United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 906B Main Post-West Area

NJDEP UST Registration No. 81533-332

June 1999

UNDERGROUND STORAGE TANK CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 906B

MAIN POST-WEST AREA NJDEP UST REGISTRATION NO. 81533-332

JUNE 1999

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. 4435-018

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EXECUTIVE SUMMARY

UST Closure

On March 6, 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. 0081533-332 (Fort Monmouth ID No. 906B), was located south of Building 906B. UST No. 0081533-332 was a 550-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. Numerous holes were noted in the UST. Soils at the location of the holes were dark in color and appeared to be contaminated. Approximately 5 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 222.40 mg/kg, except for sample A and D that had a TPHC concentration of 9210.56 mg/kg and 3318.95 mg/kg. These sample locations could not be further remediated due to the building location and the possibility of a brick chimney collapsing into the excavation. A VOA analysis (EPA Method 8260) was completed on sample A and all known compounds searched for in the analysis were not detected. Eleven tentatively identified compounds were detected below the method detection limit. Groundwater was encountered at 7.0 feet below ground surface and sheen was observed on groundwater.

All post excavation soil samples collected from the UST excavation at Building 906B 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 sheen on groundwater, two (2) groundwater samples were collected at Building 906B. On October 24, 1998, and December 7, 1998, Building 906B 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. 81533-332 at Building 906B.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-332, was closed at Building 906B at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on March 6, 1998. Refer to the site location map on Figure 1. This report presents the results of the Department of Public Works' (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP. The UST was a steel 550-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 81533-332 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. 81533-332 proceeded under the approval of the NJDEP Bureau of Federal Case Management (NJDEP-BFCM). The Standard Reporting Form and signed Site Assessment Summary form for UST No. 81533-332 are included in Appendices A and B, respectively.

After removal of the potentially contaminated soil, the site was assessed. Based on inspecting the UST, field screening of remaining subsurface soils, and reviewing analytical results of soil samples and groundwater samples, the DPW has concluded that no significant historical discharges are associated with the UST or associated piping.

This UST Closure and Site Investigation Report has been prepared by Versar, to assist the U.S. Army DPW in complying with the NJDEP regulations. The applicable NJDEP regulations at the date of closure were the *Interim Closure Requirements for Underground Storage Tank Systems* (N.J.A.C. 7:14B-1 et seq. October 1990 and revisions dated November 1, 1991).

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

1.2 SITE DESCRIPTION

Building 906B is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 0081533-332 was located south of Building 906B and appurtenant copper piping ran approximately five(5) feet north from the excavation to Building 906B. 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 906B. 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. A geological map is provided on Figure 1A.

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 906B is located approximately 600 feet south of Husky Brook, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 906B is anticipated to be to the north.

1.3 HEALTH AND SAFETY

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

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- The contractor performing the closure prior to excavation activities identified all underground obstructions (utilities, etc.).
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an 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 50 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 After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. Numerous holes were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Soils were stained and appeared to be contaminated. Approximately 5 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area. Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length. Soil samples, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 222.40 mg/kg, except for sample A and D that had a TPHC concentration of 9210.56 mg/kg and 3318.95 mg/kg. These sample locations could not be further remediated due to the location of the building and the possibility of a brick chimney collapsing into the excavation. A VOA analysis (EPA Method 8260) was completed on sample A and all known compounds searched for in the analysis were not detected. Eleven tentatively identified compounds were detected below the method detection limit. Groundwater was encountered at 7.0 feet below ground surface and sheen was observed on groundwater.

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.

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

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

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on visual observations, approximately 5 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 7.0 feet below ground surface and sheen was observed on groundwater.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified 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: (732) 532-6224
 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: Don Taguinot Phone Number: (732) 721-0900

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 3 to 15 ppm. Approximately 5 cubic yards of potentially petroleum contaminated soil were removed from the excavated area and transported to the Fort Monmouth petroleum contaminated soil holding area. Groundwater was encountered at 7.0 feet below ground surface and sheen was observed on groundwater.

2.3 SOIL SAMPLING

On March 6, 1998, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, D, and DUP B were collected from a total of four (4) locations of the UST excavation. Centerline samples A, B, and DUP B were collected at a depth of 8.0 feet bgs. Sidewall samples C and D were collected at a depth of 6.5 feet bgs. No piping samples were collected because the piping lines were only five feet in length. All samples were analyzed for total petroleum hydrocarbons (TPHC) and total solids. Based on preliminary TPHC results, a VOA analysis (EPA Method 8260) was completed on sample A.

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

2.4 GROUNDWATER SAMPLING

On October 24,1998, and December 7, 1998, Building 906B 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 6, 1998 from a total of four (4) locations. All samples were analyzed for TPHC and total solids. In addition, sample A was analyzed for VOA. 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 VOA analysis for sample A was compared to the NJDEP residential direct contact soil cleanup criteria and is included as Table 3. The analytical data package is provided in Appendix E.

All post-excavation soil samples collected on March 6, 1998, from the UST excavation and from below piping associated with the UST contained concentrations of TPHC below the NJDEP soil cleanup criteria.

3.2 GROUNDWATER SAMPLING RESULTS

No compounds were detected in the sample collected from Building 906B on October 24,1998.

No compounds were detected in the sample collected from Building 906B on December 7, 1998. Acetone was detected in the field dup at a concentration of 4.08 ug/l. No other compounds were detected in the field dup.

A summary of the analytical results and comparison to the NJDEP groundwater cleanup criteria is provided in Table 4 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. Army Fort Monmouth, Fort Monmouth, New Jersey.

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

3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 906B 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 906B on October 24, 1998, and December 7, 1998, groundwater quality at Building 906B 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. 81533-332 at Building 906B.

TABLES

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TABLE 1
SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 906B, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 2	<u> </u>					
Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	NJDEP Method
A	3/6/98	3/9/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
В	3/6/98	3/9/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
C	3/6/98	3/9/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
D	3/6/98	3/9/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
DUP B	3/6/98	3/9/98	Soil	Post-excavation	TPHC	OQA-QAM-025

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF SAMPLING ACTIVITIES BUILDING 906B, 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**
4003.01	10/24/98	10/28/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4003.02	10/24/98	10/28/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4003.05	10/2498	10/28/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4003.06	10/24/98	10/28/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4116.01	12/7/98	12/10/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4116.02	12/7/98	12/10/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4116.03	12/7/98	12/10/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP
4116.04	12/7/98	12/10/98	Aqueous	Groundwater	VOCs, SVOCs	PPNDP

Note:

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

**PPNDP:

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS BUILDING 906B, MAIN POST-WEST AREA FORT MONMOUTH, NEW JERSEY

Page 1 of 1

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/8.0=	3390.01	3/6/98	3/9/98	Total Solid			81.67 %		
				TPHC	185	yes	9210.56	10,000	No
B/8.0 =	3390.02	3/6/98	3/9/98	Total Solid			82.30 %		
				TPHC	187	Yes	222.40	10,000	No
C/6.5=	3390.03	3/6/98	3/9/98	Total Solid			84.86 %		
				TPHC	175	Yes	ND	10,000	No
D/6.5 =	3390.04	3/6/98	3/9/98	Total Solid			81.79 %		
				TPHC	188	yes	3318.95	10,000	No
DUPB/8.0=	3390.05	3/6/98	3/9/98	Total Solid			82.10 %		
				TPHC	190	yes	ND	10,000	No

Note:

Total Solid results are expressed as a percentage.

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

Not detected above stated method detection limit ND

TPHC Total Petroleum Hydrocarbons

Table 3 **VOLATILE ORGANICS ANALYSIS DATA SHEET**

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) SOIL

Date Sampled:

3/6/98

Location:

<u>906B</u>

Lab Sample ID: 3390.01(SAMPLE A)

CONCENTRATION UNITS:

(ug/L or ug/Kg)

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON- RESIDENTIAL
107028	Acrolein	2000	U	NA	NA
107131	Acrylonitrile	2000	Ŭ	1000	5000
75650	tert-Butyl alcohol	3800	U	NA	NA
1634044	Methyl-tert-Butyl ether	880	υ	NA	NA
108203	Di-isopropyl ether	590	U	NA	NA
	Dichlorodifluoromethane	1200	U	NA	NA
74-87-3	Chloromethane	290	υ	520000	1000000(d)
75-01-4	Vinyl Chloride	880	U	2000	7000
74-83-9	Bromomethane	590	υ	79000	1000000(d)
75-00-3	Chloroethane	880	U	NA	NA
75-69-4	Trichlorofluoromethane	590	U	NA	NA
75-35-4	1, 1-Dichloroethene	290	υ	8000	150000
67-64-1	Acetone	590	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	290	υ	NA	NA
75-09-2	Methylene Chloride	5600		49000	210000
156-60-5	trans-1,2-Dichloroethene	590	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	290	U	570000	1000000(d)
108-05-4	Vinyl Acetate	880	U	NA	NA
78-93-3	2-Butanone	880	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	290	U	79000	1000000(d)
67-66-3	Chloroform	290	υ	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	290	υ	NA	NA
56-23-5	Carbon Tetrachloride	590	U	2000(k)	4000(k)
71-43-2	Benzeze	290	U	3000	13000
107-06-2	1,2-Dichloroethane	590	υ	6000	24000

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Table 3 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) SOIL

Date Sampled:

<u>3/6/98</u>

Location:

<u>906B</u>

Lab Sample ID: 3390.01(SAMPLE A)

CONCENTRATION UNITS: (ug/L or ug/Kg)

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON- RESIDENTIAL
79-01-6	Trichloroethene	290	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	290	U	10000	43000
75-27-4	Bromodichloromethane	290	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	590	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	290	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	590	U	1000000(d)	1000000(d)
108-88-3	Toluene	290	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	590	U	NA	NA
79-00-5	1,1,2-Trichloroethane	590	U	22000	420000
127-18-4	Tetrachloroethene	290	U	4000(k)	6000(k)
591-78-6	2-Hexanone	590	U	NA	NA
126-48-1	Dibromochloromethane	590	U	NA	NA
108-90-7	Chlorobenzene	290	U	37000	680000
100-41-4	Ethylbenzene	590	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	880	U	NA	NA
1330-20-7	o-Xylene	590	U	NA	NA
100-42-5	Styrene	590	U	23000	97000
75-25-2	Bromoform	590	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	590	U	34000	70000(k)
541-73-1	1,3-Dichlorobenzene	880	U	5100000	10000000(c)
106-46-7	1,4-Dichlorobenzene	880	U	570000	1000000(c)
95-50-1	1,2-Dichlorobenzene	880	U	5100000	10000000(c)

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

SOIL CLEANUP CRITERIA (MG/KG)

(LAST REVISED-7/11/96)

- (A) CRITERIA ARE HEALTH BASED USING AN INCIDENTAL INGESTION EXPOSURE PATHWAY EXCEPT WHERE NOTED BELOW.
- (B) CRITERIA ARE SUBJECT TO CHANGE BASED ON SITE SPECIFIC FACTORS (E.G., AQUIFER CLASSIFICATION, SOIL TYPE, NATURAL BACKGROUND, ENVIRONMENTAL IMPACTS, ETC.)
- (C) HEALTH BASED CRITERION EXCEEDS THE 10,000 MG/KG MAXIMUM FOR TOTAL ORGANIC CONTAMINANTS.
- (D) HEALTH BASED CRITERION EXCEEDS THE 1000 MG/KG MAXIMUM FOR TOTAL VOLATILE ORGANIC CONTAMINANTS
- (E) CLEANUP STANDARD PROPOSAL WAS BASED ON NATURAL BACKGROUND.
- (F) HEALTH BASED CRITERION IS LOWER THAN ANALYTICAL LIMITS; CLEANUP CRITERION BASED ON PRACTICAL QUANTITATION LEVEL.
- (G) CRITERION HAS BEEN RECALCULATED BASED ON NEW TOXICOLOGICAL DATA.
- THE IMPACT TO GROUND WATER VALUES FOR INORGANIC CONSTITUENTS WILL BE DEVELOPED BASED UPON SITE SPECIFIC CHEMICAL AND PHYSICAL PARAMETERS.
 - (I) ORIGINAL CRITERION WAS INCORRECTLY CALCULATED AND HAS BEEN RECALCULATED.
- 11(J) TYPOGRAPHICAL ERROR.
- (K) CRITERIA BASED ON INHALATION EXPOSURE PATHWAY, WHICH YIELDED A MORE STRINGENT CRITERION THAN THE INCIDENTAL INGESTION EXPOSURE PATHWAY.
- New Criterion derived using methodology in the basis and background document.
 - (M) CRITERION BASED ON ECOLOGICAL (PHYTOTOXICITY) EFFECTS.
- LEVEL OF THE HUMAN HEALTH BASED CRITERION IS SUCH THAT EVALUATION FOR POTENTIAL ENVIRONMENTAL IMPACTS ON A SITE BY SITE BASIS IS RECOMMENDED.

