165019.786 | 189254.991 |
| (GW denotes <u>G</u> round <u>W</u> ater) | | |

Reference Point

| <u>Location / Desc.</u> | <u>Y Coord. (Northing)</u> | <u>X Coord. (Easting)</u> |
|--------------------------------|-------------------------------------|------------------------------------|
| 270 POLE | 165016.779 | 189255.499 |

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APPENDIX A

NJDEP-BUST CLOSURE APPROVAL LETTER

UNDERGROUND STORAGE TANK SYSTEM CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL
PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS #

C-93-3184

UST #

0081533

US Army
BLDG. 270
Ft. Monmouth, NJ

Monmouth

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM
THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

Removal of: one 3,000 gallon #2 diesel UST(s) and appurtenant piping.

SITE ASSESSMENT: Soil samples will be taken every five (5) feet along the center line of each tank and one (1) soil sample for every 15 feet along all associated piping. Two (2) additional samples will be taken from around the tank and biased to the areas of highest field screened readings. Samples will be analyzed for TPHC. If sample results are greater than 1,000ppm than 25% of the samples will be analyzed for VO+10.

ON-SITE MANAGER:

C. Appleby

TELEPHONE:

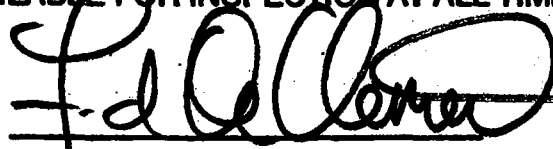
908-532-1475

OWNER:

TELEPHONE:

EFFECTIVE DATE: **AUG 26 1993**

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED
ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.



KEVIN F. KRATINA, BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS



State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation

CN 029
Trenton, NJ 08625-0029
Tel. # 609-984-3156
Fax. # 609-292-5604

Scott A. Weiner
Commissioner

Karl J. E
C

SEP 2 1993

Dear Applicant:

The Department of Environmental Protection (the Department) received an "Underground Storage Tank Closure Plan Approval Application" for your facility. This application detailed the procedures to be implemented as required by the Underground Storage Tank Systems Technical Requirements and Procedures at N.J.A.C. 7:14B-1 et seq. Based upon our review of the information submitted, a Closure Approval is hereby granted.

A Standard Reporting Form (SRF) must be submitted to the Department within seven (7) days of removal or abandonment of the tank(s). The date of removal or abandonment must be included with the SRF. The SRF will be used to delist the tank(s) from the Bureau of Underground Storage Tanks (BUST) registration files. A copy of the SRF is attached.

Within ninety (90) days of completion of the tank(s) closure, a Site Assessment Summary pursuant to N.J.A.C. 7:14B-9.5 must be submitted to BUST (copy attached). If contamination is discovered during closure, you are required to initiate corrective action as per N.J.A.C. 7:14B-8 and outlined in the Department's Scope of Work document. All discharges must be reported to the Spill Hotline at (609) 292-7172.

Once you have obtained a Closure Approval, a demolition permit issued pursuant to N.J.A.C. 5:23 et seq. and authorized by the Department of Community Affairs (DCA), Construction Code Element must be procured from your local construction code official. For further information in obtaining a demolition permit, please contact the local construction code official directly, or DCA's Code Assistance Unit at (609) 530-8793.

If you require further information or assistance, please contact the Tank Management Section of BUST at (609) 984-3156.

Attachments: Closure Approval
SRF
SAS

New Jersey is an Equal Opportunity Employer
Recycled Paper





State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0029
ATTN: UST Program
(609) 984-3156

For State Use Only

Date Rec'd. _____
Auth. _____
Routing _____
UST NO. _____

STANDARD REPORTING FORM
for reporting activities at an UST facility:

- | | |
|--|---|
| ☐ General Facility Information Changes | ☐ Sale or Transfer |
| ☒ Closure (Abandonment or Removal) | ☐ Substantial Modification |
| ☐ Temporary Closure | ☐ Financial Responsibility |
| ☐ Change in Service | ☐ Address Change Only |

Check ONLY One Type of Activity - Complete Form For That Activity

(More than one tank can be listed per activity)

*** NOTE *** ALL NEW tank installations at existing registered facilities must submit a Registration Questionnaire for the new tanks.

Answer questions 1 through 5 and others as applicable.

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

US ARMY
Director of Public Works
BLDG 167
Fort Monmouth, N.J. 07703

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

3. Contact person for this activity:

Dinkar M. Desai
Telephone Number: (908) 532-1475

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire:

BLDG 270

54

5. Registration Number (if known):

UST - 0081533

6. For GENERAL FACILITY INFORMATION changes (address, telephone, contact person, etc. - supply NEW information only):

- a. Facility name: _____
b. Facility location: _____
c. Owner's mailing address: _____

NJ
d. Block: _____ Lot: _____
e. Contact person (facility operator): _____
1. Contact telephone number: () _____
g. Other (Specify): _____

(OVER)

2-

7. For CLOSURE (abandonment or removal - check all that apply):

8. ☐ Abandonment Date / / Case No:

Attach the necessary implementation schedule (3 copies) and all documentation needed for abandonment per N.J.A.C. 7:14B-9.1 (d).

- b. ☒ Removal Date: 7 16 1994 Case No. _____

Attach the necessary implementation schedule (3 copies).

