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United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

***Building 917
Main Post-West Area***

NJDEP UST Registration No. 81533-155

December 1998

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

BUILDING 917

**MAIN POST-WEST AREA
NJDEP UST REGISTRATION NO. 81533-155**

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

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EXECUTIVE SUMMARY

UST Closure

On March 16, 1998, a steel underground storage tank (UST) was closed by removal in accordance with New Jersey Department of Environmental Protection (NJDEP) closure procedures at the Main Post-West area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 0081533-155 (Fort Monmouth ID No. 917), was located southwest of Building 917. UST No. 0081533-155 was a 1,000-gallon #2 fuel oil UST.

Site Assessment

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual*. The sampling and laboratory analysis conducted during the site assessment were performed in accordance with Section 7:26E-2.1 of the *Technical Requirements for Site Remediation*. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, the UST was inspected for corrosion holes. No holes were noted in the UST. Soils surrounding the tank were dark in color and appeared to be contaminated. OVA readings taken during the assessment ranged from non-detect to 2 ppm. Approximately 36 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, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 869.67 mg/kg. Groundwater was encountered at 4.0 feet below ground surface and oil was observed on groundwater.

All post excavation soil samples collected from the UST excavation at Building 917 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 oil on groundwater, two (2) groundwater samples were collected at Building 917. On October 30, 1998, and November 30, 1998, Building 917 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. 81533-155 at Building 917.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-155, was closed at Building 917 at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on March 16, 1998. Refer to the site location map on Figure 1. This report presents the results of the Department of Public Works' (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 81533-155 complied with all applicable Federal, State, and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. All permits including but not limited to the NJDEP approved Decommissioning/Closure Plan were posted onsite for inspection. The decommissioning activities were conducted by DPW personnel who are registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 81533-155 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BFCM). The Standard Reporting Form and signed Site Assessment Summary form for UST No. 81533-155 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 917 is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 0081533-155 was located southwest of Building 917 and appurtenant copper piping ran approximately five (5) feet southeast from the excavation to Building 917. 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 917. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

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

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

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

Local Geology

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

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse grained feldspathic quartz and glauconite sand to 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 917 is located approximately 650 feet southwest of Oceanport Creek, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 917 is anticipated to be to the northeast.

1.3 HEALTH AND SAFETY

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

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

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

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST, and the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 25 gallons of liquid from the UST and its associated piping were pumped directly into a Lionetti Oil Recovery truck where it was then transported to Lionetti Oil Recovery Co., Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, NJ. Refer to Appendix C for a copy of 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 and with an OVA for evidence of contamination. Soils were stained and appeared to be contaminated. OVA readings taken during the assessment ranged from non-detect to 2 ppm. Approximately 36 cubic yards of potentially contaminated soil were removed from the excavated area and transported to the Main Post petroleum contaminated soil holding area. Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length. Soil samples, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 869.67 mg/kg. Groundwater was encountered at 4.0 feet below ground surface and oil was observed on groundwater. See Figure 3 for a cross-sectional view of the excavated area.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

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

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

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

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on OVA air monitoring and TPHC analysis results from the post-excavation soil samples, approximately 36 cubic yards of potentially contaminated soil were removed from the UST excavation. All potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were transported to the soil staging area. Soils that did not exhibit signs of contamination were used as backfill following the removal of the UST. Groundwater was encountered at 4.0 feet below ground surface and oil was observed on groundwater.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified 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: Charles Appleby
Employer: U.S. Army, Fort Monmouth
Phone Number: (908) 532-0989
NJDEP Certification No.: 2056
- 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: L & L Oil Service
Contact Person: Gary Lo Bella
Phone Number: (908) 462-1001
NJDEP Company Certification No.: P56601

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using an OVA and visual observations to identify potentially contaminated material. OVA readings taken during the assessment ranged from non-detect to 2 ppm. Approximately 36 cubic yards of potentially petroleum contaminated soil were removed from the excavated area and transported to the Fort Monmouth petroleum contaminated soil holding area. Soils were removed from the excavation until no evidence of contamination remained. Groundwater was encountered at 4.0 feet below ground surface and oil was observed on groundwater.

2.3 SOIL SAMPLING

On March 31, 1998, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, D, E, F, and DUP A were collected from a total of six (6) locations of the UST excavation. Excavation floor samples A and DUP A were collected at a depth of 7.0 feet bgs. Sidewall samples B, C, D, and E were collected at a depth of 3.5 feet bgs. Piping sample F was collected along the former piping length of the excavation, which was approximately five (5) feet in length. The piping sample was collected at a depth of 1.0 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC) and total solids.

U.S. Army personnel in accordance with the NJDEP Technical Requirements and the NJDEP Field Sampling Procedures Manual performed the site assessment. A summary of sampling activities including parameters analyzed is provided in Table 1. The post-excavation soil samples were collected using NJDEP *Field Sampling Procedures Manual* (1992) standard sampling procedures. Following soil sampling activities, the samples were chilled and delivered to U.S. Army Fort Monmouth Environmental Laboratory located in Fort Monmouth, New Jersey, for analysis.

2.4 GROUNDWATER SAMPLING

On October 30, 1998, and November 30, 1998, Building 917 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 March 16, 1998 from a total of six (6) locations. All samples were analyzed for TPHC and total solids. The post-excavation sampling results were compared to the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 mg/kg (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the analytical results and comparison to the NJDEP soil cleanup criteria is provided in Table 2 and the soil sampling locations are shown on Figure 4. The analytical data package is provided in Appendix E.

All post-excavation soil samples collected on March 16, 1998, from the UST excavation and from below piping associated with the UST contained concentrations of TPHC below the NJDEP soil cleanup criteria. Soil samples, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 869.67 mg/kg.

3.2 GROUNDWATER SAMPLING RESULTS

The sample collected from Building 917 on October 30, 1998, contained bis (2-ethylhexyl) phthalate at 3.47 ug/l. No other compounds were detected. Methylene chloride was detected in the trip blank and field blank at a concentration of 1.38 ug/l and 3.98 ug/l. Bis (2-ethylhexyl) phthalate was also detected in the field blank at a concentration of 5.19 ug/l. No other compounds were detected in the trip blank and field blank.

No compounds were detected in the sample collected from Building 917 on November 30, 1998.

A summary of the analytical results and comparison to the NJDEP groundwater cleanup criteria is provided in Table 3 and the groundwater sampling locations are shown on Figure 5. The analytical data package is provided in Appendix F. The full data package, including quality control, is on file at U.S. Fort Monmouth,

Groundwater samples collected on October 30, 1998, and November 30, 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 917 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 917 on October 30, 1998, and November 30, 1998, groundwater quality at Building 917 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. 81533-155 at Building 917.

TABLES

TABLE 1
 SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
 BUILDING 917, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 1 of 2

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	NJDEP Method
A	3/31/98	3/31/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
B	3/31/98	3/31/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
C	3/31/98	3/31/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
D	3/31/98	3/31/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
E	3/31/98	3/31/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
F	3/31/98	3/31/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
DUP A	3/31/98	3/31/98	Soil	Post-excavation	TPHC	OQA-QAM-025

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

**SUMMARY OF SAMPLING ACTIVITIES
BUILDING 917, 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**
4018.01	10/30/98	11/6/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4018.02	10/30/98	11/6/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4018.03	10/30/98	11/6/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4018.04	10/30/98	11/6/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4018.07	10/30/98	11/6/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4018.08	10/30/98	11/6/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4089.01	11/30/98	12/1/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4089.02	11/30/98	12/1/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4093.01	11/30/98	12/1/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4093.02	11/30/98	12/1/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4093.03	11/30/98	12/1/98	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 917, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 2

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/7.0=	3447.01	3/31/98	3/31/98	Total Solid TPHC	-- 177	-- yes	86.42 % 450.46	-- 10,000	--
B/3.5=	3447.02	3/31/98	3/31/98	Total Solid TPHC	-- 172	-- Yes	90.56 % 869.67	-- 10,000	No
C/3.5=	3447.03	3/31/98	3/31/98	Total Solid TPHC	-- 189	-- Yes	81.63 % ND	-- 10,000	--
D/3.5=	3447.04	3/31/98	3/31/98	Total Solid TPHC	-- 157	-- yes	95.90 % ND	-- 10,000	--
E/3.5=	3447.05	3/31/98	3/31/98	Total Solid TPHC	-- 178	-- yes	84.77 % ND	-- 10,000	--
F/1.0=	3447.06	3/31/98	3/31/98	Total Solid TPHC	-- 167	-- yes	92.51 % ND	-- 10,000	--
DUPA/7.0=	3447.07	3/31/98	3/31/98	Total Solid TPHC	-- 173	-- yes	86.58 % 511.70	-- 10,000	No

Note:

* Total Solid results are expressed as a percentage.

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

*** Sample further remediated and resampled

ND Not detected above stated method detection limit

TPHC Total Petroleum Hydrocarbons

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.01(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	1.38	--	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: 10/30/98 Location: 917 Lab Sample ID: 4018.01(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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.02(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	3.98	--	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: 10/30/98 Location: 917 Lab Sample ID: 4018.02(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: FMETL NJDEP #: 13461 Matrix: (soil/water) WATER
Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.03(Bldg 917)

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: 10/30/98 Location: 917 Lab Sample ID: 4018.03(Bldg 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.07 (DUP 917)

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: 10/30/98 Location: 917 Lab Sample ID: 4018.07(DUP 917)

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

Table 3
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.02(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:	<u>FMETL</u>	NJDEP #	<u>13461</u>	Matrix: (soil/water) <u>WATER</u>		
Date Sampled:	<u>10/30/98</u>	Location:	<u>917</u>	Lab Sample ID:	<u>4018.02(Field Blank)</u>	
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	5.19	--	30	no
117-84-0	Di-n-octylphthalate	1.30	Not Detected	--	100	no
205-99-2	Benzo[b]fluoranthene	1.31	Not Detected	--	10	no
207-08-9	Benzo[k]fluoranthene	1.57	Not Detected	--	2	no
50-32-8	Benzo[a]pyrene	1.36	Not Detected	--	20	no
193-39-5	Indeno[1,2,3-cd]pyrene	1.22	Not Detected	--	20	no
53-70-3	Dibenz[a,h]anthracene	3.12	Not Detected	--	20	no
191-24-2	Benzo[g,h,i]perylene	1.13	Not Detected	--	nle	no

Table 3
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP #: 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.04(Bldg 917)