- LEVEL OF THE CRITERION IS SUCH THAT EVALUATION FOR POTENTIAL ACUTE EXPOSURE HAZARD IS RECOMMENDED.
 - (P) CRITERION BASED ON THE USEPA INTEGRATED EXPOSURE UPTAKE BIOKINETIC (IEUBK) MODEL UTILIZING THE DEFAULT PARAMETERS. THE CONCENTRATION IS CONSIDERED TO PROTECT 95% OF TARGET POPULATION (CHILDREN) AT A BLOOD LEVEL OF 10 UG/DL.
 - (Q) CRITERIA WAS DERIVED FROM A MODEL DEVELOPED BY THE SOCIETY FOR ENVIRONMENTAL GEOCHEMISTRY AND HEALTH (SEGH) AND WAS DESIGNED TO BE PROTECTIVE FOR ADULTS IN THE WORKPLACE.
 - (R) INSUFFICIENT INFORMATION AVAILABLE TO CALCULATE IMPACT TO GROUND WATER CRITERIA.

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: 4003.01(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	по
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	по
75-01-4	Vinyl Chloride	1.06	Not Detected		5	no
74-83-9	Bromomethane	1.10	Not Detected		10	по
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	по
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	по
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	по
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	по
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	по
71-43-2	Benzeze	0.23	Not Detected		1	по
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		пІе	no
10061-01-5	cis-1,3-Dichloropropene	0.69	Not Detected		nle	no
10061-01-5	cis-1,3-Dichloropropene	0.69	Not Detected		nle	no

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

906B

Lab Sample ID: 4003.01(Trip Blank)

Date Sampi	ed: <u>10/24/98</u>	Location	: <u>900B</u>	Lau S	ample 1D: 4003.0	ri(Trip Brank)
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	по
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		піе	no
1330-20-7	o-Xylene	0.62	Not Detected		nle	no
100-42-5	Styrene	0.56	Not Detected		100	по
75-25-2	Bromoform	0.70	Not Detected		. 4	no
79-34-5	1,1,2,2-Tetrachloroethane	0.47	Not Detected		2	по
541-73-1	1,3-Dichlorobenzene	0.55	Not Detected		600	по
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 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: 4003.02(Field Blank)

	CAS NO.	COMPOUND NAME	MDL	RESULTS	OUALIFIER	REGULATORY	EXCEEDS
107031 Acrylonizine 2.78 Not Detected 30 10 10 10 10 10 10 10					, , , , , , , , , , , , , , , , , , ,		
10713 Actypulatine 2.78 And Detected	107028	Acrolein	1.85	Not Detected		50	no
1634044 Methyl-ter-Butyl ether 0.16 Not Detected nle no	107131	Acrylonitrile	2.78	Not Detected		50	no
108203 Di-ispropyl ether Dichiprodiftuoromethane Dichiprodiftu	75650	tert-Butyl alcohol	8.52	Not Detected		nle	no
Dichlorodiflucromethane 1.68	1634044	Methyl-tert-Butyl ether	0.16	Not Detected		nle	no
Not Detected	108203	Di-isopropyl ether	0.25	Not Detected		nle	no
75-01-4		Dichlorodifluoromethane	1.68	Not Detected		nle	no
1.00	74-87-3	Chloromethane	1.16	Not Detected		30	no
1.10	75-01-4	Vinyl Chloride	1.06	Not Detected		5	no
10.1 10.1 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2	74-83-9	Bromomethane	1.10	Not Detected		10	no
17-53-4 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17-11- 17	75-00-3	Chloroethane	1.01	Not Detected		nle	no
1.75-35-4 1.75-Dichloroethene 1.36 Not Detected 700 no	75-69-4	Trichlorofluoromethane	0.50	Not Detected		nle	по
75-15-0 Carbon Disulfide 0.46 Not Detected nle no	75-35-4	1, 1-Dichloroethene	0.24	Not Detected		2	no
75-09-2 Methylene Chloride	67-64-1	Acetone	1.36	Not Detected		700	no
156-60-5 trans-1,2-Dichloroethene 0.16 Not Detected 100 no	75-15-0	Carbon Disulfide	0.46	Not Detected		nle	по
75-35-3 1,1-Dichloroethane 0.12 Not Detected 70 no 75-35-3 1,1-Dichloroethane 0.78 Not Detected nle no 78-93-3 2-Butanone 0.62 Not Detected 300 no 156-59-2 cis-1,2-Dichloroethane 0.17 Not Detected 10 no 67-66-3 Chloroform 0.30 Not Detected 6 no 75-55-6 1,1,1-Trichloroethane 0.23 Not Detected 30 no 56-23-5 Carbon Tetrachloride 0.47 Not Detected 2 no 71-43-2 Benzeze 0.23 Not Detected 2 no 107-06-2 1,2-Dichloroethane 0.18 Not Detected 2 no 78-87-5 1, 2-Dichloropropane 0.40 Not Detected 1 no 75-27-4 Bromodichloromethane 0.55 Not Detected <td>75-09-2</td> <td>Methylene Chloride</td> <td>0.24</td> <td>Not Detected</td> <td></td> <td>2</td> <td>no</td>	75-09-2	Methylene Chloride	0.24	Not Detected		2	no
108-05-4 Vinyl Acetate 0.78	156-60-5	trans-1,2-Dichloroethene	0.16	Not Detected		100	no
78-93-3 2-Butanone 0.62 Not Detected 300 no 156-59-2 cis-1,2-Dichloroethene 0.17 Not Detected 10 no 67-66-3 Chloroform 0.30 Not Detected 6 no 75-55-6 1,1,1-Trichloroethane 0.23 Not Detected 30 no 56-23-5 Carbon Tetrachloride 0.47 Not Detected 2 no 71-43-2 Benzeze 0.23 Not Detected 1 no 107-06-2 1,2-Dichloroethane 0.18 Not Detected 2 no 78-87-5 1, 2-Dichloropropane 0.40 Not Detected 1 no 75-27-4 Bromodichloromethane 0.55 Not Detected nle no 110-75-8 2-Chloroethyl vinyl ether 0.65 Not Detected nle no	75-35-3	1,1-Dichloroethane	0.12	Not Detected		70	no
156-59-2 cis-1,2-Dichloroethene 0.17 Not Detected 10 no	108-05-4	Vinyl Acetate	0.78	Not Detected		nle	no
67-66-3 Chloroform 0.30 Not Detected 6 no 75-55-6 1,1,1-Trichloroethane 0.23 Not Detected 30 no 56-23-5 Carbon Tetrachloride 0.47 Not Detected 2 no 71-43-2 Benzeze 0.23 Not Detected 1 no 107-06-2 1,2-Dichloroethane 0.18 Not Detected 2 no 79-01-6 Trichloroethene 0.23 Not Detected 1 no 78-87-5 1, 2-Dichloropropane 0.40 Not Detected 1 no 75-27-4 Bromodichloromethane 0.55 Not Detected nle no 110-75-8 2-Chloroethyl vinyl ether 0.65 Not Detected nle no	78-93-3	2-Butanone	0.62	Not Detected		300	по
75-55-6 1,1,1-Trichloroethane 0.23 Not Detected 30 no 56-23-5 Carbon Tetrachloride 0.47 Not Detected 2 no 71-43-2 Benzeze 0.23 Not Detected 1 no 107-06-2 1,2-Dichloroethane 0.18 Not Detected 2 no 79-01-6 Trichloroethene 0.23 Not Detected 1 no 78-87-5 1, 2-Dichloropropane 0.40 Not Detected 1 no 75-27-4 Bromodichloromethane 0.55 Not Detected 1 no 110-75-8 2-Chloroethyl vinyl ether 0.65 Not Detected nle no	156-59-2	cis-1,2-Dichloroethene	0.17	Not Detected		10	no
1,1,1-Prichloroethane	67-66-3	Chloroform	0.30	Not Detected		6	no
71-43-2 Benzeze 0.23 Not Detected 1 no 107-06-2 1,2-Dichloroethane 0.18 Not Detected 2 no 79-01-6 Trichloroethene 0.23 Not Detected 1 no 78-87-5 1, 2-Dichloropropane 0.40 Not Detected 1 no 75-27-4 Bromodichloromethane 0.55 Not Detected 1 no 110-75-8 2-Chloroethyl vinyl ether 0.65 Not Detected nle no	75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
107-06-2 I,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	56-23-5	Carbon Tetrachloride	0.47	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	71-43-2	Benzeze	0.23	Not Detected		1	no
79-01-6 Inchloropropane 0.25 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	107-06-2	I,2-Dichloroethane	0.18	Not Detected		2	no
75-27-4 Bromodichloromethane 0.55 Not Detected 1 no	79-01-6	Trichloroethene	0.23	Not Detected		1	no
110-75-8 2-Chloroethyl vinyl ether 0.65 Not Detected nle no	78-87-5	1, 2-Dichloropropane	0.40	Not Detected		1	no
110-73-6 2-Chiofoethyl vinyfether 0.03 Not Detected like	75-27-4	Bromodichloromethane	0.55	Not Detected		1	no
10061-01-5 cis-1,3-Dichloropropene 0.69 Not Detected nle ^{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 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

906B

Lab Sample ID: 4003.02(Field Blank)

Date Sampl	ed: <u>10/24/98</u>	Location	: <u>906B</u>	Lab Sample ID: 4003.02(Fleid 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	по	
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	по	
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 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

13461

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: 4003.05(Bldg 906B)