C-93-3184

8. For CHANGES IN HAZARDOUS SUBSTANCES STORED (check all that apply):

- a. ☐ Temporary Closure (12 month maximum time – see N.J.A.C. 7:14B-9.1(b)). Remove all hazardous substances; leave tank in place.
- b. ☐ Change in service from a regulated substance to a non-regulated substance. Tank must be cleaned and site assessment performed per N.J.A.C. 7:14B-9.1(e).
- c. ☐ Changes in service from one regulated hazardous substance to another regulated hazardous substance.

Tank No. _____ Old _____ New _____

Tank No. _____ Old _____ New _____

| Tank No. | Old | New |
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(Attach additional sheets if more space is needed)

9. For TRANSFER OF OWNERSHIP: Effective Date: / /

- a. **New Owner (operator)** _____

- b. New Facility Name _____

N

County

- c. Closing Attorney _____ Tele: (____) _____ - _____

10. For SUBSTANTIAL MODIFICATIONS (to include any retrofitted activity - e.g. the addition of spill/overflow protection monitoring systems, cathodic protection, etc.):

- a. Type of Modification _____ Date: ____/____/____

- b. * NOTE *** Substantial modifications require a permit under N.J.A.C. 7:14B-10.

11. For changes in FINANCIAL RESPONSIBILITY to (check appropriate changes and attach copies of new information):

- a. Policy Type: ☐ d. Company/Carrier: ☐
b. Policy Number: ☐ e. Expiration Date: ☐
c. Other: ☐

(Specify)

NOTE: ALL appropriate and applicable permits, licenses and certificates required by the above activity(ies) from any local, state and/or federal agencies must be obtained separately from this notification.

CERTIFICATION

This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for the facility (N.J.A.C. 7:14B-2.3 (a) 1).

"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment."

Signature: T. Jones

Name (print or type): JAMES OTT

Title: Directorate of Public Works Date: 2/10/94

REF-100

(INTMOD- 32)

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 : _____

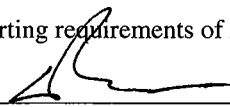
State: _____ Zip: _____ Telephone Number : _____

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 : 81533-54 (7 digits)• Incident Report Number • • • • • (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 ☐ NoName: Dinker DeSai Signature:  UST Cert. No.: 10173Firm: U.S. Army Fort Monmouth Firm's UST Cert. Number: NA - U.S. ArmyFirm Address: Directorate of Public Works Building 173 City: Fort MonmouthState: New Jersey Zip: 07703 Telephone Number : 732-532-6224

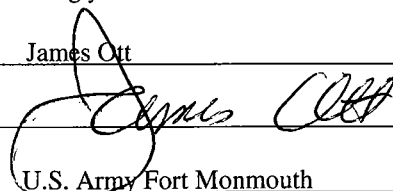
(NOTE: Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21 et seq.)

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 WorksSignature: Company Name: U.S. Army Fort Monmouth Date: 3/25/99

C. 11

A. 10

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

C. 11

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APPENDIX C

WASTE MANIFEST



State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 028, Trenton, NJ 08625-0028

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

Form Approved. OMB No. 2050-0039. Expires 9-30-94

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No.
NJ3211002059703191 | Manifest Document No.
1 | 2. Page 1
of 1 | Information in the shaded areas is not required by Federal law. | | |
|--|---|--|---|-------------------|---|-----------------|---------------|
| 3. Generator's Name and Mailing Address
US Army Communications Electronics Command
Main Post, c/o James Shirghio, Bldg 2504
ATTN: SELFM-DL-EM-MS, Fort Monmouth, NJ 07703 | | | A. State Manifest Document Number
NJA 1603191 | | | | |
| 4. Generator's Phone (908) 532-6223 | | | B. State Generator's ID
SAME | | | | |
| 5. Transporter 1 Company Name
Freehold Cartage, Inc. | | | C. State Trans. ID
NJDEPE52265 | | | | |
| 6. US EPA ID Number
NJ D 054126164 | | | D. Transporter's Phone (908) 462-1001 | | | | |
| 7. Transporter 2 Company Name | | | E. State Trans. ID | | | | |
| 8. US EPA ID Number | | | F. Transporter's Phone () | | | | |
| 9. Designated Facility Name and Site Address
Lionetti Oil Recovery Co., Inc.
Runyon & Cheesequake Rds.
Old Bridge, NJ 08857 | | | G. State Facility's ID | | | | |
| 10. US EPA ID Number
NJ D 084044064 | | | H. Facility's Phone (908) 721-0900 | | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)
HM | | | 12. Containers
No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste No. |
| a. | X | Petroleum Oil, N.O.S. Class 3 (Petroleum Oil)
Combustible Liquid UN 1270 PG III | 001 | TT | XX236 G | X | 722 |
| b. | X | Petroleum Oil NOS Class 3 (Petroleum Oil)
Combustible Liquid UN 1270 PG III | 001 | TT | XX300 G | X | 722 |
| c. | | | | | | | |
| d. | | | | | | | |
| J. Additional Descriptions for Materials Listed Above
Petroleum Oil 95 %
Water 5 % L,T | | | K. Handling Codes for Wastes Listed Above
T04 Filtration | | | | |
| a. | | | c. | | | | |
| b. | | Petroleum Oil 95 %
Water 5 % L,T | d. | | | | |
| 15. Special Handling Instructions and Additional Information
NOT EPA REGULATED. REGULATED BY NJ AS HAZARDOUS WASTE. 11a. ERG #27
24 HOUR EMERGENCY PHONE: 201-427-2881
NJ DECAL# 55182 | | | a) Bldg 271 b) Bldg 270
81533-59 | | | | |
| 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.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | |
| Printed/Typed Name
Joseph M. Fallon | | | Signature
Joseph M. Fallon | | Month Day Year
05/29/94 | | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
David S. Smith | | | Signature
David S. Smith | | Month Day Year
10/5/12/94 | | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Darr | | | Signature | | Month Day Year | | |
| 19. Discrepancy Indication Space | | | | | | | |
| 20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year | | | | | | | |