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:	FMETL	NJDEP #	13461	Matrix:	(soil/water) WATER	
DATESAMPLED:	10/30/98	LOCATION:	917	LAB SAMPLE ID:	4018.04(Bldg 917)	
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	3.47	--	30	no
117-84-0	Di-n-octylphthalate	1.30	Not Detected	--	100	no
205-99-2	Benzo[b]fluoranthene	1.31	Not Detected	--	10	no
207-08-9	Benzo[k]fluoranthene	1.57	Not Detected	--	2	no
50-32-8	Benzo[a]pyrene	1.36	Not Detected	--	20	no
193-39-5	Indeno[1,2,3-cd]pyrene	1.22	Not Detected	--	20	no
53-70-3	Dibenz[a,h]anthracene	3.12	Not Detected	--	20	no
191-24-2	Benzo[g,h,i]perylene	1.13	Not Detected	--	nle	no

Table 3
SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.08(DUP 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 10/30/98 Location: 917 Lab Sample ID: 4018.08(DUP 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4089.01(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: 11/30/98 Location: 917 Lab Sample ID: 4089.01(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:	<u>FMETL</u>	NJDEP #	<u>13461</u>	Matrix: (soil/water) <u>WATER</u>		
Date Sampled:	<u>11/30/98</u>	Location:	<u>917</u>	Lab Sample ID: <u>4089.02(Field Blank)</u>		
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: 11/30/98 Location: 917 Lab Sample ID: 4089.02(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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4093.01(Bldg 917)

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: 11/30/98 Location: 917 Lab Sample ID: 4093.01(Bldg 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4093.03(DUP 917)

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: 11/30/98 Location: 917 Lab Sample ID: 4093.03(DUP 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4089.02(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:	<u>FMETL</u>	NJDEP #	<u>13461</u>	Matrix: (soil/water) <u>WATER</u>		
Date Sampled:	<u>11/30/98</u>	Location:	<u>917</u>	Lab Sample ID:	<u>4089.02(Field Blank)</u>	
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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4093.02(Bldg 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4093.02(Bldg 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4093.03(DUP 917)

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: FMETL NJDEP # 13461 Matrix: (soil/water) WATER
 Date Sampled: 11/30/98 Location: 917 Lab Sample ID: 4093.03(DUP 917)

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

FIGURES

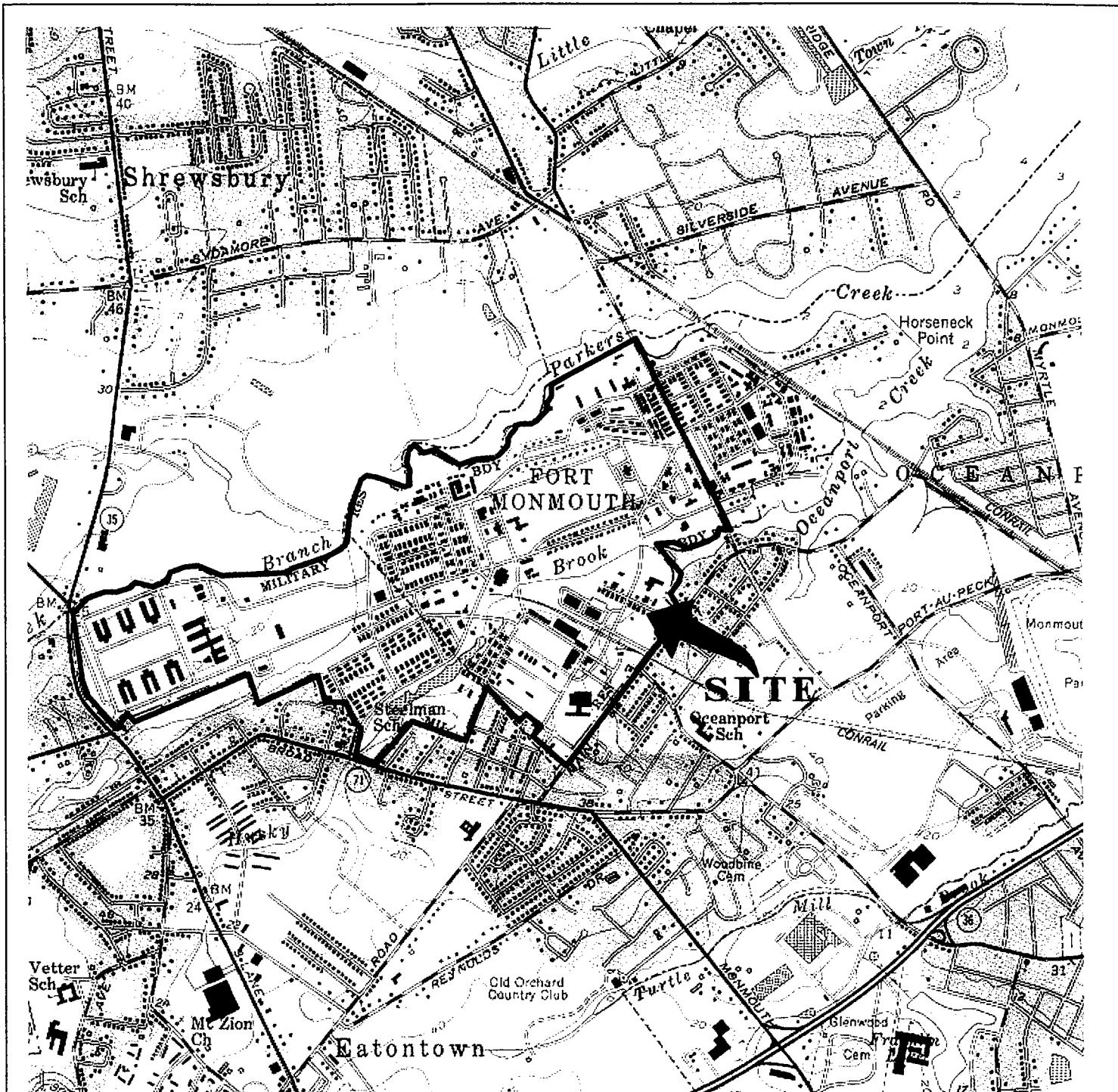


FIGURE 1

LOCATION MAP

Building 917

Main-Post West

Fort Monmouth Army Base Monmouth County, NJ

VERSAR

Engineers, Managers, Scientists, & Planners
Bristol, PA

LONG BRANCH, N. J.

40073-C8-TE-024

1954

PHOTOREVISED 1981
DMA 6164 I SE-SERIES V822



QUADRANGLE LOCATION

Mapped, edited and published by the Geological Survey

Scale: 1" = 2000'

Date: MARCH 1998

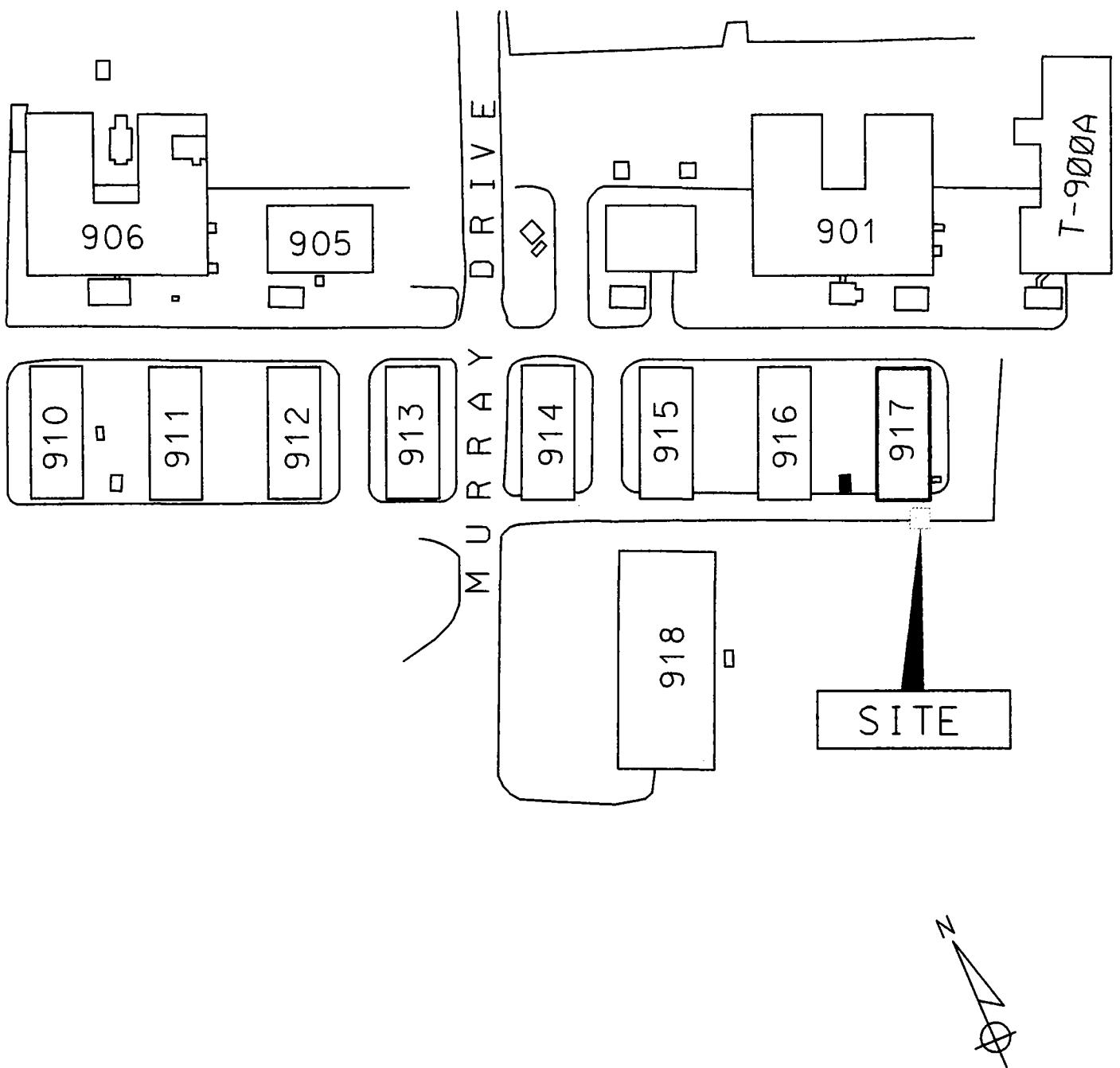


FIGURE 2
SITE MAP
BUILDING 917
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=100'