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	по
	Dichlorodifluoromethane	1.68	Not Detected		nle	no
74-87-3	Chloromethane	1.16	Not Detected		30	по
75-01-4	Vinyl Chloride	1.06	Not Detected		5	no
74-83-9	Bromomethane	1.10	Not Detected	. <u></u>	10	по
75-00-3	Chloroethane	1.01	Not Detected		nle	no
75-69-4	Trichlorofluoromethane	0.50	Not Detected		піе	no
75-35-4	I, 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		пlе	no
75-09-2	Methylene Chloride	0.24	Not Detected		2	no
156-60-5	trans-1,2-Dichloroethene	0.16	Not Detected		100	по
75-35-3	1,1-Dichloroethane	0.12	Not Detected		70	no
108-05-4	Vinyl Acetate	0.78	Not Detected		nle	по
78-93-3	2-Butanone	0.62	Not Detected		300	no
156-59-2	cis-1,2-Dichloroethene	0.17	Not Detected		10	no
67-66-3	Chloroform	0.30	Not Detected	'	6	no
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	no
71-43-2	Benzeze	0.23	Not Detected		1	no
107-06-2	1,2-Dichloroethane	0.18	Not Detected		2	no
79-01-6	Trichloroethene	0.23	Not Detected		1	no
78-87-5	1, 2-Dichloropropane	0.40	Not Detected		I	no
75-27-4	Bromodichloromethane	0.55	Not Detected		I	по
110-75-8	2-Chloroethyl vinyl ether	0.65	Not Detected		пlе	no
10061-01-5	cis-1,3-Dichloropropene	0.69	Not Detected		nle	no

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 10/24/98 Location: 906B Lab Sample ID: 4003.03(Bldg 906B)

Date Sampled: <u>10/24/98</u>		Location	906 <u>B</u>	Lab Sample ID: 4003.03(Bldg 906B)		
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	по
75-25-2	Bromoform	0.70	Not Detected		4	no
79-34-5	1,1,2,2-Tetrachloroethane	0.47	Not Detected		2	по
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	во

Table 4 **VOLATILE ORGANICS ANALYSIS DATA SHEET**

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: 4003.06(DUP 906B)

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	по
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	по
74-87-3	Chloromethane	1.16	Not Detected		30	no
75-01-4	Vinyl Chloride	1.06	Not Detected		5	по
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	по
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	по
108-05-4	Vinyl Acetate	0.78	Not Detected		пlе	no
78-93-3	2-Butanone	0.62	Not Detected		300	no
156-59-2	cis-1,2-Dichloroethene	0.17	Not Detected		10	по
67-66-3	Chloroform	0.30	Not Detected		6	no
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	no
71-43-2	Benzeze	0.23	Not Detected		1	no
107-06-2	1,2-Dichloroethane	0.18	Not Detected		2	no
79-01-6	Trichloroethene	0.23	Not Detected		1	no
78-87-5	1, 2-Dichloropropane	0.40	Not Detected		1	по
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 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

906B

Lab Sample ID: 4003.06(DUP 906B)

Date Sampled: <u>10/24/98</u>		Location	n: <u>906B</u>	Lab Sample ID: 4003.06(DUP 906		
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	по
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	I,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		пІе	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	<u></u>	nle	no
1330-20-7	o-Xylene	0.62	Not Detected		nle	по
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	по
106-46-7	1,4-Dichlorobenzene	0.57	Not Detected		75	по
95-50-1	1,2-Dichlorobenzene	0.64	Not Detected		600	no

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: 4003.02(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	по
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	по
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	по
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	по
77-47-4	Hexachlorocyclopentadiene	1.59	Not Detected		50	по
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

191-24-2

Benzo[g,h,i]perylene

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 10/24/98 Location: 906B Lab Sample ID: 4003.02(Field Blank)

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

1.13

Not Detected

no

nle

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: <u>4003.05(Bldg 906B)</u>

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	по
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	по
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	по
91-58-7	2-Chloronaphthalene	2.15	Not Detected		nle	no
88-74-4	2-Nitroaniline	1.62	Not Detected		nle	по
131-11-3	Dimethylphthalate	2.74	Not Detected		7000	no
208-96-8	Acenaphthylene	2.35	Not Detected		nle	no

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 10/24/98 Location: 906B Lab Sample ID: 4003.05(Bldg 906B)

Date Sample	d: <u>10/24/98</u>	Location:	<u>906B</u>	Lab Sample ID: 4003.05(Bidg 906B)				
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	по		
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	по		
86-73-7	Fluorene	1.93	Not Detected		300	no		
7005-72-3	4-Chlorophenyl-phenylether	1.53	Not Detected		nle	по		
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	по		
85-01-8	Phenanthrene	1.67	Not Detected		nle	no		
120-12-7	Anthracene	1.79	Not Detected		2000	по		
84-74-2	Di-n-butylphthalate	1.83	Not Detected		900	no		
206-44-0	Fluoranthene	1.85	Not Detected		300	по		
92-87-5	Benzidine	4.11	Not Detected		50	no		
129-00-0	Pyrene	1.02	Not Detected		200	по		
85-68-7	Butylbenzylphthalate	1.15	Not Detected		100	по		
56-55-3	Benzo[a]anthracene	1.57	Not Detected		10	по		
91-94-1	3,3'-Dichlorobenzidine	2.28	Not Detected		60	по		
218-01-9	Chrysene	2.32	Not Detected		20	по		
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		пlе	no		

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

10/24/98

Location:

<u>906B</u>

Lab Sample ID: 4003.06(DUP 906B)

CAS NO.	COMPOUND NAME	MDL (ug/L)	RESULTS	QUALIFIER	REGULATORY LEVEL(ug/L)	EXCEEDS CRITERIA
110-86-1	Pyridine	2.52	Not Detected		nle	по
62-75-9	N-nitroso-dimethylamine	2.64	Not Detected		20	по
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	по
100-51-6	Benzyl alcohol	2.09	Not Detected		nle	no
95-50-1	1,2-Dichlorobenzene	2.44	Not Detected		600	по
108-60-1	bis(2-chloroisopropyl)ether	2.96	Not Detected		300	по
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	по
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	по
77-47-4	Hexachlorocyclopentadiene	1.59	Not Detected		50	no
91-58-7	2-Chloronaphthalene	2.15	Not Detected		nle	по
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

Participant of the second

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 10/24/98 Location: 906B Lab Sample ID: 4003.06(DUP 906B)

Date Sample	u. <u>10/24/96</u>	Location.	<u>900B</u>	Lausi	imple 1D. 4003.	00(DOI 700D)
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	по
100-01-6	4-Nitroaniline	2.70	Not Detected		nle	no
86-30-6	n-Nitrosodiphenylamine	1.73	Not Detected		20	по
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	по
56-55-3	Benzo[a]anthracene	1.57	Not Detected		10	по
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	по

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 12/7/98 Location: 906B Lab Sample ID: 4116.01(Trip Blank)

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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	по
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	по
67-64-1	Acetone	1.36	Not Detected		700	no
75-15-0	Carbon Disulfide	0.46	Not Detected		nle	no
75-09-2	Methylene Chloride	0.24	Not Detected		2	no
156-60-5	trans-1,2-Dichloroethene	0.16	Not Detected		100	no
75-35-3	1,1-Dichloroethane	0.12	Not Detected		70	no
108-05-4	Vinyl Acetate	0.78	Not Detected		nle	no
78-93-3	2-Butanone	0.62	Not Detected		300	no
156-59-2	cis-1,2-Dichloroethene	0.17	Not Detected		10	no
67-66-3	Chloroform	0.30	Not Detected		6	no
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	no
71-43-2	Benzeze	0.23	Not Detected		1	no
107-06-2	1,2-Dichloroethane	0.18	Not Detected		2	no
79-01-6	Trichloroethene	0.23	Not Detected		1	no
78-87-5	1, 2-Dichloropropane	0.40	Not Detected		1	по
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		лІе	no

Table 4 **VOLATILE ORGANICS ANALYSIS DATA SHEET**

Lab Name:

FMETL

NJDEP#

13461

Matrix: (soil/water) WATER

Date Sampled: 906B Lab Sample ID: 4116.01(Trip Blank)) 12/7/98 Location: CAS NO. COMPOUND NAME MDL **RESULTS** QUALIFIER REGULATORY **EXCEEDS** (ug/L) LEVEL(ug/L) **CRITERIA** 108-10-1 0.59 Not Detected 4-Methyl-2-Pentanone 400 no 108-88-3 Toluene 0.37 Not Detected 1000 10061-02-6 0.87 Not Detected trans-1,3-Dichloropropene nle no 79-00-5 0.48 Not Detected 3 1,1,2-Trichloroethane __ no 127-18-4 Tetrachloroethene 0.32 Not Detected 1 no 591-78-6 0.71 Not Detected 2-Hexanone nle 126-48-1 Dibromochloromethane 0.86 Not Detected 10 no Chlorobenzene 108-90-7 0.39 Not Detected 4 no 100-41-4 Ethylbenzene 0.65 Not Detected 700 по 1330-20-7 1.14 Not Detected m+p-Xylenes nle 1330-20-7 o-Xylene 0.62 Not Detected nle 100-42-5 0.56 Not Detected 100 Styrene no 75-25-2 0.70 Not Detected 4 Bromoform no 79-34-5 0.47 Not Detected 2 1,1,2,2-Tetrachloroethane 541-73-1 1,3-Dichlorobenzene 0.55 Not Detected 600 no 106-46-7 0.57 Not Detected 75 1,4-Dichlorobenzene 95-50-1 1,2-Dichlorobenzene 0.64 Not Detected 600 no --

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Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 12/7/98 Location: 906B Lab Sample ID: 4116.02(Field Blank)

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CAS NO.	COMPOUND NAME	MDL (ug/L)	RESULTS	QUALIFIER	REGULATORY LEVEL(ug/L)	EXCEEDS CRITERIA
107028	Acrolein	1.85	Not Detected		50	по
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	по
108203	Di-isopropyl ether	0.25	Not Detected		nle	no
·	Dichlorodifluoromethane	1.68	Not Detected		nle	по
74-87-3	Chloromethane	1.16	Not Detected		30	no
75-01-4	Vinyl Chloride	1.06	Not Detected		5	по
74-83-9	Bromomethane	1.10	Not Detected		10	no
75-00-3	Chloroethane	1.01	Not Detected		nle	по
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	по
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		пІе	по
78-93-3	2-Butanone	0.62	Not Detected		300	no
156-59-2	cis-1,2-Dichloroethene	0.17	Not Detected		10	no
67-66-3	Chloroform	0.30	Not Detected		6	no
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	no
71-43-2	Benzeze	0.23	Not Detected		I	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 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 12/7/98 Location: 906B Lab Sample ID: 4116.02(Field Blank)

Date Sampi	ca. <u>12/1/96</u>	Location.	<u> 200D</u>	Lat 5	ample 1D. <u>+110.0</u>	Z(Picid Dialik)
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	по
127-18-4	Tetrachloroethene	0.32	Not Detected		1	no
591-78-6	2-Hexanone	0.71	Not Detected		nle	по
126-48-1	Dibromochloromethane	0.86	Not Detected		10	no
108-90-7	Chlorobenzene	0.39	Not Detected		4	по
100-41-4	Ethylbenzene	0.65	Not Detected		700	no
1330-20-7	m+p-Xylenes	1.14	Not Detected		nle	по
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	по
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	по
106-46-7	1,4-Dichlorobenzene	0.57	Not Detected		75	no
95-50-1	1,2-Dichlorobenzene	0.64	Not Detected		600	по

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

12/7/98

Location:

<u>906B</u>

Lab Sample ID: 4116.03(Bldg 906B)