F 1 1
A 1 2
F 1 3
A 1 4
F 1 5
A 1 6
F 1 7
A 1 8
F 1 9
A 1 10
F 1 11
A 1 12
F 1 13
A 1 14
F 1 15
A 1 16
F 1 17
A 1 18
F 1 19
A 1 20
F 1 21
A 1 22
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F 1 89
A 1 90
F 1 91
A 1 92
F 1 93
A 1 94
F 1 95
A 1 96
F 1 97
A 1 98
F 1 99
A 1 100

APPENDIX D
UST DISPOSAL CERTIFICATE

MAZZA & SONS, INC.

Metal Recyclers
Auto and Truck
3230 Shafto Rd.
Tinton Falls, NJ
(908) 922-8282

NO. _____

DATE 11 July 94

840 197- UST0090010-20
840 270 UST001533-54
East Menmouth
Easton, New Jersey

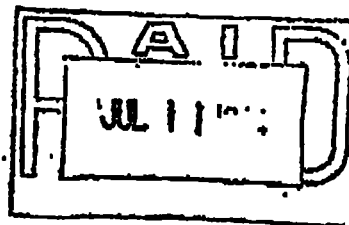
Customer's Name Cute, Inc

Address _____

Make of
AutoTires
Tank
Price

42360 LB 6

29860 LB 6

12500

Weight Price

Cast Iron

Steel

Li. Iron

Copper #1

Copper #2

Li. Copper

Brass

Alum Clean

Lead

Stainless

Radiators

Batteries

TOTAL AMOUNT:

Weigher CCustomer Don Cea

APPENDIX E

SOIL ANALYTICAL DATA PACKAGE

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

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 167
Ft. Monmouth, NJ 07703

Lab. ID #: 1552.1-.8
Sample Rec'd: 07/06/94
Analysis Start: 07/07/94
Analysis Comp: 07/07/94

Analysis: 418.1 (TPH)
Matrix: Soil
Analyst: S. Hubbard
Ext. Meth: Sonc.

NJDEPE UST Reg.#: 0081533-54
Closure #: C-93-3184
DICAR #: 94-7-6-1417-48
Location #: Bldg. 270

| Lab ID. | Description | %Solid | Result
(mg/Kg) | MDL |
|---------|------------------------------|--------|-------------------|-----|
| 1552.1 | Site A, South Bottom OVA= NA | 82 | ND | 6.6 |
| 1552.2 | Site B, Mid South OVA= NA | 83 | 10.7 | 6.6 |
| 1552.3 | Site C, Mid Bottom OVA= NA | 82 | ND | 6.6 |
| 1552.4 | Site D, Mid North OVA= NA | 81 | 7.69 | 6.6 |
| 1552.5 | Site E, North Bottom OVA= NA | 81 | 126. | 9.9 |
| 1552.6 | Site F, N.W. Corner OVA= NA | 85 | 686. | 9.9 |
| 1552.7 | Site G, Dupe of A OVA= NA | 81 | 7.68 | 6.6 |
| 1552.8 | Site H, S.E. Corner OVA= NA | 81 | ND | 6.6 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| M. Bl. | Method Blank | 100 | ND | 3.3 |

Notes: ND = Not Detected, MDL = Method Detection Limit

* = Silica Gel Added, NA = Not Applicable

1552.1 dup= 100% 1552.1 s= 152% 1552.1 sd= 146% RPD= 4.0%



Brian K. McKee
Laboratory Director

SLRV-AIR, INC.

P.O. #: PWS-07

5 - 1/4" NIK
2 - HOT SPOT
1 - DUP
3 - LINES

Chain of Custody

| | | | | | | | | | |
|---|-------------|------------------------------------|---------------|----------------------------------|-----------------------------|---------------------|-------------|-------------|------------------------|
| Project #: 1552 | | Sampler: COTE, INC | | Date / Time: 7-6-94 | | Analysis Parameters | | Start: | |
| Customer: DPW - DESAI | | Site Name: BLDG 270 | | | | | | Finish: | |
| Phone: X21475 | | 0081533-54 | | | | | | | |
| | | CLOSURE NO C-93-3184 | | | | | | | |
| | | DICAR 94-7-6-1417-48 | | | | | | | |
| Lab Sample ID Number | Date/Time | Customer Sample Location/ID Number | Sample Matrix | # of Bottles | TPH C
9% SOLID
MUNSEL | | | | Preservation Method |
| 1552.1 | 7-6-94 1535 | SITE A - SOUTH BOTT | SOIL | 1 | X | X | X | | OVA calib at 0% |
| .2 | 1538 | B - MID SOUTH | | | | | | | an - 92% Methane |
| .3 | 1540 | C - MID BOTT | | | | | | | at office - could not |
| .4 | 1543 | D - MID NORTH | | | | | | | recalibrate in field |
| .5 | 1545 | E - NORTH BOTT | | | | | | | due to high humidity - |
| .6 | 1548 | F - NW CORNER | | | | | | | NO OVA readings |
| .7 | 1535 | G - DUPE OF A | | | | | | | |
| .8 | 1551 | H - SE CORNER | | | | | | | |
| .9 | | I - LATER DWS | | | | | | | |
| .10 | | J - | | | | | | | |
| .11 | | K - | | | | | | | |
| Relinquished By (signature) | | Date / Time | | Received By (signature) | | Shipped By: | | | |
| [Signature] | | | | | | | | | |
| Relinquished By (signature) | | Date / Time | | Received for Lab by (signature): | | Date / Time | | | |
| | | | | B. M. K. | | 7/6/94 1630 | | | |
| Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. | | | | | | | | | |