DATE: MARCH 1998

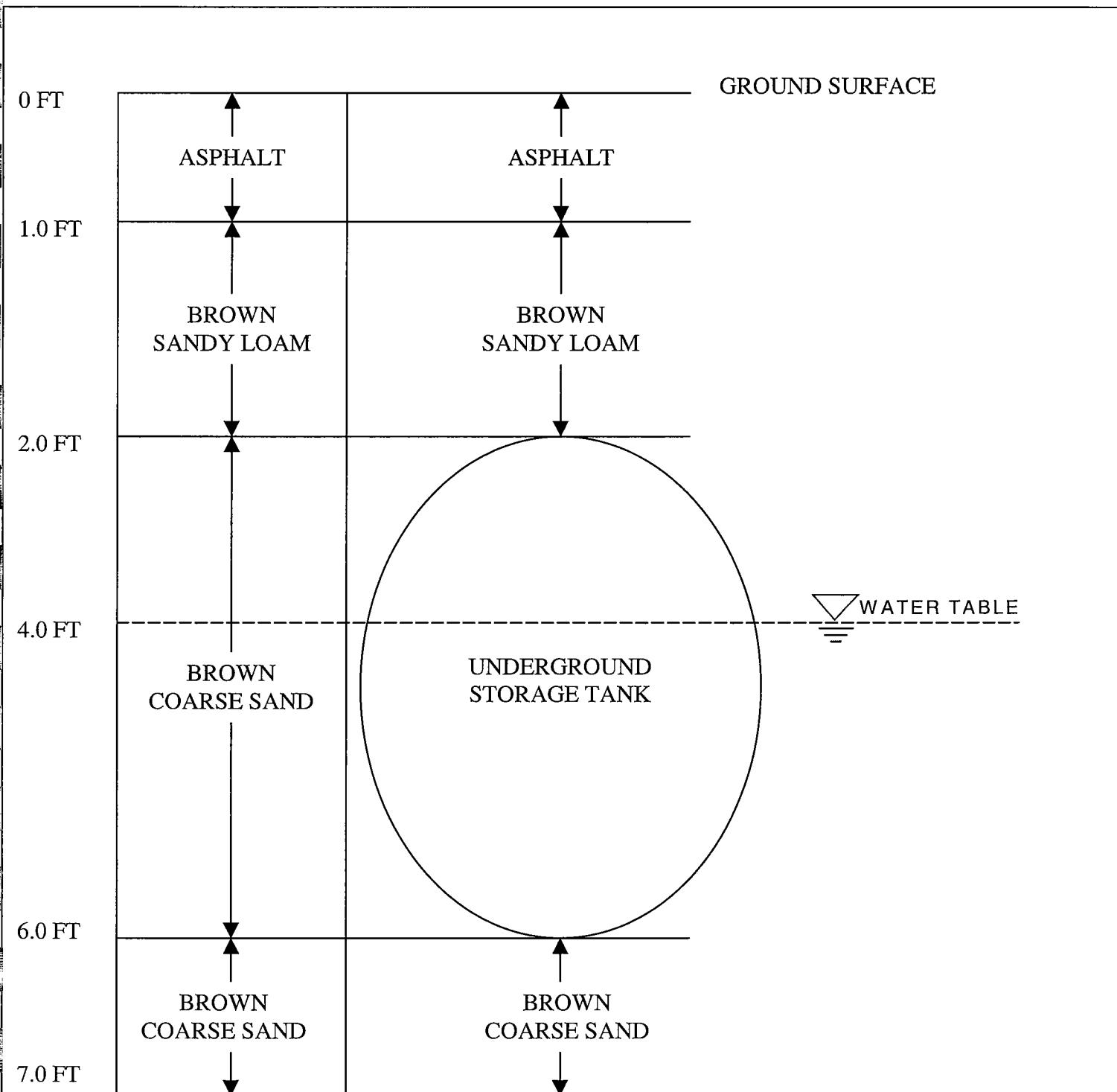


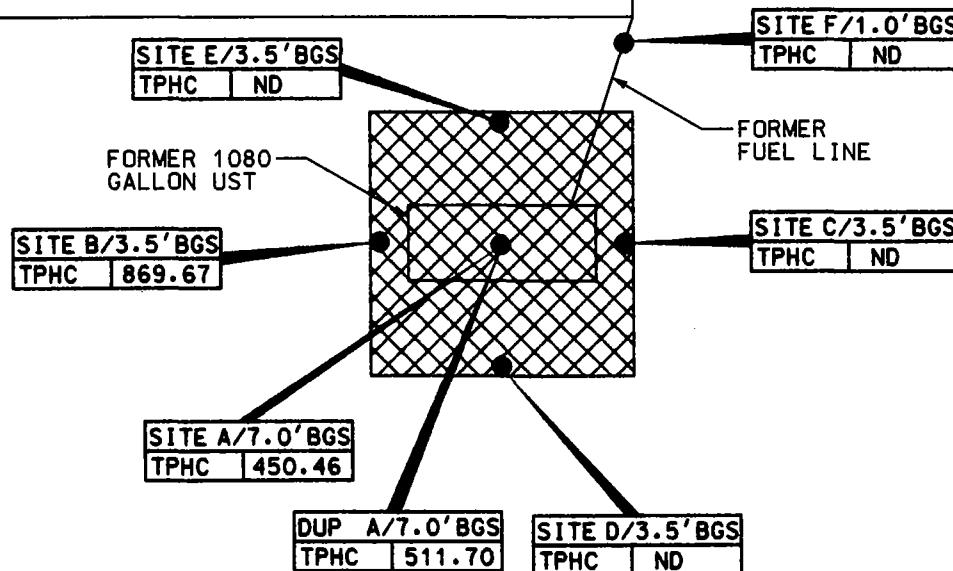
FIGURE 3
CROSS SECTIONAL VIEW
BUILDING 917
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
Engineers, Managers, Scientists & Planners
Bristol, Pennsylvania

SCALE: NTS

DATE: MARCH 1998

BUILDING 917



LEGEND

- SOIL SAMPLE LOCATION (MARCH 31, 1998)
- ▨ LIMIT OF EXCAVATION (MARCH 31, 1998)

NOTES:

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

FIGURE 4
SOIL SAMPLING LOCATION MAP
BUILDING 917
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: MARCH 1998

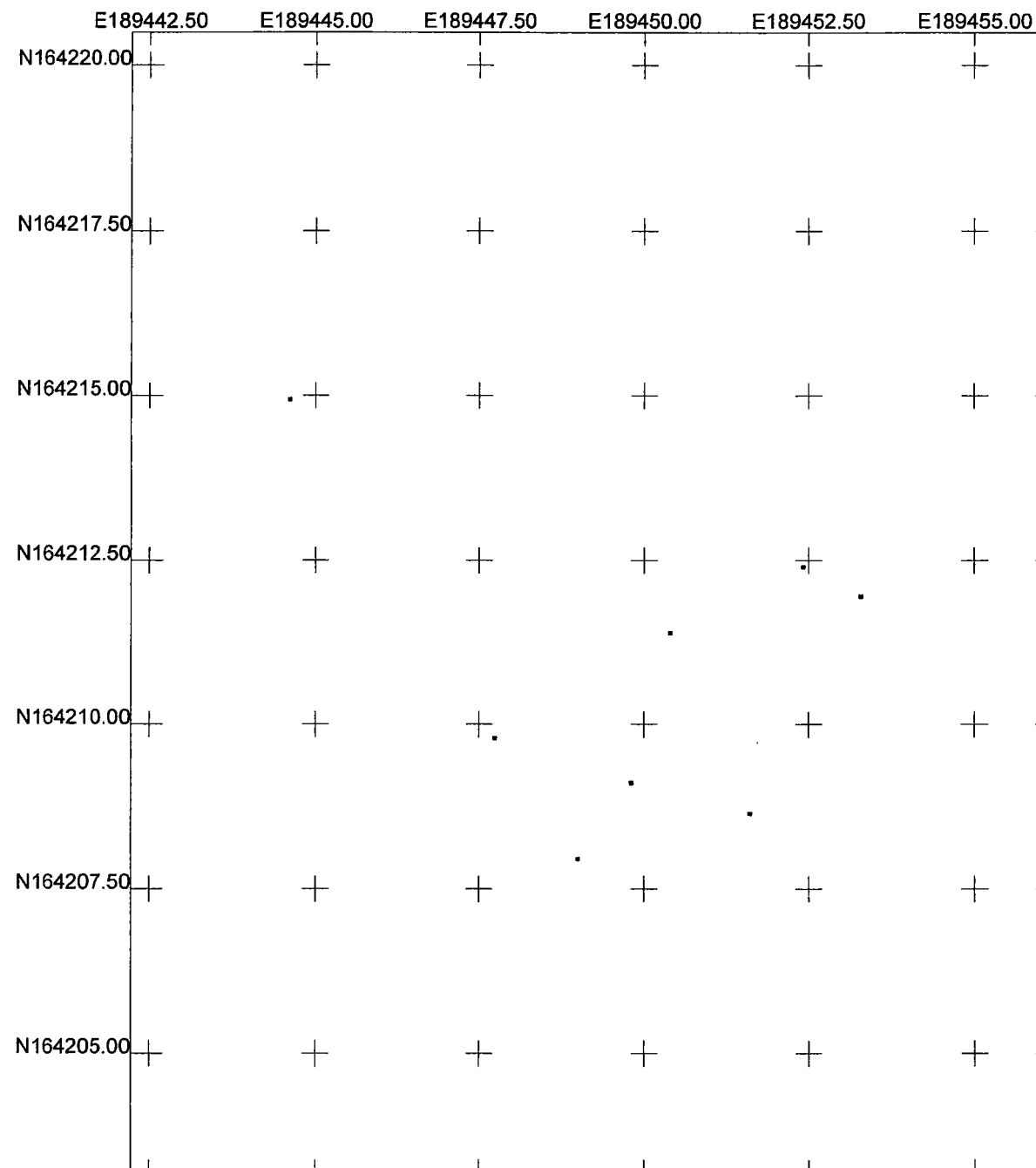


Figure 4 GPS Sample Location Map

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



Scale 1:100
0 3.000
Meters

r010415a917.cor
1/28/1999
Pathfinder Office
 Trimble

Figure 4 GPS Sample Location Point Data

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

(In Meters)

Sample Points

<u>Location/Desc.</u>	<u>Y Coord. (Northing)</u>	<u>X Coord. (Easting)</u>
917 A	164209.12	189449.796
917 B	164209.8	189447.726
917 C	164208.653	189451.597
917 D	164207.969	189448.989
917 E	164211.412	189450.382
917 F	164212.414	189452.404

Reference Points

<u>Location/Desc.</u>	<u>Y Coord. (Northing)</u>	<u>X Coord. (Easting)</u>
917 CORN	164211.963	189453.278
917 CORN	164214.954	189444.596

BUILDING 917

FORMER 1080
GALLON UST

FORMER
FUEL LINE

SAMPLING LOCATION: SAMPLING DEPTH: SAMPLING DATE:	HIGHER OF NJDEP GWQS AND PQL	BLDG 917 9-11'BGS 10/30/98	BLDG 917 10-13'BGS 11/30/98
VOLATILE ORGANIC COMPOUNDS:		ND	ND
SEMICVOLATILE ORGANIC COMPOUNDS:			
BIS(2-ETHYLEXYL)PHTHALATE:	NLE	3.47	ND