CAS NO.	COMPOUND NAME	MDL (ug/L)	RESULTS	QUALIFIER	REGULATORY LEVEL(ug/L)	EXCEEDS CRITERIA
107028	Acrolein	1.85	Not Detected		50	по
107131	Acrylonitrile	2.78	Not Detected		50	по
75650	tert-Butyl alcohol	8.52	Not Detected		nle	по
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	по
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	по
67-66-3	Chloroform	0.30	Not Detected		6	по
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	no
71-43-2	Benzeze	0.23	Not Detected		1	no
107-06-2	1,2-Dichloroethane	0.18	Not Detected		2	no
79-01-6	Trichloroethene	0.23	Not Detected		1	no
78-87-5	1, 2-Dichloropropane	0.40	Not Detected		1	no
75-27-4	Bromodichloromethane	0.55	Not Detected		I	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 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

12/7/98

Location:

906B

Lab Sample ID: 4116.03(Bldg 906B)

Date Sampled: $127//98$		Location	Location: 906B		Lab Sample ID: 4116.03(Bldg 906B)			
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		πle	no		
79-00-5	1,1,2-Trichloroethane	0.48	Not Detected		3	no		
127-18-4	Tetrachloroethene	0.32	Not Detected		1	по		
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	по		
1330-20-7	m+p-Xylenes	1.14	Not Detected		nle	no		
1330-20-7	o-Xylene	0.62	Not Detected		пle	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	по		
95-50-1	1,2-Dichlorobenzene	0.64	Not Detected		600	no		

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:

FMETL

NJDEP#

Matrix: (soil/water) WATER

Date Sampled:

12/7/98

Location:

906B

<u>13461</u>

Lab Sample ID: 4116.04(Dup 906B)

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	по
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	по
74-87-3	Chloromethane	1.16	Not Detected		30	no
75-01-4	Vinyl Chloride	1.06	Not Detected		5	по
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	4.08 ug/L		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	I,1-Dichloroethane	0.12	Not Detected		70	по
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	по
67-66-3	Chloroform	0.30	Not Detected		6	по
75-55-6	1,1,1-Trichloroethane	0.23	Not Detected		30	no
56-23-5	Carbon Tetrachloride	0.47	Not Detected		2	no
71-43-2	Benzeze	0.23	Not Detected		1	no
107-06-2	1,2-Dichloroethane	0.18	Not Detected		2	no
79-01-6	Trichloroethene	0.23	Not Detected		1	no
78-87-5	1, 2-Dichloropropane	0.40	Not Detected		1	по
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	по

Table 4 VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP #

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

12/7/98

Location:

906B

Lab Sample ID: 4116.04(Dup 906B)

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	по
1330-20-7	m+p-Xylenes	1.14	Not Detected		nle	no
1330-20-7	o-Xylene	0.62	Not Detected		nie	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	по
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 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: <u>FMETL</u>

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

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12/7/98

Location:

<u>906B</u>

Lab Sample ID: 4116.02(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	по
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	по
100-51-6	Benzyl alcohol	2.09	Not Detected		nle	no
95-50-1	1,2-Dichlorobenzene	2.44	Not Detected		600	по
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	по
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	по
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	по
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 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name:

Heart - property

FMETL

NJDEP#

<u>13461</u>

Matrix: (soil/water) WATER

Date Sampled:

12/7/98

Location:

906B

Lab Sample ID: 4116.02(Field Blank)

Date Sample	d. <u>12/1/96</u>	Location	. <u>2000</u>	Lau S	ample 1D. 4110.0	Z(Tield Dialik)
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	по
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	по
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	по
205-99-2	Benzo[b]fluoranthene	1.31	Not Detected		10	no
207-08-9	Benzo[k]fluoranthene	1.57	Not Detected		2	по
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 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 12/7/98 Location: 906B Lab Sample ID: 4116.03(Bldg 906B)

CAS NO.	COMPOUND NAME	MDL (ug/L)	RESULTS	QUALIFIER	REGULATORY LEVEL(ug/L)	EXCEEDS CRITERIA
110-86-1	Pyridine	2.52	Not Detected		nle	по
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	по
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	по
621-64-7	n-Nitroso-di-n-propylamine	2.22	Not Detected		20	по
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	по
77-47-4	Hexachlorocyclopentadiene	1.59	Not Detected		50	no
91-58-7	2-Chloronaphthalene	2.15	Not Detected		nle	по
88-74-4	2-Nitroaniline	1.62	Not Detected		nle	no
131-11-3	Dimethylphthalate	2.74	Not Detected		7000	по
208-96-8	Acenaphthylene	2.35	Not Detected		nle	no

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: <u>12/7/98</u> Location: <u>906B</u> Lab Sample ID: <u>4116.03(Bldg 906B)</u>

Date Sampl	ea: <u>12///98</u>	Location	900B	Lab S	anipie 1D: 4116.0	13(Blug 900B)
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	по
121-14-2	2,4-Dinitrotoluene	1.22	Not Detected		10	по
84-66-2	Diethylphthalate	1.68	Not Detected		5000	no
86-73-7	Fluorene	1.93	Not Detected		300	по
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	по
206-44-0	Fluoranthene	1.85	Not Detected		300	no
92-87-5	Benzidine	4.11	Not Detected		50	по
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	по
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	по
205-99-2	Benzo[b]fluoranthene	1.31	Not Detected		10	no
207-08-9	Benzo[k]fluoranthene	1.57	Not Detected		2	по
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	по
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
	<u> </u>			1 .	l	l. <u></u>

Table 4 SEMI-VOLATILE ANALYSIS DATA SHEET

Lab Name:

_ #

FMETL

NJDEP#

13461

Matrix: (soil/water) WATER

Date Sampled:

<u>12/7/98</u>

Location:

<u>906B</u>

Lab Sample ID: 4116.04(Dup 906B)

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	по
111-44-4	bis(2-Chloroethyl)ether	2.45	Not Detected		10	no
541-73-1	1,3-Dichlorobenzene	2.65	Not Detected		600	по
106-46-7	1,4-Dichlorobenzene	2.50	Not Detected		75	no
100-51-6	Benzyl alcohol	2.09	Not Detected		nie	no
95-50-1	1,2-Dichlorobenzene	2.44	Not Detected		600	по
108-60-1	bis(2-chloroisopropyl)ether	2.96	Not Detected		300	по
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	по
78-59-1	Isophorone	2.31	Not Detected		100	no
111-91-1	bis(2-Chloroethoxy)methane	2.54	Not Detected		nle	по
120-82-1	1,2,4-Trichlorobenzene	2.58	Not Detected		9	по
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	по
77-47-4	Hexachlorocyclopentadiene	1.59	Not Detected		50	no
91-58-7	2-Chloronaphthalene	2.15	Not Detected		nle	по
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 4 SEMI-VOLATILE ANALYSIS DATA SHEET

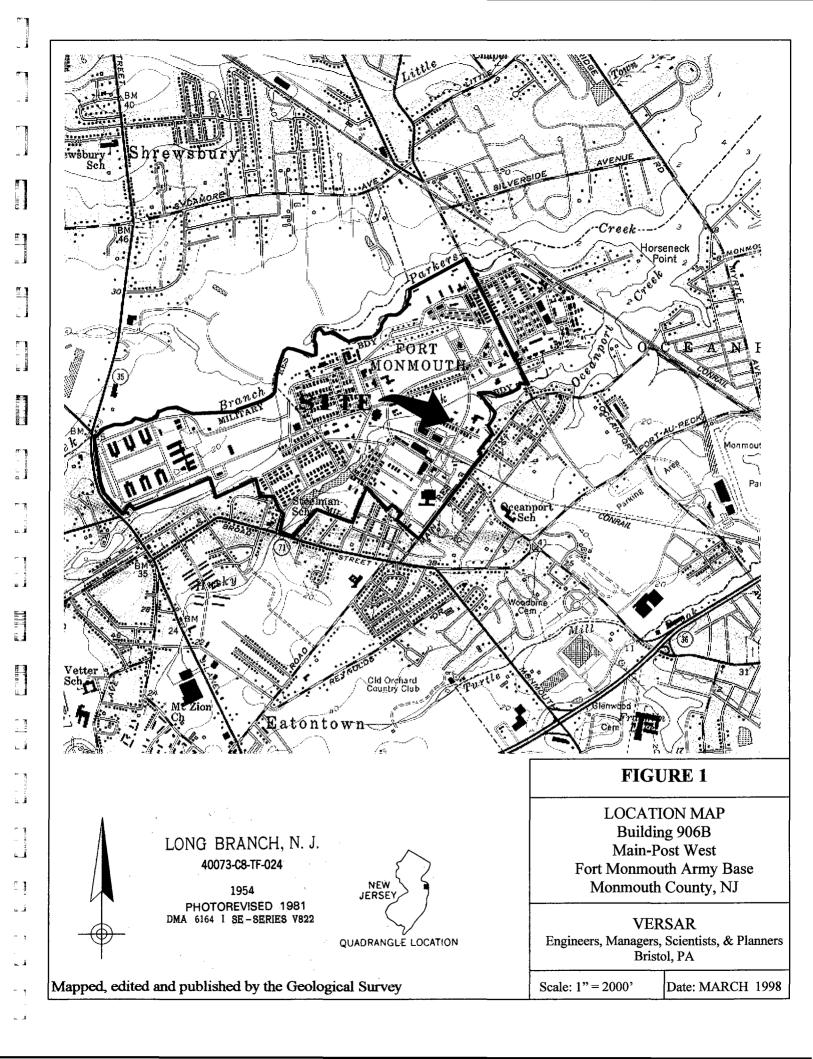
Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) WATER

Date Sampled: 12/7/98 Location: 906B Lab Sample ID: 4116.04(Dup 906B)

Date Sample	ea: <u>12///98</u>	Location	900B	Lab S	ampie 1D: 4116.0	14(Dup 900B)
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	по
83-32-9	Acenaphthene	1.98	Not Detected		400	по
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	по
86-73-7	Fluorene	1.93	Not Detected		300	no
7005-72-3	4-Chlorophenyl-phenylether	1.53	Not Detected	-~	nle	по
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	. по
85-01-8	Phenanthrene	1.67	Not Detected		nle	no
120-12-7	Anthracene	1.79	Not Detected		2000	по
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	по
85-68-7	Butylbenzylphthalate	1.15	Not Detected		100	no
56-55-3	Benzo[a]anthracene	1.57	Not Detected		10	по
91-94-1	3,3'-Dichlorobenzidine	2.28	Not Detected		60	по
218-01-9	Chrysene	2.32	Not Detected		20	по
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	по