TSK- Piping

Brian K. McKee
Laboratory Director

July 7, 1994

Sarah J. Hubbard

1042

Blank 0 MV

40.75 108 MV

81.5 204 MV

163 404 MV

1552.1 4 MV

1552.1 5 MV Duplicates

1552.1 50 MV Spike

1552.1 48 MV Spike Dup

1552.2 7 MV

1552.3 4 MV

1552.4 6 MV

1552.5 29 MV

1552.6 148 MV

1552.7 6 MV

1552.8 2 MV

1553.1 22 MV

1554.1 6 MV

105-6970-00

PRINTED IN U.S.A.

PHC Conformance/Non-conformance Summary Report

No Yes

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

✓

2. Matrix Spike/Matrix Sp Dup. Recoveries Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range)

✓

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

✓

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

N/A

5. Extraction holding time met. (If not met, list number of days exceeded for each sample)

✓

6. Analysis holding time met. (If not met, list number of days exceeded for each sample)

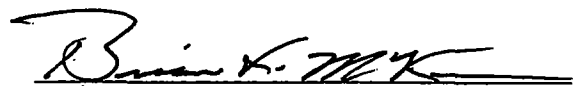
✓

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.

Project #1552


Brian K. McKee
Laboratory Manager

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

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 167
Ft. Monmouth, NJ 07703

Lab. ID #: 1553.1
Sample Rec'd: 07/07/94
Analysis Start: 07/07/94
Analysis Comp: 07/07/94

Analysis: 418.1 (TPH)
Matrix: Soil
Analyst: S. Hubbard
Ext. Meth: Sonc.

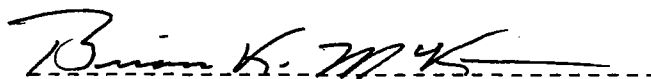
NJDEPE UST Reg.#: 0081533-54
Closure #: C-93-3184
DICAR #: 94-7-6-1417-48
Location #: Bldg. 270

| Lab ID. | Description | %Solid | Result
(mg/Kg) | MDL |
|---------|------------------------|--------|-------------------|-----|
| 1553.1 | Site I, Trench OVA= NA | 85 | 51.8 | 6.6 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| M. Bl. | Method Blank | 100 | ND | 3.3 |

Notes: ND = Not Detected, MDL = Method Detection Limit

* = Silica Gel Added, NA = Not Applicable

1552.1 dup= 100% 1552.1 s= 152% 1552.1 sd= 146% RPD= 4.0%



Brian K. McKee
Laboratory Director

Brian K. McKee
Laboratory Director

SL RV-AIR, INC.

P.O. #: PWS-07

Chain of Custody

[illegible]

July 7, 1994

Sarah J. Hubbard

1042

Blank 0 MV

40.75 108 MV

81.5 204 MV

163 404 MV

1552.1 4 MV

1552.1 5 MV Duplicate

1552.1 50 MV Spike

1552.1 48 MV Spike Dup

1552.2 7 MV

1552.3 4 MV

1552.4 6 MV

1552.5 29 MV

1552.6 148 MV

1552.7 6 MV

1552.8 2 MV

1553.1 22 MV

1554.1 6 MV

125-6970-000

PRINTED IN U.S.A.

PHC Conformance/Non-conformance Summary Report

No Yes

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

✓

2. Matrix Spike/Matrix Sp Dup. Recoveries Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range)

 ✓

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

 ✓

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

 N/A

5. Extraction holding time met. (If not met, list number of days exceeded for each sample)

 ✓

6. Analysis holding time met. (If not met, list number of days exceeded for each sample)

 ✓

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.

Project #1553

Brian K. McKee
Brian K. McKee
Laboratory Manager

L i c e n s e

$$4 \times 10^{-4} \text{ s}^{-1}$$

L 44

4- 4a

4. 13

6. 10

0.2. 1.50

Vol. 1-100

42.102

4. 1-2

4. $\frac{1}{2}$

4. 1.29

L. J. Gray

4-5-2018

 $\mathbf{v}_i$

1-1-21

100

1998

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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

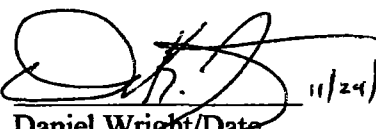


ANALYTICAL DATA REPORT
Fort Monmouth Environmental Laboratory
ENVIRONMENTAL DIVISION
Fort Monmouth, New Jersey
PROJECT: UST Program

BLDG. 270

| Field Location No. &
Location | Laboratory
Sample ID# | Matrix | Date and Time
Of Collection | Date Received |
|----------------------------------|--------------------------|---------|--------------------------------|---------------|
| Trip Blank | 3973.01 | Aqueous | 13-Oct-98 | 10/13/98 |
| Field Blank | 3973.02 | Aqueous | 13-Oct-98 09:24 | 10/13/98 |
| Bldg. 270 - 8-11' | 3973.03 | Aqueous | 13-Oct-98 10:00 | 10/13/98 |