LEGEND

- GROUNDWATER SAMPLE LOCATION
(OCTOBER 30, 1998 AND NOVEMBER 30, 1998)
- ☒ LIMIT OF EXCAVATION
(MARCH 31, 1998)

NOTES:

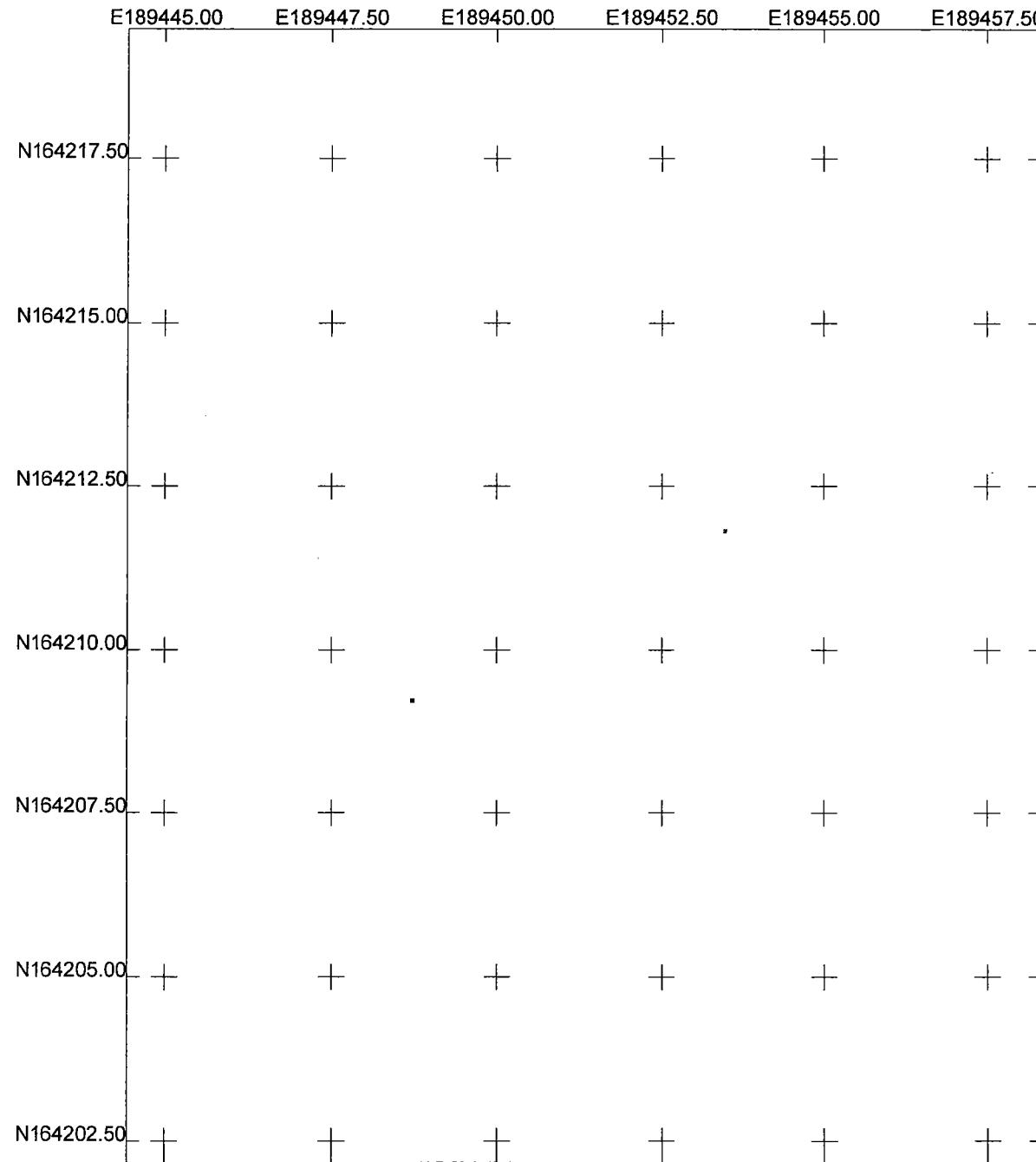
1. ND=INDICATES COMPOUND NOT DETECTED
2. NLE= NO LIMIT ESTABLISHED
3. ALL RESULTS IN ug/l
4. BGS = BELOW GROUND SURFACE

FIGURE 5
GROUNDWATER SAMPLING MAP
BUILDING 917
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: MARCH 1998



**Figure 5 GPS Sample Locations Map
(Bldg 917)**

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>
917GW	164209.235	189448.709

(GW denotes Ground Water)

Reference Point

<u>Location / Desc.</u>	<u>Y Coord. (Northing)</u>	<u>X Coord. (Easting)</u>
917 BLDG	164211.829	189453.454

APPENDIX A

NJDEP-STANDARD REPORTING FORM



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
 Closure (Abandonment or Removal)
 Temporary Closure
 Change in Service

- Sale or Transfer
 Substantial Modification
 Financial Responsibility
 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):

U.S. ARMY - FORT MONMOUTH
DPW - BUILDING 173
FORT MONMOUTH NJ 07703

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

MAIN POST

3. Contact person for this activity:

Charles Appleby

Telephone Number: (732) 532-6224

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

Bldg. 917 81533

5. Registration Number (if known):

UST - 155

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): _____

f. Contact telephone number: (_____) _____ - _____

g. Other (Specify): _____

(OVER)

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

- a. Abandonment Date: 1/1/ 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: 3/16/98 Case No. _____
Attach the necessary implementation schedule (3 copies).

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 _____

(Attach additional sheets if more space is needed)

9. For TRANSFER OF OWNERSHIP: Effective Date: 1/1/

- a. New Owner (operator) _____
b. New Facility Name _____

NJ _____

County _____

c. Closing Attorney _____ Date: (_____) _____

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

- a. Type of Modification _____ Date: 1/1/
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(s) 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 understand that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment.

Signature: James Ott

Name (print or type): JAMES OTT

Title: DIRECTOR - DEPT OF PUBLIC WORKS Date: 3/16/98

APPENDIX B

SITE ASSESSMENT SUMMARY

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form**A.** Facility Name : U.S. Army Fort Monmouth New Jersey

Facility Street Address : Directorate of Public Works Building 173

Municipality: Oceanport County : Monmouth

Block: _____ Lot(s): _____ Telephone Number : 732-532-6224

B. Owner (RP)'s Name:

Street Address: _____ City : _____

State: _____ Zip: _____ Telephone Number : _____

C. (Check as appropriate)

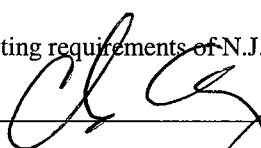
- Site Investigation
 Report (SIR) \$500 Fee
 Remedial Investigation
 Report (RIR) \$1000 Fee
 X NA - Federal Agreement

D. (Complete all that apply)

- Assigned Case Manager : Ian Curtis, Federal Case Manager
- UST Registration Number : 81533-155 (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 No

Name: Charles Appleby Signature:  UST Cert. No.: 2056

Firm: U.S. Army Fort Monmouth Firm's UST Cert. Number: NA - U.S. Army

Firm Address: Directorate of Public Works Building 173 City: Fort Monmouth

State: 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.)

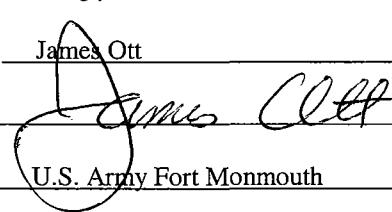
F. Certification by the Responsible Party(ies) of the Facility:

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 Works

Signature: 

Company Name: U.S. Army Fort Monmouth Date: 3/25/95

APPENDIX C

WASTE MANIFEST



RD. 1, BOX 5A - OLD BRIDGE, NJ 08857

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJ321002059707165	Manifest Document No.	2. Page 1 of 1	NHZ 009965
<p>3. Generator's Name and Mailing Address U.S. ARMY COMMUNICATIONS ELECTRONICS COMMAND MAIN POST C/O J FALLOON 2ND G (73 ATTN: SELPM-PW-EV FORT MONMOUTH, N.J. 07803</p>					
<p>4. Generator's Phone (732) 532-6223</p>					
5. Transporter 1 Company Name LIONETTI OIL RECOVERY CO INC		6. HS EPA ID Number N J D U 8 4 0 4 4 0 6 4	A. Transporter's Phone 908 721-0900		
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone		
9. Designated Facility Name and Site Address LIONETTI OIL RECOVERY CO INC DBA LORCO PETROLEUM SVCS RUNYON&CHEESEQUAKE RDS OLD BRIDGE, NJ 08857		10. HS EPA ID Number N J D 0 8 4 0 4 4 0 6 4	C. Facility's Phone 908 721-0900		
<p>11. Waste Shipping Name and Description a. PETROLEUM OIL (PETROLEUM OIL) COMBUSTIBLE LIQUID UN1270 PGIII</p>				12. Containers No.	13. Total Quantity
					00/TT01625
<p>b.</p>					
<p>c.</p>					
<p>d.</p>					
<p>D. Additional Descriptions for Materials Listed Above T,L PETROLEUM OIL 99% WATER 1%</p>				E. Handling Codes for Wastes Listed Above T04 FILTRATION	
<p>15. Special Handling Instructions and Additional Information 24 HR EMERGENCY RESPONSE/(908) 721-0900 DECAL #87103 ERG/128 DEXSIL TEST KIT RESULTS <u>1000</u> PPM MANIFEST USED FOR TRACKING PURPOSES ONLY</p>					
<p>16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.</p>					
Printed/Typed Name Joseph M. Fallon		Signature <i>Joseph M. Fallon</i> Month Day Year 10/08/98			
<p>17. Transporter 1 Acknowledgement of Receipt of Materials</p>					
Printed/Typed Name Don Mackay		Signature <i>Don Mackay</i> Month Day Year 04/08/98			
<p>18. Transporter 2 Acknowledgement of Receipt of Materials</p>					
Printed/Typed Name		Signature			
<p>19. Discrepancy Indication Space</p>					
<p>20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.</p>					
Printed/Typed Name Richard L. Bell		Signature <i>Richard L. Bell</i> Month Day Year 09/08/98			

ORIGINAL - RETURN TO GENERATOR

APPENDIX D

UST DISPOSAL CERTIFICATE

917

MAZZA & SONS, INC.