FIGURES

C JOHN THE



Geologic Map of New Jersey

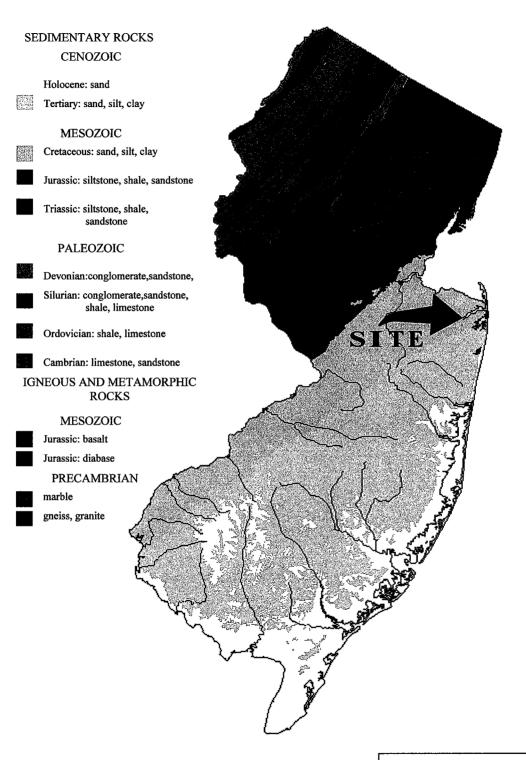
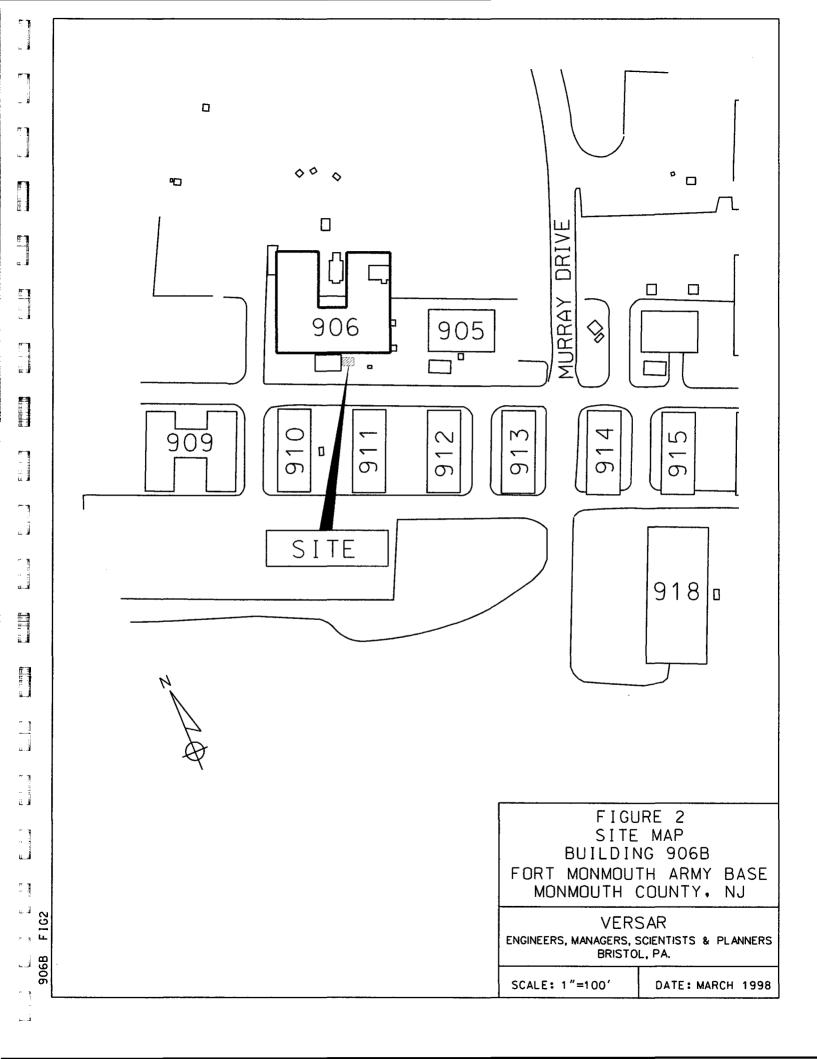
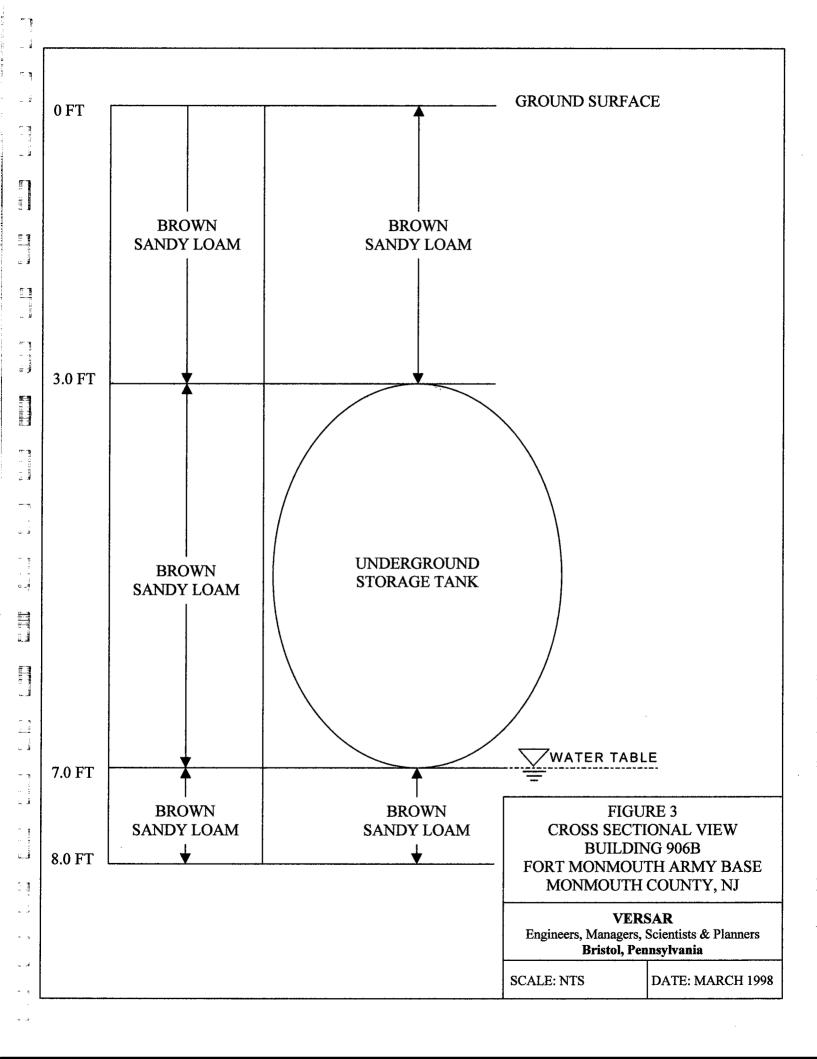


FIGURE 1A GEOLOGICAL MAP FORT MONMOUTH ARMY BASE MONMOUTH COUNTY, NJ

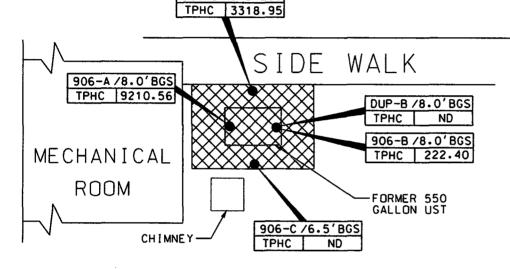
VERSAR

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



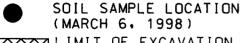


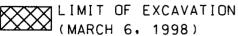
BUILDING 906-D/6.5'8GS





LEGEND





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 906B
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

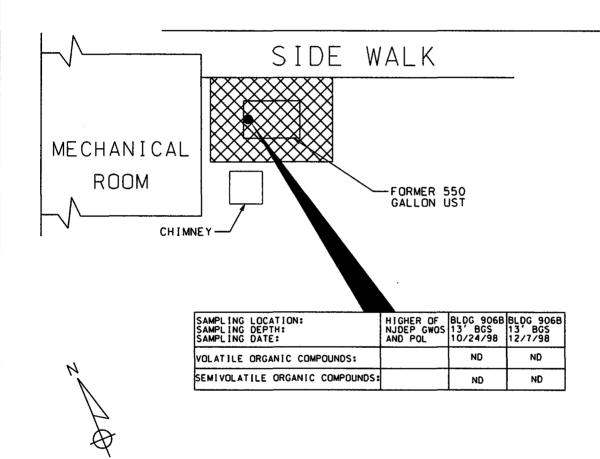
VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10'

DATE: MARCH 1998

906B F1G4

BUILDING



LEGEND

GROUNDWATER SAMPLE LOCATION (OCTOBER 24, 1998 AND DECEMBER 7, 1998) LIMIT OF EXCAVATION



(MARCH 6, 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 906B FORT MONMOUTH ARMY BASE MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: MARCH 1998

APPENDIX A NJDEP-STANDARD REPORTING FORM

NEW JERSEY LARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION BUREAU OF APPLICABILITY AND COMPLIANCE

Registration and Billing Unit CN 028, Trenton, N.J. 08625-0028 1-609-984-3156

FOR STATE USE ON	iLY
Check in Yes] No
STATUS COMCC	DE
	T

		FACILITY QUESTIONNAINE
!	FACILITY UST#	0081533 Bldg 906B
		is Registration Questionnaire will satisfy the registration requirements of the Underground Storage of stances Act, N.J.S.A. 58:10A-21, and the Registration and Billing Regulations N.J.A.C. 7:14B-2.
£ (Is this a reginatures)	box(es)] stration of a proposed or newly installed underground storage tank? (This form must be filed at least 30 days prior to operation) stration of an existing underground storage tank not presently registered? ection or amendment to an existing facility registration? UST #
	Owner Name a Facility Operato	Ind/or Address Change
[SECTION A - G	ENERAL FACILITY INFORMATION
1	. Facility Name	
2	2. Facility Location	MAIN POIST WEST NUMBER AND STREET
		CITY OR MUNICIPALITY
		COUNTY STATE ZP CODE BLOCK LOT
3	3. Facility Operator	PERSON OR TITLE Contact Tele. No. (Area Code) (Externsion)
	Operator Address (if different than	NUMBER AND STREET
,	#2)	
		CITY OR MUNICIPALITY
7		STATE ZIP CODE
. 4	4. Tank Owner	
	5. Tank Owner Address	NUMBER AND STREET
i.		
10 T		CITY OR MUNICIPALITY
~ 1		STATE ZIP CODE
آد پ	Contact Person (Tank Owner)	Tele. No.(Area Code) (Extension)
- `_	FPAID#	