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


Daniel Wright/Date
Laboratory Director

ENCLOSURE:
CHAIN OF CUSTODY
FIELD DOCUMENTATION
RESULTS

Table of Contents

| <u>Section</u> | <u>Pages</u> |
|-------------------------------------|---------------------|
| Chain of Custody | 1-2 |
| Field Documentation | 3-5 |
| Methodology Review | 6-7 |
| Laboratory Chronicle | 8-9 |
| Conformance/Non-Conformance Summary | 10-12 |
| Volatile Organics | 13-14 |
| Analytical Results Summary | 15-22 |
| Tune Results Summary | 23-26 |
| Method Blank Results Summary | 27 |
| Calibration Summary | 28-31 |
| Surrogate Recovery Summary | 32 |
| MS/MSD Results Summary | 33-34 |
| Internal Standard Area & RT Summary | 35 |
| Chromatograms | 36-43 |
| Base Neutrals | 44 |
| Analytical Results Summary | 45-54 |
| Tune Results Summary | 55-60 |
| Method Blank Results Summary | 61 |
| Calibration Summary | 62-69 |
| Surrogate Recovery Summary | 70 |
| MS/MSD Results Summary | 71 |
| Internal Standard Area & RT Summary | 72-75 |
| Chromatograms | 76-81 |
| Laboratory Deliverables Checklist | 82 |
| Laboratory Authentication Statement | 83 |

CHAIN OF CUSTODY

0001

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]

FIELD DOCUMENTATION

0003

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

FOR BLDG. # 270

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 pushrod (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 of 16 feet. The water table was at 8.75 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 7 – 12 feet. Riser casing from 7 - +3 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.

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.

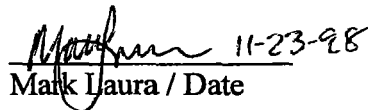
B. Field Blanks

1 Field blank was taken at this site.

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 11-23-98

METHODOLOGY REVIEW

0006

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.

LABORATORY CHRONICLE

0008

Laboratory Chronicle

Lab ID: 3973

Site: Bldg. 270

| | Date | Hold Time |
|------------------------------|-------------|-----------|
| Date Sampled | 10/13/98 | NA |
| Receipt/Refrigeration | 10/13/98 | NA |
| Extractions | | |
| 1. Base Neutrals | 10/20/98 | 14 days |
| Analyses | | |
| 1. Volatiles | 10/21/98 | 14 days |
| 2. Base Neutrals | 10/26,27/98 | 40 days |

CONFORMANCE/ NON-CONFORMANCE SUMMARIES

0010

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 2 Fluorobiphenyl low 3973.03 (Bldg 270 8-11')
 - 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 3973 04 (Bldg 291 7-10')

Laboratory Manager: _____

Date: 11/24/98

VOLATILE ORGANICS

0013

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 **VB01773.D**
 Operator **Skelton**
 Date Acquired **21 Oct 98 12:14 pm**

Sample Name **VBLK56**
 Field ID **VBLK56**
 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

0015

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

Data File Nam **vb01777.d**
 Operator **Skelton**
 Date Acquired **21 Oct 98 4:09 pm**

Sample Name **3973.01**
 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

0016

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

Data File Nam vb01778.d
 Operator Skelton
 Date Acquired 21 Oct 98 4:53 pm

Sample Name 3973.02
 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

0017

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

Data File Nam vb01779.d
 Operator Skelton
 Date Acquired 21 Oct 98 5:38 pm

Sample Name 3973.03
 Field ID Bldg 270 5-11'
 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

0018

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

VBK56

Lab Name: FMETL Project _____
NJDEP# 13461 Case No.: 3973 SDG No _____ Location UST
Matrix: (soil/water) WATER Lab Sample ID: VBK56
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01773.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: not dec. _____ Date Analyzed: 10/21/98
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Trip Blank

Lab Name: FMETL Project _____
NJDEP# 13461 Case No.: 3973 SDG No _____ Location UST
Matrix: (soil/water) WATER Lab Sample ID: 3973.01
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01777.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: not dec. _____ Date Analyzed: 10/21/98
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Blank

Lab Name: FMETL Project _____
NJDEP# 13461 Case No.: 3973 SDG No _____ Location UST
Matrix: (soil/water) WATER Lab Sample ID: 3973.02
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01778.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: not dec. _____ Date Analyzed: 10/21/98
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 |
|---------|---------------|----|------------|---|
|---------|---------------|----|------------|---|

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg270 5-11'

Lab Name: FMETL Project _____
NJDEP# 13461 Case No.: 3973 SDG No _____ Location UST
Matrix: (soil/water) WATER Lab Sample ID: 3973.03
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB01779.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: not dec. _____ Date Analyzed: 10/21/98
GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

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

Number TICs found: 1

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|----------------|---------------|-------|------------|----|
| 1. 000496-11-7 | Indane | 35.43 | 9 | JN |

BASE NEUTRALS

0044

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

Data File Name bna00993.d

Operator Skelton

Date Acquired 10/27/19 -1:8:

Sample Name Sblk145

Misc Info Sblk145 A 981020

Sample Multiplier 1

| CAS# | Name | R.T. | Response | Result | GW
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 | Hexachlorocthane | | | 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 bna00993.d

Operator Skelton

Date Acquired 10/27/19 -1:8:

Sample Name Sblk145

Misc Info Sblk145 A 981020

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 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

Sblk145

Lab Name: FMETL Lab Code 13461

Project 980932 Case No.: 3973 Location UST SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: Sblk145