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

NO. _____

DATE. 19 MARCH 98

Customer's Name Tecum Vines CC

Address _____

Weight Price

Cast Iron

Steel

36.60

Lt. Iron

Copper #1

Copper #2

22780 LB
2156
1220

Weight Price

Lt. Copper

Brass

Alum Clean

Lead

Stainless

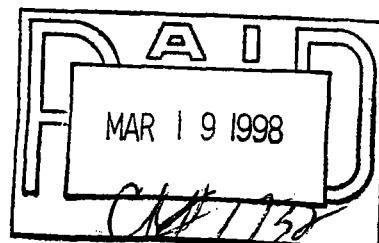
Battery

\$ 36.60

TOTAL AMOUNT:

Weigher _____

Customer



Jesse J. Bell

APPENDIX E

SOIL ANALYTICAL DATA PACKAGE

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
98-0001
Bldg. 917

Project # 3447
Date Rec. 03/31/98
Date Compl. 04/02/98
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OQA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

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

PHC Conformance/Non-conformance Summary Report

	<u>No</u>	<u>Yes</u>
1. Method Detection Limits provided.		✓
2. Method Blank Contamination - If yes, list the sample and the corresponding concentrations in each blank.	✓	
3. Matrix Spike Results Summary Meet Criteria. (If not met, list the sample and corresponding recovery which falls outside the acceptable range).	✓	
4. Duplicate Results Summary Meet Criteria. (If not met, list the sample and corresponding recovery which falls outside the acceptable range).		✓
5. IR Spectra submitted for standards, blanks, & samples		NA
6. Chromatograms submitted for standards, blanks, and samples if GC fingerprinting was conducted.		✓
7. Analysis holding time met. (If not met, list number of days exceeded for each sample)		✓

Additional Comments:

Laboratory Authentication Statement

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


Daniel K. Wright
Laboratory Manager



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: DPW-ENV		Project No: 98-0001		Analysis Parameters				Comments:	
Phone #:		Location: B. 917		TPH	OC SOILS	METALL			* = SAMPLES KEPT BELOW 4°C.
() DERA () OMA () Other:				Sample #	Type	bottles			
Samplers Name / Company : GARY DiMARTINIS - TUS									Remarks / Preservation Method
Lab Sample I.D.	Sample Location	Date	Time						
3447.01	917-A	3-31-98	1053	SOIL	1	X	X	X	2 EXC. FLOOR @ 7.0' *
02	B		1057						NO SIDE WALL @ 3.5'
03	C		1119						ND
04	D		1109						ND
05	E		1101						ND
06	F		1127						ND Piping Run @ 1.0'
07	DUP	↓	—	↓	↓	↓	↓	↓	— FIELD DUPLICATE ↓
<p><i>NOTE: OUA (#AS2114) CALIBRATED W/ 95 ppm CH₄ & ZERO(0) AIR AT 1030 HRS. ON 3-31-98 by G. DiMARTINIS.</i></p>									
Relinquished by (signature): <i>Gary DiMartinis</i>	Date/Time: 3-31-98/1400	Received by (signature): <i>J. Cervelli, Jr.</i>	Relinquished by (signature):	Date/Time:	Received by (signature):				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):				
Report Type: <input type="checkbox"/> Full, <input checked="" type="checkbox"/> Reduced, <input type="checkbox"/> Standard, <input type="checkbox"/> Screen / non-certified				Remarks: DEDICATED SAMPLING TOOLS USED.					
Turnaround time: <input checked="" type="checkbox"/> Standard 4 wks, <input type="checkbox"/> Rush Days, <input type="checkbox"/> ASAP Verbal Hrs.									

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

Client : U.S. Army **Lab. ID # :** 3447
 DPW. SELFM-PW-EV **Date Rec'd:** 31-Mar-98
 Bldg. 173 **Analysis Start:** 31-Mar-98
 Ft. Monmouth, NJ 07703 **Analysis Complete:** 02-Apr-98

Analysis: OQA-QAM-025 **UST Reg. #:**
Matrix: Soil **Closure #:**
Analyst: D.DEINHARDT **DICAR #:**
Ext. Meth: Shake **Location #:** B. 917

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3447.01	917-A	1.00	15.32	86.42	177	450.46
3447.02	917-B	1.00	15.07	90.56	172	869.67
3447.03	917-C	1.00	15.26	81.63	189	ND
3447.04	917-D	1.00	15.61	95.90	157	ND
3447.05	917-E	1.00	15.54	84.77	178	ND
3447.06	917-F	1.00	15.24	92.51	167	ND
3447.07	917-DUP	1.00	15.70	86.58	173	511.70
METHOD BLANK	31-Mar-98	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit



Daniel K. Wright
Laboratory Director

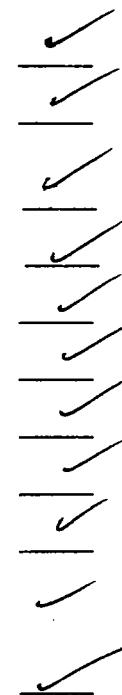
LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

1. Cover page, Title Page listing Lab Certification #, facility name and address, & date of report submitted
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 3/15/98

Laboratory Certification #13461

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

APPENDIX F

GROUNDWATER ANALYTICAL DATA PACKAGE

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

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

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

NJDEP LABORATORY CERTIFICATION # 13461



ANALYTICAL DATA REPORT

Fort Monmouth Environmental Laboratory

ENVIRONMENTAL DIVISION

Fort Monmouth, New Jersey

PROJECT: UST Program

BLDG. 917

Field Location No. & Location	Laboratory Sample ID#	Matrix	Date and Time Of Collection	Date Received
Trip Blank	4018.01	Aqueous	30-Oct-98	10/30/98
Field Blank	4018.02	Aqueous	30-Oct-98 09:20	10/30/98
Bldg. 917 – 9-11'	4018.03	Aqueous	30-Oct-98 10:00	10/30/98
Bldg. 917 – 9-11'	4018.04	Aqueous	30-Oct-98 10:15	10/30/98
Field Dup	4018.07	Aqueous	30-Oct-98	10/30/98
Field Dup	4018.08	Aqueous	30-Oct-98	10/30/98

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

12/3/98
Daniel Wright/Date
Laboratory Director

ENCLOSURE:
CHAIN OF CUSTODY
FIELD DOCUMENTATION
RESULTS

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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

Customer: CHAS. APPLEBY / VERSAR		Project No:				Analysis Parameters						Comments:	
Phone #: K210224						Location: BLDG. 917 + 914				V O A +	B N T		
()DERA ()OMA ()Other:													
Samplers Name / Company : Max Laura T.V.S. PWS 207				Sample	#								
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	IS	IS						Remarks / Preservation Method
4018. 1	TRIP BLANK	10-30-98	-	AQ	2	X							HCL
2	FIELD BLANK	"	0920	"	3	X X							HCL/44°C
3	BLDG. 917 - 9-11'	"	1000	"	2	X							HCL
4	" - "	"	1015	"	1	X							44°C HCL 44°C
5	BLDG. 914 - 6-7'	"	1040	"	2	X							HCL
6	" - "	"	1050	"	1	X							44°C
7	FIELD DUP. - X	"	-	"	2	X							HCL
8	" - X	"	-	"	1	X							44°C
Relinquished by (signature): <i>Martin</i>		Date/Time: 10-30-98 1130	Received by (signature): <i>J. Appleby</i>		Relinquished by (signature):		Date/Time:	Received by (signature):					
Relinquished by (signature):		Date/Time:	Received by (signature):		Relinquished by (signature):		Date/Time:	Received by (signature):					
Report Type: (<input type="checkbox"/> Full, <input checked="" type="checkbox"/> Reduced, <input type="checkbox"/> Standard, <input type="checkbox"/> Screen / non-certified						Remarks:							
Turnaround time: <input checked="" type="checkbox"/> Standard 4 wks, <input type="checkbox"/> Rush _____ Days, <input type="checkbox"/> ASAP Verbal _____ Hrs.													

FIELD DOCUMENTATION

0003

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

FOR BLDG. # 917

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

Objective:

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

1. Methods

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

2. Installation

- A. Using a Geoprobe, a borehole was advanced with a pre-probe with a diameter slightly larger than the casing. The hole was made to a depth of 12 feet. The water table was at 9 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. Purgging

- 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 location.

- C. Sample bottles: Supplied by Environmental Sampling Supply, Oakland, Calif.
The sample bottles are certified clean and are sealed upon delivery.
- D. P.V.C. Screens: Supplied by Bedrock Enterprises, Forked River N.J.

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

Mark Laura 12-2-98
Mark Laura / Date

METHODOLOGY SUMMARY

Methodology Summary

EPA Method 624 Gas Chromatographic Determination of Volatiles in Water

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

EPA Method 3510/8270 Gas Chromatographic Determination of Semi-volatiles in Water

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

CONFORMANCE/ NON-CONFORMANCE SUMMARY

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"? yes
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
(If not met, list those compounds and their recoveries, which fall outside the acceptable range) yes
 - 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 Duplicate performed on Bldg 917 9-11' (4018.03+04)

Laboratory Manager: 

Date: 12/13/98

LABORATORY CHRONICLE

Laboratory Chronicle

Lab ID:4018

Site: Bldg. 917

	Date	Hold Time
Date Sampled	10/30/98	NA
Receipt/Refrigeration	10/30/98	NA

Extractions

1. Base Neutrals	11/02/98	14 days
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Analyses

1. Volatiles	11/06,07/98	14 days
2. Base Neutrals	11/06/98	40 days

VOLATILE ORGANICS

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit

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

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

Data File Nam vb02014.d
 Operator Skelton
 Date Acquired 6 Nov 98 12:13 pm

Sample Name VBLK63
 Field ID VBLK63
 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

VBLK63

Lab Name:	<u>FMETL</u>	Project	<u>980932</u>				
NJDEP#	<u>13461</u>	Case No.:	<u>4018</u>	SDG No	<u></u>	Location	<u>UST</u>
Matrix (soil/water)	<u>WATER</u>			Lab Sample ID:	<u>VBLK63</u>		
Sample wt/vol:	<u>5.0</u>	(g/ml)	<u>ML</u>	Lab File ID:	<u>VB02014.D</u>		
Level: (low/med)	<u>LOW</u>			Date Received:	<u>10/30/98</u>		
% Moisture: not dec.				Date Analyzed:	<u>11/06/98</u>		
GC Column:	<u>HP5MS</u>	ID:	<u>0.25</u> (mm)	Dilution Factor:	<u>1.0</u>		
Soil Extract Volume:	<u>(uL)</u>			Soil Aliquot Volume:	<u>(uL)</u>		

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 vb02028.d
 Operator Skelton
 Date Acquired 6 Nov 98 10:47 pm

Sample Name 4018.01
 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	12.81	50782	1.38 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 ethene			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