8. Total number of regulated underground storage tanks at facility Complete Service B.

10. Facility Type: A State B Commercial/ Industrial		Cou	unty/Mur derai	nicipal	F	☐ Cha	uritable / l sidence	Public Scho	ol	G H	Other Farm	(as def 23.1 et :	ined	in
11. Is a copy of the facility site plan submitt	ted witi	h this	registra	ition pu	rsu	ant to N.	J.A.C. 7:1	14B-2?] YE	S	□NO	10. 1 BL	s e q.,	,
SECTION B - SPECIFIC TANK INFO														
The second secon			-											
ALL underground tanks, including those tak	en out	of o	peration	(UNLE	SS	THE TA	VK WAS	REMOVED	FRO	T MC	HE GRO	UND P	RIOF	R.
9/3/86) must be registered. Report all tank/	piping	statu	is chang	es unle	ess	previous	y submitt	led.						
1. Tank Identification Number 906B		NK N		TA	NK	NO.	TAN	K NO.	Į	ANK	NO.	Ţ	ANK	<u>(1</u>
	10	313	191	لــــــا					\sqcup	Ш		+		
2. CAS Number (hazardous substances only)		11	2	ш		<u>LLI</u>			Ш	11	1111		11	L
3. Date Tank Installed (Month/Day/Year)	Mo. D		Year V4~	Mo. D	ay	Year	Mo. Day	Year	Mo.	Day	Year	Mo.	Day	Ι.
	PI											1	<u> </u>	Ц
4. Tank Size (gallons)	<u> </u>		550					لللل				Ш	\coprod	
5. Tank Contents (Mark one "X" for each tank)	ļ				_	7	1 .	7		г	7			7
A. Leaded gasoline B. Unleaded gasoline	\vdash	┼┼			╁╌	 	 		-		 			<u></u>
C. Alcohol endriched gasoline	 	++			+-	 		 -	├	-	+	+	+-	_
D. Light diesel fuel (No. 1-D)	 	+-+		 	十					+		 	+	÷
E. Medium diesel fuel (No. 2-D)	 	++	-		+	 	 		 	+	+	+	+	╁
F. Waste Oil	 	+			+	 			 	+	+	- 	+-+	十
G. Kerosene (No. 1)		+			†	 	1	 	 			+	++	╁
H. Home heating oil (No. 2)	\vdash	X		 	+-	 	† †	 	<u> </u>		 	+	+ 1	╁
J. Heating oil (No. 4)	-	+			+	 	1 +		 		 	+	+-	╁
K. Heavy heating oil (No. 6)	 	++			╁┈	 	 	 	 	-	+	-	+	╁
L Aviation fuel		+-+			t			_	 	_	 	+-	+-	十
M. Motor oil		+-+			1					_	 	+	+-	${\dagger}$
N. Lubricating oil		+				1						1	+-	1
P. Sewage		17			\top							 	7-	\uparrow
Q. Sewage sludge		\top			 						<u> </u>	1	+	Ť
R. Other hazardous substances (specify)												1		
S. Hazardous waste (specify ID number)														
T. Mixtures (please specify)														
U. Emergency spill tank (specify substance)	<u> </u>						<u> </u>							
V. Other petroleum products (please specify)	<u> </u>													
W. Other (please specify)	<u> </u>			ļ	-									
6. Tank & Piping Construction	Tani	k	Piping	Tank	(Piping	Tank	Piping	Ta	nk	Piping	Tan	k	P
(Mark one each for both tank & piping) A. Bare Steel		l	K	$ \neg$					lr	7		1 ~	1	ſ
B. Cathodically protected steel		$\vdash \!\!\!\!\!\!-$		H		++-	1-1-1		-	+	++	++-	 	\dashv
C. Fiberglass-coated steel	\$	 	++-	\Box		++-	t + t	- 		+-		++-	-	┪
D. Fiberglass-reinforced plastic	13	 	++-			+	 			+-		1		ᅥ
E. Internally lined	 	 	+	 		 	 		\vdash	+		++		┪
F. Other (please specify)	 	L	1	 			† -	·	 			 	<u> </u>	
7. Tank & Piping Structure	 		D:-:	7		Dinion	71		_			+		_
(Mark one each for both tank & piping)	Tani	K	Piping	Tani	(Piping	Tank	Piping	Та	nK	Piping	Tan	K	P
A. Single wall			X						Ιſ	7]	•
B. Double wall										1				\exists
C. Other (please specify)												1	<u></u>	
8. Type of Monitoring/Detection System	Tani	k	Piping	Tan	k	Piping	Tank	Piping	To	nk	Piping			_
	[•• •			3			L. thurs	'a		Libing	Tar	JK -	F
(Mark all that apply for both tank & piping)		<u> </u>			<u>L</u>	1.	$\bot \bot \bot$							
A. Statistical Inventory Reconciliation		Į –	+				$\bot \bot \bot$		\coprod			$\perp \Gamma$		
A. Statistical Inventory Reconciliation B. Manual Tank Gauging						<i>(</i>	1 1 1	1 T	1 i	1 -	1 7	1 T	1	
A. Statistical Inventory Reconciliation B. Manual Tank Gauging C. Inventory Control									1_1					
A. Statistical Inventory Reconciliation B. Manual Tank Gauging C. Inventory Control D. Interstitial													上	_
A. Statistical Inventory Reconciliation B. Manual Tank Gauging C. Inventory Control D. Interstitial E. Precision Test														
A. Statistical Inventory Reconciliation B. Manual Tank Gauging C. Inventory Control D. Interstitial														_

·	Bldg	906B	r			<u> </u>			,	·
Tank Identification Number		K NO.	TANI	K NO.	TAN	K NO.	TAN	IK NO.	TAN	K NO.
8. Type of Monitoring/Detection System K. None	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
L Other (please specify)					1					
Overfill Protection (tank only) (Mark one X for each tank)	ļ		l		j				}	
A. Yes	ſ	7	lr	7	1 6	7	i s	7	l	7
B. No	1	X			1					1
D. Spill Containment Around Fill Pipe (Mark one X for each tank)		· 	٢	7		7		 1		_
A. Yes B. No	 	Z	 		 		[
Tank Status (Mark one X for each tank) A, In-use	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Pipin
B. Empty less than 12 months										11
C. Empty 12 months or more										
D. Emergency spill tank (sump)	$\bot\bot\bot$		$\bot \bot \bot$		\Box		1-1-1-	- -		
E. Emergency backup generator tank	+++				++-		H - H - H		 	
F. Abandoned in Place G. Removed	1 x	-11	 - - -		╂┼┼╌		} 		 	 - -
H. Other (please specify)		124			╂╌┸╌		╂┈╨┈┴┈			
	1						1		1	
If box 11B, C, or D above has been marked, indicate the estimated date last used (month/day/year)	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year
3. Closure Information - Tank ID No.		1K NO.	TANI	K NO.		K NO.	TAI	NK NO.	TANK	(NO.
	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year	Mo. Di	y Year	Mo. Da	y Yea
A. Date abandoned in place	1-1-	1111	111	1111	 -!- 	1111	 	<u> </u>		111
B. Date taken temporarily out of service						111				
C. Date removed	0306	1998		1111	1111	1111	1 1		1 1	
D. Date of Sale or Transfer		1 1 1				111		1 1 1		
E. TMS # (if applicable)	 		 		 -'-'		 	<u> </u>	 	
F. ISRA # (if applicable)	 		 		 		 			
r. 10ros w til application			سنسل		حصنجك		ــــــــــــــــــــــــــــــــــــــ	<u> </u>		in the second
CECTION C - FINANCIAL RESPONS Ces this facility have a Financial Responsi Bases and the appropriate financial (normal	bility Assi	urance Me	chanism a	is required	in 40 CF	R 280?	YES	□ NO		
Туре					Carrier /	Issuing Ac	jency			
Effective Date Expiration D	/)ate			Policy N	Number			\$ Ai	mount	
ECTION D - MONITORING SYSTE	MS									
Effective Date Expiration D SECTION D - MONITORING SYSTEM Poes this facility have a release detection must not please be aware that the facility must not provide the second not	MS nonitoring st meet th	e appropri		compliance	Numb with	er N.J.	er N.J.A.C. 7:14	N.J.A.C. 7:14B-6?	\$	\$ Amount N.J.A.C. 7:14B-6? YES
ON E - RECORDKEEPING/CO			s. Anv an	e tank not	in complia	ance requi	ires a "No	O" answer	for the en	tire fac
 Does this facility have cathodic prote if "Yes", are the systems properly or Are the performance claims and doc 	ection sys	tems for al	ll steel tan ned pursu	ks and pip ant to N.J.	ing? .A.C. 7:14	B-5?			YES [YES [ON [
pursuant to N.J.A.C. 7:14B-5? 3. Are the proper monitoring, testing, so N.J.A.C. 7:14B-5 and 6?									YES [мо мо
 Is the proper Release Response Pla Does the facility have spill and over the facility have spill and over	fill protect	tion systen	ns pursua	nt to N.J.A	.C. 7:14B	-4?			YES YES	NO NO

IMPORTANT INFORMATION

	processing. Registration and Billing Schedu	
ENALTY:	All Initial Registration fees are \$100 per facilities by owner or operator of a regulated	ility. underground storage tank to comply with any requirement of the State UST
	Act or regulations may result in the penalties	
MERGENCY:		ptline at (609) 292-7172 must be called IMMEDIATELY - 24 hours a day.
PGRADE EXEMPTION:	Residential heating oil underground storage	tanks are exempt from all upgrade requirements.
		W (critical deadlines)
	• •	must have cathodic protection and spill/overfill protection.
-		s must have cathodic protection and spill/overfill protection.
	 All federally regulated piping must have be 	•
-	All federally regulated tank systems must	· · · · · · · · · · · · · · · · · · ·
	All federally regulated tank systems must	· · · · · · · · · · · · · · · · · · ·
December 22, 1998 —	All regulated tanks shall install cathodic p	rotection and spill/overful protection.
		FICATIONS
		E SAME AS THE PERSON SIGNING CERTIFICATION NO. 1, THEN sons are required to sign No. 1 and No. 2, then they must do so.)
CEDTIEIC ATION NO) 1.	
CERTIFICATION NO		
Must be signed by the h	ighest ranking individual <u>at the facility</u> w	rith overall responsibility
"I certify under penalty	y of law that the information provided	in this document is true, accurate and complete to the best of my
		gnificant civil and criminal penalties for knowingly submitting false.
O .		crime of the fourth degree if I make a written false statement which I
		rect or authorize the violation of any statute, I am personally liable for
the penalties "		000
M.C. JA	mus off	Como Clif
(Ty	yped / Printed Name)	(Signature)
Die.	Dew	
•	(Title)	(Date)
CERTIFICATION NO	D. 2:	
Must be signed as follow		
	ws. a principal executive officer of at least the	e level of vice president
	ole proprietorship, by a general partner or	
 For a parmership or so 		
	ate, Federal or other public agency, by eit	aici a principal executive officel of fanktily elected official
• For a municipality, Sta	ate, Federal or other public agency, by eit indicated above, by the person with lega	
For a municipality, StaFor persons other than	indicated above, by the person with lega	ll responsibility for the site'
 For a municipality, Sta For persons other than "I certify under penalty 	indicated above, by the person with legal of law that I have personally examined a	al responsibility for the site' ' and am familiar with the information submitted herein and all attached
 For a municipality, Sta For persons other than "I certify under penalty documents, and that bas 	n indicated above, by the person with legated of law that I have personally examined a sed on my inquiry of those individuals im	al responsibility for the site' ' and am familiar with the information submitted herein and all attached amediately responsible for obtaining the information. I believe that the
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APPENDIX B SITE ASSESSMENT SUMMARY