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00993.D

Level: (low/med) LOW Date Received: 10/13/98

% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/20/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 6 (ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----------------|---------------|-------|------------|----|
| 1. 000629-50-5 | Tridecane | 12.09 | 9 | JN |
| 2. 000629-59-4 | Tetradecane | 13.43 | 12 | JN |
| 3. 000629-62-9 | Pentadecane | 14.68 | 12 | JN |
| 4. 000544-76-3 | Hexadecane | 15.86 | 12 | JN |
| 5. 000629-78-7 | Heptadecane | 16.99 | 10 | JN |
| 6. 000593-45-3 | Octadecane | 18.05 | 8 | JN |

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

Data File Name bna00974.d
 Operator Skelton
 Date Acquired 10/26/19 -1:9:

Sample Name 3973.02
 Misc Info Field Blank
 Sample Multiplier 1

| CAS# | Name | R.T. | Response | Result | GW
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 **bna00974.d**
 Operator **Skelton**
 Date Acquired **10/26/19 -1:9:**

Sample Name **3973.02**
 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 | 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

Field Blank

Lab Name: FMETL Lab Code 13461
Project 980932 Case No.: 3973 Location UST SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 3973.02
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00974.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/20/98
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/26/98
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 bna00975.d
 Operator Skelton
 Date Acquired 10/26/19 -1:0:

Sample Name 3973.03
 Misc Info Bldg 27
 Sample Multiplier 1

| CAS# | Name | R.T. | Response | Result | GW
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 bna00975.d

Operator Skelton

Date Acquired 10/26/19 -1:0:

Sample Name 3973.03

Misc Info Bldg 27

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
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg 270

Lab Name: FMETL Lab Code 13461
Project 980932 Case No.: 3973 Location UST SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: 3973.03
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00975.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: decanted: (Y/N) N Date Extracted: 10/20/98
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/26/98
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 |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|

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

Bldg 291

Lab Name: FMETL Lab Code 13461
Project 980932 Case No.: 3973 Location UST SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 3973.04
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA00976.D
Level: (low/med) LOW Date Received: 10/13/98
% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/20/98
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/26/98
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 11/24/96

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

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

NJDEP LABORATORY CERTIFICATION # 13461

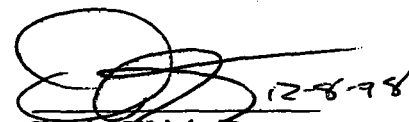


ANALYTICAL DATA REPORT Fort Monmouth Environmental Laboratory ENVIRONMENTAL DIVISION Fort Monmouth, New Jersey PROJECT: UST Program

BLDG. 270

| Field Location No. &
Location | Laboratory
Sample ID# | Matrix | Date and Time
Of Collection | Date Received |
|----------------------------------|--------------------------|---------|--------------------------------|---------------|
| Trip Blank | 4052.01 | Aqueous | 13-Nov-98 | 11/13/98 |
| Field Blank | 4052.02 | Aqueous | 13-Nov-98 09:30 | 11/13/98 |
| Bldg. 270 8-11' | 4052.04 | Aqueous | 13-Nov-98 14:50 | 11/13/98 |

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


Daniel Wright/Date
Laboratory Director

ENCLOSURE:
CHAIN OF CUSTODY
FIELD DOCUMENTATION
RESULTS

Table of Contents

| <u>Section</u> | <u>Pages</u> |
|-------------------------------------|---------------------|
| Chain of Custody | 1-2 |
| Field Documentation | 3-5 |
| Methodology Review | 6-7 |
| Conformance/Non-Conformance Summary | 8-10 |
| Laboratory Chronicle | 11-12 |
| Volatile Organics | 13-14 |
| Analytical Results Summary | 15-22 |
| Tune Results Summary | 23-26 |
| Method Blank Results Summary | 27 |
| Calibration Summary | 28-31 |
| Surrogate Recovery Summary | 32 |
| MS/MSD Results Summary | 33-34 |
| Internal Standard Area & RT Summary | 35 |
| Chromatograms | 36-43 |
| Base Neutrals | 44 |
| Analytical Results Summary | 45-53 |
| Tune Results Summary | 54-57 |
| Method Blank Results Summary | 58 |
| Calibration Summary | 59-63 |
| Surrogate Recovery Summary | 64 |
| MS/MSD Results Summary | 65 |
| Internal Standard Area & RT Summary | 66-67 |
| Chromatograms | 68-73 |
| Laboratory Deliverables Checklist | 74 |
| Laboratory Authentication Statement | 75 |

CHAIN OF CUSTODY

0001



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]

FIELD DOCUMENTATION

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

FOR BLDG. # 270

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 pushrod (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 of 16 feet. The water table was at 8.75 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 7 – 12 feet. Riser casing from 7 - +3 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.

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 taken at this site.

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

 11-23-98
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

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 N/A

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 dup performed on 41052.03 Bldg 2700 8-11

Laboratory Manager: _____

Date: 12-8-98

LABORATORY CHRONICLE

Laboratory Chronicle

Lab ID: 4052

Site: Bldg. 270

| | Date | Hold Time |
|------------------------------|-------------|------------------|
| Date Sampled | 11/13/98 | NA |
| Receipt/Refrigeration | 11/13/98 | NA |
| Extractions | | |
| 1. Base Neutrals | 11/15/98 | 14 days |
| Analyses | | |
| 1. Volatile Organics | 11/17,18/98 | 14 days |
| 2. Base Neutrals | 11/20/98 | 40 days |

VOLATILE ORGANICS

0013

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 vb02128.d
 Operator Skelton
 Date Acquired 17 Nov 98 3:32 pm

Sample Name Vblk65
 Field ID Vblk65
 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