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

Qualifiers

B = Compound found in related blank
 E = 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.:	4018
Matrix (soil/water)	WATER		
Sample wt/vol:	5.0	(g/ml)	ML
Level: (low/med)	LOW		
% Moisture: not dec.			
GC Column:	HP5MS	ID:	0.25 (mm)
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 vb02029.d
 Operator Skelton
 Date Acquired 6 Nov 98 11:31 pm

Sample Name 4018.02
 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	12.81	145347	3.98 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:	<u>FMETL</u>	Project	<u>980932</u>				
NJDEP#	<u>13461</u>	Case No.:	<u>4018</u>	SDG No	<u></u>	Location	<u>UST</u>
Matrix (soil/water)	<u>WATER</u>			Lab Sample ID:	<u>4018.02</u>		
Sample wt/vol:	<u>5.0</u>	(g/ml)	<u>ML</u>	Lab File ID:	<u>VB02029.D</u>		
Level: (low/med)	<u>LOW</u>			Date Received:	<u>10/30/98</u>		
% Moisture: not dec.				Date Analyzed:	<u>11/06/98</u>		
GC Column:	<u>HP5MS</u>	ID:	<u>0.25</u> (mm)	Dilution Factor:	<u>1.0</u>		
Soil Extract Volume:	<u>(uL)</u>			Soil Aliquot Volume:	<u>(uL)</u>		

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 Name vb02030.d
 Operator Skelton
 Date Acquired 7 Nov 98 12:16 am

Sample Name 4018.03
 Field ID Bldg 917 9-11'
 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	
	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

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

Qualifiers

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

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

0021

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg 917

Lab Name:	<u>FMETL</u>	Project	<u>980932</u>				
NJDEP#	<u>13461</u>	Case No.:	<u>4018</u>	SDG No	<u> </u>	Location	<u>UST</u>
Matrix (soil/water)	<u>WATER</u>			Lab Sample ID: <u>4018.03</u>			
Sample wt/vol:	<u>5.0</u>	(g/ml)	<u>ML</u>	Lab File ID: <u>VB02030.D</u>			
Level: (low/med)	<u>LOW</u>			Date Received: <u>10/30/98</u>			
% Moisture: not dec.				Date Analyzed: <u>11/07/98</u>			
GC Column:	<u>HP5MS</u>	ID:	<u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>			
Soil Extract Volume:	(uL)			Soil Aliquot Volume: <u> </u> (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 Name vb02032.d
 Operator Skelton
 Date Acquired 7 Nov 98 1:44 am

Sample Name 4018.07
 Field ID Field Dup
 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

Field Dup

Lab Name:	FMETL	Project	980932
NJDEP#	13461	Case No.:	4018
Matrix (soil/water)	WATER		
Sample wt/vol:	5.0	(g/ml)	ML
Level: (low/med)	LOW		
% Moisture: not dec.			
GC Column:	HP5MS	ID:	0.25 (mm)
Soil Extract Volume:	(uL)		
		Lab Sample ID:	4018.07
		Lab File ID:	VB02032.D
		Date Received:	10/30/98
		Date Analyzed:	11/07/98
		Dilution Factor:	1.0
		Soil Aliquot Volume:	(uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

BASE NEUTRALS

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

Data File Name	bna01187.d	Sample Name	SBLK156
Operator	Skelton	Misc Info	SBLK156 A 981102
Date Acquired	6 Nov 1998 1:32 am	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 **bna01187.d**
 Operator **Skelton**
 Date Acquired **6 Nov 1998 1:32 am**

Sample Name **SBLK156**
 Misc Info **SBLK156 A 981102**
 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

Lab Name:	FMETL	Lab Code	13461	Sblk156
Project	980932	Case No.:	4018	Location UST SDG No.:
Matrix: (soil/water)	WATER	Lab Sample ID: SBLK156		
Sample wt/vol:	1000	(g/ml)	ML	Lab File ID: BNA01187.D
Level: (low/med)	LOW	Date Received: 10/30/98		
% Moisture:		decanted: (Y/N)	N	Date Extracted: 11/02/98
Concentrated Extract Volume:	1000	(uL)	Date Analyzed: 11/06/98	
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. 000301-02-0	9-Octadecenamide, (Z)-	23.25	27	JN
2.	unknown	26.41	51	J

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

Data File Name **bna01189.d** Sample Name **4018.02**
 Operator **Skelton** Misc Info **Field Blank**
 Date Acquired **6 Nov 1998 2:55 am** 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 **bna01189.d**

Operator **Skelton**

Date Acquired **6 Nov 1998 2:55 am**

Sample Name **4018.02**

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	24.71	184841	5.19 ug/L	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

Lab Name:	<u>FMETL</u>	Lab Code	<u>13461</u>	Field Blank
Project	<u>980932</u>	Case No.:	<u>4018</u>	Location UST SDG No.:
Matrix: (soil/water)	<u>WATER</u>			Lab Sample ID: <u>4018.02</u>
Sample wt/vol:	<u>1000</u>	(g/ml)	<u>ML</u>	Lab File ID: <u>BNA01189.D</u>
Level: (low/med)	<u>LOW</u>			Date Received: <u>10/30/98</u>
% Moisture:				Date Extracted: <u>11/02/98</u>
Concentrated Extract Volume:	<u>1000</u>	(uL)	Date Analyzed: <u>11/06/98</u>	
Injection Volume:	<u>1.0</u>	(uL)	Dilution Factor: <u>1.0</u>	
GPC Cleanup: (Y/N)	<u>N</u>	pH:	<u>7</u>	

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	23.25	26	J
2.	unknown	26.41	53	J

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

Data File Name **bna01190.d**
 Operator **Skelton**
 Date Acquired **6 Nov 1998 3:37 am**

Sample Name **4018.04**
 Misc Info **Bldg 917 9-11'**
 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 **bna01190.d**

Sample Name **4018.04**

Operator **Skelton**

Misc Info **Bldg 917 9-11'**

Date Acquired **6 Nov 1998 3:37 am**

Sample Multiplier **1**

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L	
86-73-7	Fluorene			not detected	300	1.93	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L	
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	24.72	114246	3.47 ug/L	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

Lab Name:	<u>FMETL</u>	Lab Code	<u>13461</u>	Bldg917
Project	<u>980932</u>	Case No.:	<u>4018</u>	Location UST SDG No.:
Matrix: (soil/water)	<u>WATER</u>			Lab Sample ID: <u>4018.04</u>
Sample wt/vol:	<u>1000</u>	(g/ml)	<u>ML</u>	Lab File ID: <u>BNA01190.D</u>
Level: (low/med)	<u>LOW</u>			Date Received: <u>10/30/98</u>
% Moisture:	decanted: (Y/N) <u>N</u>			Date Extracted: <u>11/02/98</u>
Concentrated Extract Volume:	<u>1000</u>	(uL)		Date Analyzed: <u>11/06/98</u>
Injection Volume:	<u>1.0</u>	(uL)		Dilution Factor: <u>1.0</u>
GPC Cleanup: (Y/N)	<u>N</u>	pH:	<u>7</u>	

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000301-02-0	9-Octadecenamide, (Z)-	23.25	28	JN
2.	unknown	26.41	53	J

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

Data File Name **bna01192.d** Sample Name **4018.08**
 Operator **Skelton** Misc Info **Field Dup**
 Date Acquired **6 Nov 1998 4:59 am** 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 **bna01192.d** Sample Name **4018.08**
 Operator **Skelton** Misc Info **Field Dup**
 Date Acquired **6 Nov 1998 4:59 am** Sample Multiplier **1**

121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	ug/L
84-66-2	Diethylphthalate			not detected	5000	1.68	ug/L
86-73-7	Fluorene			not detected	300	1.93	ug/L
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	ug/L
100-01-6	4-Nitroaniline			not detected	NLE	2.70	ug/L
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

Field Dup

Lab Name:	FMETL	Lab Code	13461
Project	980932	Case No.:	4018
Matrix: (soil/water)	WATER	Location	UST
Sample wt/vol:	1000	(g/ml)	ML
Level: (low/med)	LOW	Date Received:	10/30/98
% Moisture:		decanted: (Y/N)	N
Concentrated Extract Volume:	1000	(uL)	Date Extracted: 11/02/98
Injection Volume:	1.0	(uL)	Date Analyzed: 11/06/98
GPC Cleanup: (Y/N)	N	pH:	7
Dilution Factor:	1.0		

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000301-02-0	9-Octadecenamide, (Z)-	23.25	30	JN
2.	unknown	26.41	56	J

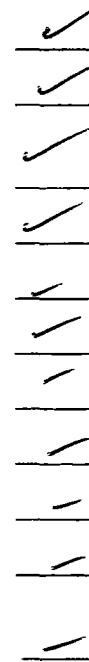
LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

**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 12/3/94

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. 917

Field Location No. & Location	Laboratory Sample ID#	Matrix	Date and Time Of Collection	Date Received
Trip Blank	4089.01	Aqueous	30-Nov-98	11/30/98
Field Blank	4089.02	Aqueous	30-Nov-98 09:35	11/30/98
Bldg. 917 10-13'	4093.01	Aqueous	30-Nov-98 14:28	11/30/98
Bldg. 917 10-13'	4093.02	Aqueous	30-Nov-98 14:35	11/30/98
Field Dup.	4093.03	Aqueous	30-Nov-98	11/30/98

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

Daniel Wright/Date
Laboratory Director

**ENCLOSURE:
CHAIN OF CUSTODY
FIELD DOCUMENTATION
RESULTS**

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CHAIN OF CUSTODY

000001

Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: CHAS APPALY/VERSAR		Project No:				Analysis Parameters						Comments:			
Phone #: X2 6224		Location: BLDG. 911				V O A +	B N +								
()DERA ()OMA ()Other:						IS	IS								
Samplers Name / Company: Mark Lanza T.V.S. PWS 07				Sample #	Type	bottles									Remarks / Preservation Method
Lab Sample I.D..	Sample Location	Date	Time	AQ.	2	X									HCL
4089. 1	TRIP BLANK	11-30-98	"	"	3	X									HCL/40cc
	2 FIXED BLANK	"	0930	"	2	X									HCL
	3 BLDG. 911 - 7.5-10.5'	"	0940	"	1	X									40cc
4	"	"	1030	"											
Relinquished by (signature): <i>M. Lanza</i>		Date/Time: 11-30-98 14:50		Received by (signature): <i>J. Kelly</i>		Relinquished by (signature):		Date/Time:		Received by (signature):					
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):					
Report Type: (<input type="checkbox"/> Full, <input type="checkbox"/> Reduced, <input type="checkbox"/> Standard, <input type="checkbox"/> Screen / non-certified								Remarks:							
Turnaround time: (<input type="checkbox"/> Standard 4 wks, <input type="checkbox"/> Rush _____ Days, <input type="checkbox"/> ASAP Verbal _____ Hrs.															

Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>Chas Adeloye / VERSAR</u>		Project No:				Analysis Parameters						Comments:	
Phone #: <u>X26224</u>						Location: <u>BLDG. 917</u>				<u>V</u>	<u>B</u>		
<input checked="" type="checkbox"/> DERA <input type="checkbox"/> YOMA <input type="checkbox"/> Other: _____						<u>O</u>	<u>N</u>	<u>A</u>	<u></u>	<u></u>	<u></u>		
Samplers Name / Company : <u>Mary Laura</u>				Sample #	Type	bottles	<u>S</u>	<u>S</u>					Remarks / Preservation Method
Lab Sample I.D.	Sample Location	Date	Time										
4093-1	BLDG. 917 - 10-13'	11-30-98	1428	AQ.	2	X							HCL
2	" "	"	1435	II	1		X						<4°C
3	FIELD DUP.	X	"	X	II	3	X	X					HCL / <4°C
Relinquished by (signature): <u>M. Laura</u>		Date/Time: 11-30-98 1450	Received by (signature): <u>J. Chaffee</u>		Relinquished by (signature):		Date/Time:	Received by (signature):					
Relinquished by (signature): <u> </u>		Date/Time:	Received by (signature):		Relinquished by (signature):		Date/Time:	Received by (signature):					
Report Type: <input type="checkbox"/> Full, <input type="checkbox"/> Reduced, <input type="checkbox"/> Standard, <input type="checkbox"/> Screen / non-certified						Remarks:							
Turnaround time: <input type="checkbox"/> Standard 4 wks, <input type="checkbox"/> Rush _____ Days, <input type="checkbox"/> ASAP Verbal _____ Hrs.													

FIELD DOCUMENTATION

000004

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

FOR BLDG. # 917

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

Objective:

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

1. Methods

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

2. Installation

- A. Using a Geoprobe, a borehole was advanced with a pre-probe with a diameter slightly larger than the casing. The hole was made to a depth of 12 feet. The water table was at 9 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.

000005

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

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

5. Quality Assurance/Quality Control

A. Decontamination

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

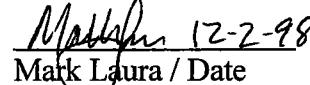
1. Remove all adherent soil material.
2. Wash with a laboratory grade glassware detergent.
3. Rinsed with potable water.
4. Rinse with distilled and deionized ASTM Type II water.

B. Field Blanks

1 Field blank was taken at this location.

- C. Sample bottles: Supplied by Environmental Sampling Supply, Oakland, Calif.
The sample bottles are certified clean and are sealed upon delivery.
- D. P.V.C. Screens: Supplied by Bedrock Enterprises, Forked River N.J.

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


Mark Laura / Date

000006

METHODOLOGY SUMMARY

Methodology Summary

EPA Method 624

Gas Chromatographic Determination of Volatiles in Water

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

EPA Method 3510/8270

Gas Chromatographic Determination of Semi-volatiles in Water

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

CONFORMANCE/ NON-CONFORMANCE SUMMARY

000009

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms labeled/Compounds identified
(Field samples and method blanks) yes
2. Retention times for chromatograms provided yes
3. GC/MS Tune Specifications
 - a. BFB Meet Criteria yes
 - b. DFTPP Meet Criteria yes
4. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series yes
5. GC/MS Calibration – Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series yes
6. GC/MS Calibration requirements
 - a. Calibration Check Compounds Meet Criteria yes
 - b. System Performance Check Compounds Meet Criteria yes
7. Blank Contamination – If yes, List compounds and concentrations in each blank:
 - 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 _____
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
(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 _____

000010

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

Indicate
Yes, No, N/A

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

yes

- a. VOA Fraction _____
b. B/N Fraction _____
c. Acid Fraction 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:

trip + field blank with Lab ID 4089. All samples taken
on the same day 11/30/98.
Field dup performed on 4093.01 and 4093.02

Laboratory Manager:

Date: 12-9-98

000011

LABORATORY CHRONICLE

000012

Laboratory Chronicle

Lab ID: 4093

Site: Bldg 917

	Date	Hold Time
Date Sampled	11/30/98	NA
Receipt/Refrigeration	11/30/98	NA

Extractions

1. Base Neutrals	12/01/98	14 days
------------------	----------	---------

Analyses

1. Volatile Organics	12/01/98	14 days
2. Base Neutrals	12/02,03/98	40 days

000013

VOLATILE ORGANICS

000014

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

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

000015

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

Data File Name vb02266.d
 Operator Skelton
 Date Acquired 1 Dec 98 12:16 pm

Sample Name Vblk69
 Field ID Vblk69
 Sample Multiplier 1

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

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

Qualifiers

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

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

000016

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Vblk69

Lab Name:	FMETL	Project	980932
NJDEP#	13461	Case No.:	4093
SDG No		Location	UST
Matrix: (soil/water)	WATER	Lab Sample ID:	Vblk69
Sample wt/vol:	5.0	(g/ml)	ML
Level: (low/med)	LOW	Lab File ID:	VB02266.D
% Moisture: not dec.		Date Received:	11/30/98
GC Column:	HP5MS	ID:	0.25 (mm)
Soil Extract Volume:		Date Analyzed:	12/01/98
		Dilution Factor:	1.0
		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 Name vb02274.d
 Operator Skelton
 Date Acquired 1 Dec 98 6:31 pm

Sample Name 4089.01
 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-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

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

Qualifiers

B = Compound found in related blank

E = Value above linear range

D = Value from dilution

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

000018

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Trip Blank

Lab Name:	FMETL	Project	980932
NJDEP#	13461	Case No.:	4089
Matrix: (soil/water)	<u>WATER</u>		
Sample wt/vol:	5.0	(g/ml)	ML
Level: (low/med)	<u>LOW</u>		
% Moisture: not dec.			
GC Column:	HP5MS	ID:	0.25 (mm)
Soil Extract Volume:	_____ (uL)		
SDG No	Location	UST	
Lab Sample ID: 4089.01			
Lab File ID: VB02274.D			
Date Received: 11/30/98			
Date Analyzed: 12/01/98			
Dilution Factor: 1.0			
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 Name **vb02275.d**
 Operator **Skelton**
 Date Acquired **1 Dec 98 7:17 pm**

Sample Name **4089.02**
 Field ID **Field Blank**
 Sample Multiplier **1**

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

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

Qualifiers

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

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

000020

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Blank

Lab Name:	<u>FMETL</u>	Project	<u>980932</u>				
NJDEP#	<u>13461</u>	Case No.:	<u>4089</u>	SDG No	<u></u>	Location	<u>UST</u>
Matrix: (soil/water)	<u>WATER</u>			Lab Sample ID:	<u>4089.02</u>		
Sample wt/vol:	<u>5.0</u>	(g/ml)	<u>ML</u>	Lab File ID:	<u>VB02275.D</u>		
Level: (low/med)	<u>LOW</u>			Date Received:	<u>11/30/98</u>		
% Moisture: not dec.				Date Analyzed:	<u>12/01/98</u>		
GC Column:	<u>HP5MS</u>	ID:	<u>0.25</u>	(mm)	Dilution Factor:	<u>1.0</u>	
Soil Extract Volume:	<u>(uL)</u>			Soil Aliquot Volume:	<u>(uL)</u>		

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 **vb02280.d**
 Operator **Skelton**
 Date Acquired **1 Dec 98 11:04 pm**

Sample Name **4093.01**
 Field ID **Bldg917**
 Sample Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory	MDL	Qualifier
					Level (ug/l)*		
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

000022

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg. 917

Lab Name:	FMETL	Project	980932
NJDEP#	13461	Case No.:	4093
Matrix: (soil/water)	WATER	SDG No	
Sample wt/vol:	5.0	(g/ml)	ML
Level: (low/med)	LOW	Lab Sample ID:	4093.01
% Moisture: not dec.		Lab File ID:	VB02280.D
GC Column:	HP5MS	ID:	0.25 (mm)
Soil Extract Volume:		Date Received:	11/30/98
	(uL)	Date Analyzed:	12/01/98
		Dilution Factor:	1.0
		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 Name vb02281.d
 Operator Skelton
 Date Acquired 1 Dec 98 11:49 pm

Sample Name 4093.03
 Field ID Field Dup
 Sample Multiplier 1

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

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

Qualifiers

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

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

000024

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Dup

Lab Name:	<u>FMETL</u>	Project	<u>980932</u>					
NJDEP#	<u>13461</u>	Case No.:	<u>4093</u>	SDG No	<u> </u>	Location	<u>UST</u>	
Matrix: (soil/water)	<u>WATER</u>			Lab Sample ID: <u>4093.03</u>				
Sample wt/vol:	<u>5.0</u>	(g/ml)	<u>ML</u>	Lab File ID: <u>VB02281.D</u>				
Level: (low/med)	<u>LOW</u>			Date Received: <u>11/30/98</u>				
% Moisture: not dec.				Date Analyzed: <u>12/01/98</u>				
GC Column:	<u>HP5MS</u>	ID:	<u>0.25</u>	(mm)	Dilution Factor: <u>1.0</u>			
Soil Extract Volume:	<u> </u> (uL)			Soil Aliquot Volume: <u> </u> (uL)				

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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BASE NEUTRAL

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

Data File Name	BNA01479.D	Sample Name	Sblk174
Operator	Skelton	Misc Info	Sblk174 A 98120
Date Acquired	2 Dec 1998 5:00 pm	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
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
78-59-1	Isophorone			not detected	100	2.31	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
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