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

Municipality: Oceanport	A. Facility Name: U.S. Army Fo	ort Monmouth New Jersey	
Block:	Facility Street Address: Direct	ectorate of Public Works Building 173	
Street Address:	Municipality: Oceanport	County : Monmouth	
Street Address:	Block: Lot	r(s):Tele	phone Number : 732-532-6224
C. (Check as appropriate) Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee X NA - Federal Agreement E. Certification by the Subsurface Evaluator: The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E	B. Owner (RP)'s Name:		
C. (Check as appropriate) Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee X NA - Federal Agreement E. Certification by the Subsurface Evaluator: The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E Firm: U.S. Atmy Fort Monmouth Firm's UST Cert. Number: NA-U.S. Atmy Firm Address: Directorate of Public Works Building 173 City: Fort Monmouth Firm's UST Cert. Number: Telephone Number: Telepho	Street Address:	City	y :
Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee X NA - Federal Agreement Tank Closure Number: Sederal Case Manager 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	State:	_Zip: Telephone Number :	
The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E	Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee	 Assigned Case Manager: <u>Ian Curtis, Federal</u> UST Registration Number: <u>81533-332</u> Incident Report Number	(7 digits) (10 or 12 digits)
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	The attached report conforms Name: Charles Appleby Firm: U.S. Army Fort Monmo Firm Address: Directorate of I State: NJ Zip	s to the specific reporting requirements of N.J.A.C. 7: Signature: Duth Public Works Building 173 Telephone Number: 7	UST Cert. No.: 2056 ST Cert. Number: NA-U.S. Army City: Fort Monmouth 32-532-6224
Company Name: U.S. Army Fort Monmouth Date:	F. Certification by the Respon The following certification shall 1. For a Corporation by a persor resolution, certified as a true of the second secon	sible Party(ies) of the Facility: I be signed [according to the requirements of N.J.A.C. on authorized by a resolution of the board of director copy by the secretary of the corporation, shall be submorietorship, by a general partner or the proprietor, respectal or other public agency by either a principal execunality of law that I have personally examined and am familic attached documents, and that based on my inquiry of those lieve that the submitted information is true, accurate, and the information is true, accurate, or expected of the fourth degree if I make a written false statement who magly direct or authorize the violation of any statute, I am partners of the fourth degree if I make a written false statement who magly direct or authorize the violation of any statute, I am partners of the fourth degree if I make a written false statement who magly direct or authorize the violation of any statute, I am partners of the fourth degree if I make a written false statement who may be a facility of the fourth degree if I make a written false statement who may be a facility of the fourth degree if I make a written false statement who may be a facility of the fourth degree if I make a written false statement who may be a facility of the fourth degree if I make a written false statement who may be a facility of the facility	7:14B-1.7(b)]as follows: ors to sign the document. A copy of the mitted along with the certification; or sectively; or tive officer or ranking elected Official. ar with the information submitted in this individuals responsible for obtaining the dicomplete. I am aware that there are incomplete information and that I am ich I do not believe to be true. I am also personally liable for the penalties." Title: Directorate of Public Works

US ARMY, FORT MONMOUTH DAILY UST CLOSURE LOG

BLDG.#: 906 REG.#: CLOSURE#: TOA: TOD:	
CLOSURE SUPERVISOR: (1) NJDEP CERT.#: PERSONNEL: GI, EC, NO	_
ACTIVITY	YES/
THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES	Y
THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES	
ALL ON-SITE PERSONNEL HAVE CURRENT TRAINING IAW ALL SAFETY REQ. (E.G. 29CFR)	
ALL UTILITIES WERE MARKED OUT PRIOR TO ANY EXCAVATION (VISUAL CONFIRM. YES/NO)	
HAND EXCAVATION WAS DONE WHEN EXCAVATING WITHIN 4 FT OF ANY UTILITIES	
ALL UST PIPING WAS BLOWN BACK AND DRAINED PRIOR TO ANY EXCAVATION WITH BACKHOE	
ALL UST PIPING WAS REMOVED PRIOR TO UST EXCAVATION	V
A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR	NIA
THE UST WAS CLEANED AND NO RESIDUAL LIQUIDS WERE LEFT IN THE TANK	7
THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED	
DRUMS OF WASTE WERE GENERATED AT THIS SITE TODAY(ID CARDS COMPLETED)	V
DRUMS OF WASTE WERE TRANSPORTED TO THE (MP,CW,EV) HWSA	NA
GALLONS OF X WASTE WERE REMOVED (MANIFEST#:)	1
CUBIC YARDS OF PETROL. CONT. SOIL WERE EXCAVATED+TRANS TO (T-80, 2624)	Y
THE DPW WAS NOTIFIED OF ANY DISCHARGE TO THE ENVIRONMENT. (WHO)	1
ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY	
THE SSE AUTHORIZED BACKFILLING THE EXCAVATION. SSE INITIAL REQUIRED:	
THE UST WAS TRANSPORTED TO UST YMAG FOR DISPOSAL (ATTACH SCRAP TICKET)	1
ADDITIONAL NOTES WERE TAKEN AND RECORDED ON THE BACK OF THIS FORM	NA
THE FOLLOWING DOCUMENTS WERE GIVEN TO THE SSE TODAY: (CIRCLE EACH OR ADD ITEMS)	1
SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT,	$ \vee $
I certify under penalty of law that tank decommissioning activities performed in compliance with N.J.A.C. 7:14B-9.2(b)3. I am aware that are significant penalties for submitting false, inaccurate, or incoinformation, including fines and/or imprisonment. SIGNATURE: DATE:	were there
SIGNATURE: DATE: 3-6-98 ca\ms\ust\removal\siteclls.doc # = C. Apple by	

APPENDIX C
WASTE MANIFEST



_ 3



GENERATOR/CUSTOMER

RD1 Box 5A Old Bridge, N.J. 08857 (732) 721-0900 Fax (732) 721-0231 Charles Wood YARD YOO GAL. (DRUMS)

STANDARD COLLECTION ORDER FORM

B. 104 (PROPOSED CREDIT 187828 UNION SITE)

SALES ORDER # BILL TO (IF DIFFERENT FROM LOCATION) GENERATOR/LOCATION VIECOM-VINNELL SERVICES FIRMUNMOUTH INFORMATION/ATTENTION LI ACCOUNT APPROVAL CODE: PURCHASE STATE ID NO. MANIFEST 10389 21002059 SHIPPING INFORMATION This is to certify that the below named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. SALES REPRESENTATIVE TYPE US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) NO. QTY. UNIT SERVICE SECTION WASTE CODE SALES LINE QUANTITY **UNIT PRICE** DESCRIPTION PRICE TAX CODE TOTAL 40500 USED OIL REMOVAL 40300 **ANTI-FREEZE REMOVAL** 40600 **USED OIL FILTER REMOVAL** 40501 GAL **OILY WATER DISPOSAL** 1400 40502 SLUDGE DISPOSAL 41001 GASOLINE/WATER 41501 DRUM DISPOSAL 41504 TANK ENTRY 40800 PARTS WASHER SERVICE OUAM-41500 **TRUCK & OPERATOR** 41511 NEW 55 GAL DRUM /17H 41503 **QAQC ANALYTICAL TESTING** 42001 **DEXSIL TEST KIT** TAX 41509 TRANSPORTATION DRUMS-012+H20 PUMPOUT 3K+1KTANKS+SEVERAL QUANTITY TOTAL CHARGE MY ACCOUNT FOR THIS TRANSACTION UNLESS OTHERWISE INDICATED IN THE **GENERATOR** PAYMENT SECTION. CERTIFICATION INVOICES REFLECTING CHARGES TO CUSTOMER ARE SUBJECT TO AN INTEREST RATE OF THE LESSER OF 11/2% PER MONTH (18% l certify that this generator PER ANNUM) OR THE MAXIMUM RATE ALLOWED BY LAW ON ANY INVOICES THAT generates less than 100 ARE NOT PAID WITHIN 30 DAYS. IN THE EVENT OF DEFAULT, LORCO SHALL BE kilograms of hazardous ENTITLED TO RECOVER COSTS OF COLLECTION, INCLUDING REASONABLE waste per month, as **PAYMENT RECEIVED SECTION** ATTORNEY'S FEES. defined at 40 C.F.R. 261, GENERATOR WARRANTS AND REPRESENTS THAT THE MATERIALS PROVIDED and does not accumulate TOTAL RECEIVED CASH [] more than 1,000 kilograms LORCO HEREUNDER HAVE NOT BEEN MIXED, COMBINED, OR OTHERWISE of such waste during the BLENDED IN ANY QUANTITY WITH MATERIALS CONTAINING POLYCHLORINATED CHECK NUMBER month. BIPHENYLS (PCB) OR ANY OTHER MATERIAL DEFINED AS HAZARDOUS WASTE UNDER APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO 40 CFR PART 261, GENERATOR AGREES TO INDEMNIFY AND HOLD LORCO HARMLESS FOR ANY DAMAGES, COSTS, ATTORNEY'S FEES, ETC, ARISING OUT OF OR IN ANY WAY RELATED TO A BREACH OF THE ABOVE WARRANTY BY THE GENERATOR. CUSTOMER SERVICED Generator certifies that the waste is **EVERY 30 DAYS** In accordance the N.J.A.C. 7:26-12.1 et seg, LORCO has the required GENERATOR'S SIGNATURE permits to accept the above described waste. LARGE QUANTITY In accordance with 40 CFR 266 § 43(5) LORCO has notified GENERATOR the US EPA of its location and used oil management activities. CERTIFICATION Title DEXSIL CDT AGUINOT TEST RESULTS Date Signature

PPM

LORCO

ÉEPRESENTATIVE



RD. 1, BOX 5A - OLD BRIDGE, NJ 08857 **NON-HAZARDOUS** 1. Generator's US EPA ID No.

W.J. 3.2.1.0.0.2.2.0.5.9.7

Manifest Document No.
1.0.3.8.9 2. Page 1 NHZ 010389 of / **WASTE MANIFEST** 3. Generator's Name and Mailing Address
U.S. Army Communications Electronics Command Main Post
Bldg. 173, ATTN SELFM-PW-EV, FT. Monmouth, N.T., 07703 4. Generator's Phone (5. Transporter 1 Company Name US EPA ID Number A. Transporter's Phone LIONETTI OIL RECOVERY CO INC. | N J D O 8 4 C 4 4 0 5 903 721-0900 7. Transporter 2 Company Name US EPA ID Number B. Transporter's Phone 9. Designated Facility Name and Site Address US EPA ID Number 10. C. Facility's Phone LIONETTI OIL RECOVERY CO INC DBA LORGO PETROLEUM SVGS RUNYON&CHEESEQUAKE RDS OLD BRIDGE, NJ 08257 133003404405 908 721-0900 12. Containers 13. Total Quantity 14. Unit Wt/Vol 11. Waste Shipping Name and Description No. Type PETROLEUM OIL (PETROLEUM OIL) COMBUSTIBLE, LIQUID UN1270 PEITI b. GENERATOR d. D. Additional Descriptions for Materials Listed Above E. Handling Codes for Wastes Listed Above T.L PETROLEUM OIL 15% WATER 85% TO4 FILTRATION 15. Special Handling Instructions and Additional Information 24 HR EMERGENCY RESPONSE#(900) 721-0900 DECAL# 87084 ERG#128 DEXSIL TEST MIT RESULTS N/A PRIMAPIFEST USED FOR TRACKING PURPOSES ONLY 16. GENERATOR'S CERTIFICATION: 1 certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste. Printed/Typed Name Signature Meste. barres 800 Buch 50 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Signature ON TAGUINOT 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Signature Month Year 19. Discrepancy Indication Space FAC 20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19. Printed/Typed Name Signature Day Year