Vblk65

Lab Name: FMETL Project 980932
NJDEP# 13461 Case No.: 4052 SDG No Location UST
Matrix: (soil/water) WATER Lab Sample ID: Vblk65
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02128.D
Level: (low/med) LOW Date Received: 11/12/98
% Moisture: not dec. Date Analyzed: 11/17/98
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 vb02143.d
 Operator Skelton
 Date Acquired 18 Nov 98 3:00 am

Sample Name 4052.01
 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 | |
| | 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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Trip Blank

Lab Name: FMETL Project 980932
NJDEP# 13461 Case No.: 4052 SDG No Location UST
Matrix: (soil/water) WATER Lab Sample ID: 4052.01
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02143.D
Level: (low/med) LOW Date Received: 11/12/98
% Moisture: not dec. Date Analyzed: 11/18/98
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 vb02144.d
 Operator Skelton
 Date Acquired 18 Nov 98 3:45 am

Sample Name 4052.02
 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 | 12.82 | 77677 | 2.15 ug/L | 2 | 0.24 ug/L | |
| 156-60-5 | trans-1,2-Dichloroethene | | | not detected | 100 | 0.16 ug/L | |
| 75-35-3 | 1,1-Dichloroethane | | | not detected | 70 | 0.12 ug/L | |
| 108-05-4 | Vinyl Acetate | | | not detected | nle | 0.78 ug/L | |
| 78-93-3 | 2-Butanone | | | not detected | 300 | 0.62 ug/L | |
| | cis-1,2-Dichloroethene | | | not detected | 10 | 0.17 ug/L | |
| 67-66-3 | Chloroform | | | not detected | 6 | 0.30 ug/L | |
| 75-55-6 | 1,1,1-Trichloroethane | | | not detected | 30 | 0.23 ug/L | |
| 56-23-5 | Carbon Tetrachloride | | | not detected | 2 | 0.47 ug/L | |
| 71-43-2 | Benzene | | | not detected | 1 | 0.23 ug/L | |
| 107-06-2 | 1,2-Dichloroethane | | | not detected | 2 | 0.18 ug/L | |
| 79-01-6 | Trichloroethene | | | not detected | 1 | 0.23 ug/L | |
| 78-87-5 | 1,2-Dichloropropane | | | not detected | 1 | 0.40 ug/L | |
| 75-27-4 | Bromodichloromethane | | | not detected | 1 | 0.55 ug/L | |
| 110-75-8 | 2-Chloroethyl vinyl 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.: 4052 SDG No Location UST
Matrix: (soil/water) WATER Lab Sample ID: 4052.02
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02144.D
Level: (low/med) LOW Date Received: 11/12/98
% Moisture: not dec. Date Analyzed: 11/18/98
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 vb02146.d
 Operator Skelton
 Date Acquired 18 Nov 98 5:15 am

Sample Name 4052.04
 Field ID Bldg270
 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 | 10.53 | 46199 | 5.81 ug/L | 700 | 1.36 ug/L | |
| 75-15-0 | Carbon Disulfide | | | not detected | nle | 0.46 ug/L | |
| 75-09-2 | Methylene Chloride | | | not detected | 2 | 0.24 ug/L | |
| 156-60-5 | trans-1,2-Dichloroethene | | | not detected | 100 | 0.16 ug/L | |
| 75-35-3 | 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

Bldg. 270

Lab Name: FMETL Project 980932
 NJDEP# 13461 Case No.: 4052 SDG No Location UST
 Matrix: (soil/water) WATER Lab Sample ID: 4052.04
 Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB02146.D
 Level: (low/med) LOW Date Received: 11/12/98
 % Moisture: not dec. Date Analyzed: 11/18/98
 GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

Number TICs found: 1

| CAS NO. | COMPOUND NAME | RT | EST. CONC. | Q |
|----------------|---------------|-------|------------|----|
| 1. 000496-11-7 | Indane | 35.44 | 9 | JN |

BASE NEUTRALS

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

Data File Name bna01324.d
 Operator Skelton
 Date Acquired 20 Nov 1998 1:23 am

Sample Name Sblk166
 Misc Info Sblk166 A 981115
 Sample Multiplier 1

| CAS# | Name | R.T. | Response | Result | GW
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 bna01324.d
Operator Skelton
Date Acquired 20 Nov 1998 1:23 am

Sample Name Sblk166
Misc Info Sblk166 A 981115
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

Sblk166

Lab Name: FMETL Lab Code 13461
 Project 980932 Case No.: 4052 Location UST SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: Sblk166
 Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01324.D
 Level: (low/med) LOW Date Received: 11/12/98
 % Moisture: _____ decanted: (Y/N) N Date Extracted: 11/15/98
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/20/98
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|---|
| 1. | unknown | 26.38 | 15 | J |

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

Data File Name bna01331.d
 Operator Skelton
 Date Acquired 20 Nov 1998 6:16 am

Sample Name 4052.02
 Misc Info Field Blank
 Sample Multiplier 1

| CAS# | Name | R.T. | Response | Result | GW
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 **bn01331.d**
 Operator **Skelton**
 Date Acquired **20 Nov 1998 6:16 am**

Sample Name **4052.02**
 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 | 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

Field Blank

Lab Name: FMETL Lab Code 13461
Project 980932 Case No.: 4052 Location UST SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 4052.02
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01331.D
Level: (low/med) LOW Date Received: 11/12/98
% Moisture: _____ decanted: (Y/N) N Date Extracted: 11/15/98
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/20/98
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|---|
| 1. | unknown | 23.22 | 12 | J |
| 2. | unknown | 26.38 | 28 | J |