* Higher of PQL's and Ground Water Criteria as per NJAC 7.9-

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

000054

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Sblk174

Lab Name:	FMETL	Lab Code	13461
Project	980932	Case No.:	4093
Matrix: (soil/water)	WATER		
Sample wt/vol:	1000	(g/ml)	ML
Level: (low/med)	LOW		
% Moisture:		decanted: (Y/N)	N
Concentrated Extract Volume:	1000	(uL)	
Injection Volume:	1.0	(uL)	
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 Base Neutral Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **bns01492.d** Sample Name **4089.02**
 Operator **Skelton** Misc Info **Field Blank**
 Date Acquired **3 Dec 1998 2:22 am** Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level ($\mu\text{g}/\text{L}$) ^a	MDL	Qualifier
110-86-1	Pyridine			not detected	NLE	2.52	$\mu\text{g}/\text{L}$
62-75-9	N-nitroso-dimethylamine			not detected	20	2.64	$\mu\text{g}/\text{L}$
62-53-3	Aniline			not detected	NLE	2.90	$\mu\text{g}/\text{L}$
111-44-4	bis(2-Chloroethyl)ether			not detected	10	2.45	$\mu\text{g}/\text{L}$
541-73-1	1,3-Dichlorobenzene			not detected	600	2.65	$\mu\text{g}/\text{L}$
106-46-7	1,4-Dichlorobenzene			not detected	75	2.50	$\mu\text{g}/\text{L}$
100-51-6	Benzyl alcohol			not detected	NLE	2.09	$\mu\text{g}/\text{L}$
95-50-1	1,2-Dichlorobenzene			not detected	600	2.44	$\mu\text{g}/\text{L}$
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	2.96	$\mu\text{g}/\text{L}$
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	2.22	$\mu\text{g}/\text{L}$
67-72-1	Hexachloroethane			not detected	10	2.59	$\mu\text{g}/\text{L}$
98-95-3	Nitrobenzene			not detected	10	2.45	$\mu\text{g}/\text{L}$
78-59-1	Isophorone			not detected	100	2.31	$\mu\text{g}/\text{L}$
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	2.54	$\mu\text{g}/\text{L}$
120-82-1	1,2,4-Trichlorobenzene			not detected	9	2.58	$\mu\text{g}/\text{L}$
91-20-3	Naphthalene			not detected	NLE	3.03	$\mu\text{g}/\text{L}$
106-47-8	4-Chloroaniline			not detected	NLE	2.55	$\mu\text{g}/\text{L}$
87-68-3	Hexachlorobutadiene			not detected	1	0.64	$\mu\text{g}/\text{L}$
91-57-6	2-Methylnaphthalene			not detected	NLE	2.49	$\mu\text{g}/\text{L}$
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.59	$\mu\text{g}/\text{L}$
91-58-7	2-Chloronaphthalene			not detected	NLE	2.15	$\mu\text{g}/\text{L}$
88-74-4	2-Nitroaniline			not detected	NLE	1.62	$\mu\text{g}/\text{L}$
131-11-3	Dimethylphthalate			not detected	7000	2.74	$\mu\text{g}/\text{L}$
208-96-8	Acenaphthylene			not detected	NLE	2.35	$\mu\text{g}/\text{L}$
606-20-2	2,6-Dinitrotoluene			not detected	NLE	1.54	$\mu\text{g}/\text{L}$
99-09-2	3-Nitroaniline			not detected	NLE	1.62	$\mu\text{g}/\text{L}$
83-32-9	Acenaphthene			not detected	400	1.98	$\mu\text{g}/\text{L}$
132-64-9	Dibenzofuran			not detected	NLE	2.13	$\mu\text{g}/\text{L}$
121-14-2	2,4-Dinitrotoluene			not detected	10	1.22	$\mu\text{g}/\text{L}$
84-66-2	Diethylphthalate			not detected	5000	1.68	$\mu\text{g}/\text{L}$
86-73-7	Fluorene			not detected	300	1.93	$\mu\text{g}/\text{L}$
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	1.53	$\mu\text{g}/\text{L}$
100-01-6	4-Nitroaniline			not detected	NLE	2.70	$\mu\text{g}/\text{L}$
86-30-6	n-Nitrosodiphenylamine			not detected	20	1.73	$\mu\text{g}/\text{L}$
103-33-3	Azobenzene			not detected	NLE	1.92	$\mu\text{g}/\text{L}$
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	1.54	$\mu\text{g}/\text{L}$
118-74-1	Hexachlorobenzene			not detected	10	1.88	$\mu\text{g}/\text{L}$
85-01-8	Phenanthrene			not detected	NLE	1.67	$\mu\text{g}/\text{L}$
120-12-7	Anthracene			not detected	2000	1.79	$\mu\text{g}/\text{L}$
84-74-2	Di-n-butylphthalate			not detected	900	1.83	$\mu\text{g}/\text{L}$
206-44-0	Fluoranthene			not detected	300	1.85	$\mu\text{g}/\text{L}$
92-87-5	Benzidine			not detected	50	4.11	$\mu\text{g}/\text{L}$
129-00-0	Pyrene			not detected	200	1.02	$\mu\text{g}/\text{L}$
85-68-7	Butylbenzylphthalate			not detected	100	1.15	$\mu\text{g}/\text{L}$
56-55-3	Benzo[a]anthracene			not detected	10	1.57	$\mu\text{g}/\text{L}$
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	$\mu\text{g}/\text{L}$
218-01-9	Chrysene			not detected	20	2.32	$\mu\text{g}/\text{L}$
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	$\mu\text{g}/\text{L}$
117-84-0	Di-n-octylphthalate			not detected	100	1.30	$\mu\text{g}/\text{L}$
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	$\mu\text{g}/\text{L}$
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	$\mu\text{g}/\text{L}$
50-32-8	Benzo[a]pyrene			not detected	20	1.36	$\mu\text{g}/\text{L}$
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	$\mu\text{g}/\text{L}$
53-70-3	Dibenzo[a,h]anthracene			not detected	20	3.12	$\mu\text{g}/\text{L}$
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	$\mu\text{g}/\text{L}$

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

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

000056

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Field Blank

Lab Name:	FMETL	Lab Code:	13461
Project	980932	Case No.:	4089
Matrix: (soil/water)	WATER	Location	UST
Sample wt/vol:	1000	(g/ml)	ML
Level: (low/med)	LOW	Lab Sample ID:	4089.02
% Moisture:		decanted: (Y/N)	N
Concentrated Extract Volume:	1000	(uL)	Date Received: 11/30/98
Injection Volume:	1.0	(uL)	Date Extracted: 12/01/98
GPC Cleanup: (Y/N)	N	pH: 7	Date Analyzed: 12/03/98
Dilution Factor:	1.0		

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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

Data File Name **bna01497.d** Sample Name **4093.02**
 Operator **Skelton** Misc Info **Bldg917**
 Date Acquired **3 Dec 1998 5:59 am** Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
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
78-59-1	Isophorone			not detected	100	2.31	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
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
36-55-3	Benzo[a]anthracene			not detected	10	1.57	ug/L
91-94-1	3,3'-Dichlorobenzidine			not detected	60	2.28	ug/L
218-01-9	Chrysene			not detected	20	2.32	ug/L
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.29	ug/L
117-84-0	Di-n-octylphthalate			not detected	100	1.30	ug/L
205-99-2	Benzo[b]fluoranthene			not detected	10	1.31	ug/L
207-08-9	Benzo[k]fluoranthene			not detected	2	1.57	ug/L
50-32-8	Benzo[a]pyrene			not detected	20	1.36	ug/L
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	1.22	ug/L
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.12	ug/L
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	1.13	ug/L

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

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

000058

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Bldg917

Lab Name:	FMETL	Lab Code	13461
Project	980932	Case No.:	4093
Matrix: (soil/water)	WATER	Location	UST
Sample wt/vol:	1000	(g/ml)	ML
Level: (low/med)	LOW	Lab Sample ID:	4093.02
% Moisture:		decanted: (Y/N)	N
Concentrated Extract Volume:	1000	(uL)	Date Received: 11/30/98
Injection Volume:	1.0	(uL)	Date Extracted: 12/01/98
GPC Cleanup: (Y/N)	N	pH:	7 Date Analyzed: 12/03/98
Dilution Factor:	1.0		

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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

Data File Name bna01498.d
 Operator Skelton
 Date Acquired 3 Dec 1998 6:42 am

Sample Name 4093.03
 Misc Info Field Dup
 Sample Multiplier 1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L) ^a	MDL	Qualifier
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
78-59-1	Isophorone			not detected	100	2.31	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
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

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

Qualifiers

E = Value exceeded linear range

D = Value from dilution

B = Compound in related blank

PQL = Practical Quantitation Limit

MDL = Method Detection Limit

NLE = No Limit Established

R.T. = Retention Time

000060

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

Lab Name:	<u>FMETL</u>	Lab Code	<u>13461</u>	Field Dup
Project	<u>980932</u>	Case No.:	<u>4093</u>	Location <u>UST</u> SDG No.:
Matrix: (soil/water)	<u>WATER</u>			Lab Sample ID: <u>4093.03</u>
Sample wt/vol:	<u>1000</u>	(g/ml)	<u>ML</u>	Lab File ID: <u>BNA01498.D</u>
Level: (low/med)	<u>LOW</u>			Date Received: <u>11/30/98</u>
% Moisture:	<u> </u> decanted: (Y/N) <u>N</u>			Date Extracted: <u>12/01/98</u>
Concentrated Extract Volume:	<u>1000</u>	(uL)	Date Analyzed: <u>12/03/98</u>	
Injection Volume:	<u>1.0</u>	(uL)	Dilution Factor: <u>1.0</u>	
GPC Cleanup: (Y/N)	<u>N</u>	pH:	<u>7</u>	

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

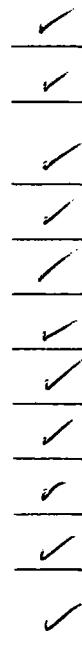
LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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



Laboratory Manager or Environmental Consultant's Signature _____
Date 12/1/94



Laboratory Certification #13461

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

000088

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.



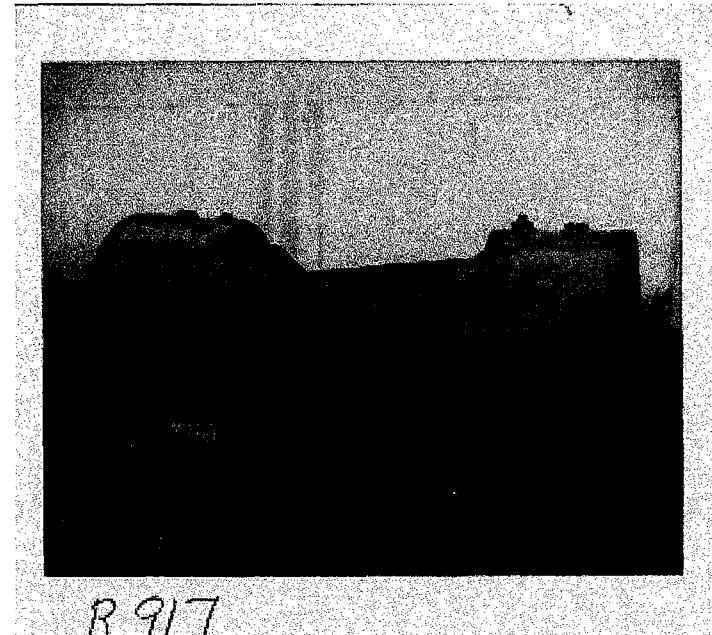
Daniel K. Wright
Laboratory Manager

APPENDIX G

PHOTOGRAPHS



B.917
3/19/98



B.917
3/19/98

MARCH 16, 1998
PHOTOGRAPHIC LOG

UST NO. 81533-155

**Building 917
Main Post-West
Fort Monmouth**

VERSAR
Engineers, Managers, Scientists & Planners
Bristol, PA