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

Data File Name bna01333.d
 Operator Skelton
 Date Acquired 20 Nov 1998 7:39 am

Sample Name 4052.04
 Misc Info Bldg270
 Sample Multiplier 1

| CAS# | Name | R.T. | Response | Result | GW
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 bna01333.d
 Operator Skelton
 Date Acquired 20 Nov 1998 7:39 am

Sample Name 4052.04
 Misc Info Bldg270
 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 | 17.91 | 74318 | 1.84 ug/L | 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

Bldg270

Lab Name: FMETL Lab Code 13461
Project 980932 Case No.: 4052 Location UST SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 4052.04
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA01333.D
Level: (low/med) LOW Date Received: 11/12/98
% Moisture: _____ decanted: (Y/N) N Date Extracted: 11/15/98
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/20/98
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----------------|-----------------------------------|-------|------------|----|
| 1. 001680-51-9 | Naphthalene, 1,2,3,4-tetrahydro-6 | 12.00 | 8 | JN |
| 2. 000301-02-0 | 9-Octadecenamide, (Z)- | 23.22 | 13 | JN |
| 3. | unknown | 26.38 | 29 | J |

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 12/5/95



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

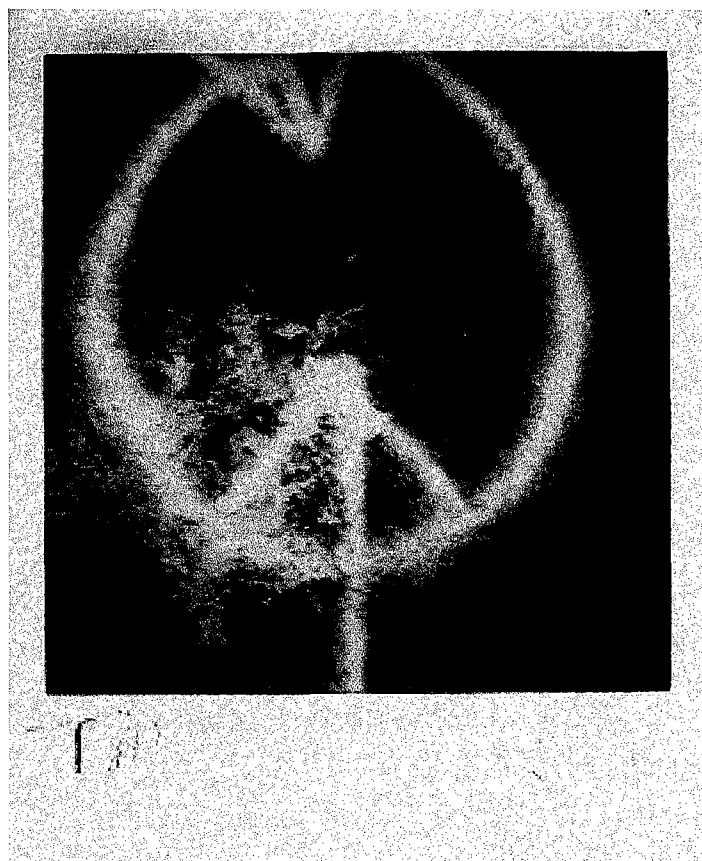
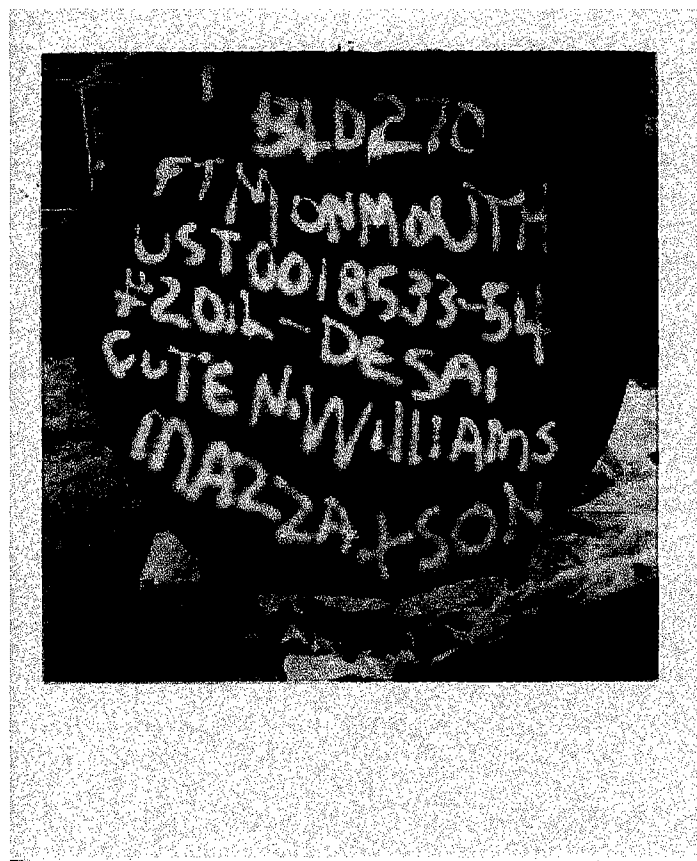
I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW-846 for Solid Waste Analysis. I have personally examined the information 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**

APPENDIX G

PHOTOGRAPHS



JULY 6, 1994
PHOTOGRAPHIC LOG
UST NO. 81533-54

Building 270
Main Post-West
Fort Monmouth

VERSAR
Engineers, Managers, Scientists & Planners
Bristol, PA