CASIE PROTAJK ENVIRONMENTAL SERVICES

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

\prod	MANIFEST NIJ13121	SUS EPA ID No. 1 0 0 2 0 5 9 7 1 2 1	gent No	2. Page 1 of		:				
	3. Generator's Name and Mailing Address U.S. Army C			nent Number						
Main Post Bldg 173/Attn: Fort Monmouth NJ 07703 NHZ020 16448 B. State Generator's ID										
4. Generator's Phone (732) 532 - 6223										
5. Transporter 1 Company Name 6. US EPA ID Number , Joe Fig. 10 N										
Casie Ecology Oil Salvage, Inc. N J D 0 4 5 9 9 5 6 9 3 C. State Trans. ID 1 6 9 3 7. Transporter 2 Company Name 8. US EPA ID Number D. Transporter's Phone (60%)										
7. Transporter 2 Company Name 8. US EPA ID Number D. Transporter's Phone (609) 69										
Designated Facility Name and Site Address 10. US EPA ID Number										
	Casie Ecology Oil Salvage, Inc. T/A			F. Transporte)				
3209 N. MILL Rd / Casie Protank G. State Facility's 0614D1HPO										
Vineland NJ 08360 N J D 0 4 5 9 9 5 6 9 3 H. Facility's Phone (609) 69										
1	11. US DOT Description (Including Proper Shipping Name, Haza		No.			Jnit W VVol W	L · /aste No.			
G	a. Combustible liquid, n.o.s.(Fu	el Oil)		1.0	200					
EN	NA1993, PGIII		0 1 0 1 1	TIT	3.70	G I	D, 7, 2			
E	b.		0 0 1 2	11100	01012					
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			11	. 1 1.	11					
,	c.									
	· ·		, ,				, ,			
	d.									
Ц	Additional Descriptions for Materials Listed Above			K. Handling	Codes for Wa	stee Listed	Above			
	L,T %oil/sed. %wtr.		ĺ	n. nanamg		istes Listee /				
	а. с.			a. •	c	•				
	b. d. 15. Special Handling Instructions and Additional Information			b. 1	<u>l</u> d	·				
	•									
				· ·	•					
	a. 24 Hr. Emergency Response #609 69			# 12'7	ad above by					
	proper shipping name and are classified, packed, marked, ar according to applicable international and national governme	nd labeled, and are in all respects in p	proper con	idition for tran	sport by high	way				
	I hereby certify that the above-named material is not hazardous		, 264-and 2	279 or any appl	icable state la	w.				
						į,				
	Printed/Typed Name	Signature				Month	Day , Year			
Ц	Charles APPLEBY SELFM-PLU	-8/				04	0/198			
ĭ				7 /						
TRANSPORTER	Priored/Typed/Name	Signature	//.		•	Month	8º10°5			
P	18. Transporter 2 Acknowledgement of Receipt of Materials	13010		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		VY	01/0			
Ř	Printed/Typed Name	Signature				Month	Day Year			
Ř	4 · · · · · · · · · · · · · · · · · · ·			····						
	19. Discrepancy Indication Space					;				
FACI						:				
- 1						<u>.</u> :				
i T	20. Facility Owner or Operator: Certification of receipt of non-hazar		t except as	noted in Item	19.	:				
1	Printed/Typed Name	Signature				Month	Day Year			
	<u> </u>	<u></u>								

APPENDIX D UST DISPOSAL CERTIFICATE

MAZZA & SONS, INC. Metal Recyclers

906

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

NO.	

DATE. 19 MAR 97

Customer's Name	Treem	Ulkin CC	
Address			

Weight Price		Weight Price
Cast Iron		Lt. Copper
Steel 24.00	*****LB	Brass
Lt. Iron	22360 LB	Alum Clean
Copper #1	21560	Lead
Copper #2	Sou	Stainless
		Battery
	MAR I 9 1998	<u> </u>
	MAK 1 5 1550	$\mathcal{Q} \cup \infty$ TOTAL AMOUNT:
	(M) 138	101AL AMOUNT.
Weigher	Customer 77	mex Meller
	1	

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. 906

Project #

3390

Date Rec.

03/06/98

Date Compl. 03/09/98

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.

Fort Monmouth Envisonmental Testing Laboratory

Bidg: 173, SELFM-PW-EV, Fort Monmouth, NJ 07703

Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil

NJDEP Certification #13461

Chain of Custody Record

Customer: DPW-ENV		Project No. 98-0101				Analysi Parameters							Comments:	
Phone #:		Location:					×	1	3					* SAMPLES KEPT
()DERA NOMA ()Other:	B 906				\mathbb{L}	7	18	68	#			X	BELOW 4°C.
Samplers Name / Con	npany : GARY DIM	ARTINIS-	-TUS	Sample	#	100	73	1/3	48	60			3	
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	1/	6,	16	36	0			V	Remarks / Preservation Method
3390,01	906-A	3-6-98	1355	SOIL	2	\geq	\geq	X	\geq	6			20	CENTER UNE @ 8.0' *
02	\mathcal{B}		1404							7		<u> </u>	40	<u> </u>
03	<u>C</u>		1413							8			3	SIDE WALL @ 6.5'
04	D		1420		J.					9			10	↓
20	DUP	V	<i>.</i> —	$ \mathbf{V} $	1	V	1	1					_	FIELD BUPLICATE
06	78	<u> </u>		METHANO	1				1	10				TRIP BLANK
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·	to grave a comment of the contraction	and the second s	and the second second		<u></u>									
NOTE: OUR	(#ASZIIY) CAUB	RATED Q	1/95 pon	, CHy	42	ERC	(0)	ATA	€ €	13	501	HRS.	on,	8-6-98 by G. D. MARTIN.
	N-1000 0		• //				···							<u> </u>
Relinquished by signifur	Date/Time:	Received by (s	ignature):		Relino	quished	by (sig	nature):		Date/	Time:	Receiv	ed by (signature):
Why WING	2-6-98 1530	Hau	Mu											
Relinquished by (signature	:): Date/Time:	ecceived by (s	Λ		Relino	quished	by (sig	nature):		Date/	Time:	Receiv	ed by (signature):
			<u>U</u>									L		
Report Type: ()Full, 🖔	educed, ()Standard, ()Screen	/ non-certified		•		Remar	ks: \mathcal{D}	EDIC	ATEZ	SAI	rpc	NG :	7080	s Used.
Turnaround time: (XStanda	ard 4 wks, () Rush Days,	()ASAP Verb	al Hrs.											

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

Client:

U.S. Army

Lab. ID#:

3390

DPW. SELFM-PW-EV

Date Rec'd:

06-Mar-98

Bldg. 173

Analysis Start:

09-Mar-98

Ft. Monmouth, NJ 07703

Analysis Complete:

09-Mar-98

Analysis:

OQA-QAM-025

UST Reg. #:

Matrix:

Soil

Closure #:

Analyst:

D.DEINHARDT

DICAR #:

Ext. Meth:	Shake			Location #:		B.906
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3390.01	906-Å	1.00	15.55	81.67	185	9210.56
3390.02	906-B	1.00	15.31	82.30	187	222.40
3390.03	906-C	1.00	15.80	84.86	175	ND
3390.04	906-D	1.00	15.30	81.79	188	3318.95
3390.05	906-DUP	1.00	15.09	82.10	190	ND
						*
					_	
METHOD BLANK	10-Mar-98	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright **Laboratory Director**

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:

Volatiles - EPA Method 8260

98-0001

B.906

Project # 3390 Date Rec. 03/06/98 Date Compl. 03/12/98

Released by:

Daniel K. Wright Laboratory Director

1

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

A 50uL volume of Methanol Samples soil is added to 5mL aliquot of water. Surrogates and internal standards are added and the sample is placed on a purge and trap concentrator. The sample as purged and desorbed into a GC/MS system.

Volatiles are identified and quantitated. The final concentration is calculated using soil weight, percent solid, methanol volume and concentration.

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		Indicate Yes, No, N/A
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	<u>'</u>
2.	Retention times for chromatograms provided	4
3.	GC/MS Tune Specifications	
	a. BFB Meet Criteriab. DFTPP Meet Criteria	<u> </u>
4.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series	4
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	Ψ
6.	GC/MS Calibration Requirements	
	a. Calibration Check Compounds Meet Criteriab. System Performance Check Compounds Meet Criteria	1 × 1×
7.	Blank Contamination - If yes, List compounds and concentrations in each blank:	4
	a. VOA Fraction	
	b. B/N Fraction	
	c. Acid Fraction	
8.	Surrogate Recoveries Meet Criteria	<u> </u>
	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	
	If not met, were the calculations checked and the results qualified as "estimated"?	_
9.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	7)
	a. VOA Fraction $1/1-DEE - 155$	
	b. B/N Fraction	
	c. Acid Fraction	

GC/MS Analysis Conformance/Non-Conformance Summary (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 a. VOA Fraction b. B/N Fraction c. Acid Fraction 11. Extraction Holding Time Met	ge) Y
If not met, list number of days exceeded for each sample:	
12. Analysis Holding Time Met If not met, list number of days exceeded for each sample:	<u> </u>
Additional Comments:	
Laboratory Manager Date: 6-16-946	

Fort Monmouth Environmental Testing Laboratory

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

Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil

NJDEP Certification #13461

Chain of Custody Record

Customer: DPW	I-ENV	Project No:	98-000	7				Ana	lysi	Paran	eters			Comments:
Phone #:		Location:					ನ	3	Thus:		3			X=SAMPLES KEPT BELDW 4°C.
)Other:		906			S	SOLA	B	66	#	48		8	BELDW 4°C.
Samplers Name / Con	npany: GARY DIM	ARTINIS.	-TUS	Sample	#	M	23	13	48	40	34.5		12	
Lab Sample I.D.	Sample Location	Date	Time	Туре	bottles	1/	13	1	Ž¢.	0	S .		V	Remarks / Preservation Method
3390,01	906-A	3-6-98	1355	Soil	2	\geq	\ge	X	\geq	6	X		20	CENTER LINE @ 8.0' *
02	<i>B</i>		1404							7			40	↓
03	C		1413							8			3	SIDE WALL @ 6.5'
04	D		1420		V.					9			10	<u> </u>
20	DUP	V		\downarrow	1	V	1	1		_			_	FIELD DUPLICATE
06	TB	↓	_	METHANO	-				1	10	X		_	TRIP BLANK V
										<u> </u>	<u> </u>			
			-/-											
NOTE: OVA	(#ASZIIY) CAUB	RATED C	J 95 ppn	CH4	42	ERI	(0)	ATA	2 €	13	50 A	HRS.	on.	8-6-98 by G. DiFAMATA
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Religioushed by slephing	2 X	Received by (signature):		Relino	juished	by (sig	nature):	:	Date	Time:	Receiv	ved by (signature):
Why WING	1-3-6-98 1530	Alle	Mu											
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			<u> </u>	<u>-</u>	-		- D		A	<u> </u>			7717/	S / LEFA
Report Type: ()Full, (X)R	leduced, ()Standard, ()Screen				!	Remar	ks: \mathcal{V}	EDIC	MIEL) SHI	npu	\sim G	<i>العن ا</i>	s USED.
Turnaround time: (X)Standa	ard 4 wks, () Rush Days,	()ASAP Verb	al Hrs.											

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

FIELD ID.

Lab Name: FMETL NJDEP # 13461 VBLK31

Project: <u>980001</u> Case No.: <u>3390</u> Location: <u>B.906</u> SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: VBLK31

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V03130.D

Level: (low/med) MED Date Received: 03/06/98

% Moisture: not dec. 0 Date Analyzed: 03/12/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	ט
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	Ų
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

FIELD ID.

VBLK31 Lab Name: **FMETL** NJDEP # 13461 Project: 980001 Case No.: 3390 Location: B.906 SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: VBLK31 Sample wt/vol: 10.0 (g/ml) G Lab File ID: V03130.D Date Received: 03/06/98 Level: (low/med) MED % Moisture: not dec. 0 Date Analyzed: 03/12/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	Ü
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	υ
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

FIELD ID.

906-A

Lab Name:	FMETL				NJDEP#	13461	
Project: 980001		Case No.: 3390		3390	Location: B.906 SD		DG No.:
Matrix: (soil/	water)	SOIL			Lat	Sample ID:	3390.01
Sample wt/ve	o l :	10.4	(g/ml)	G	Lat	File ID:	V03140.D
Level: (low/r	ned)	MED			Da	te Received:	03/06/98

 % Moisture: not dec.
 18.23
 Date Analyzed:
 03/12/98

 GC Column:
 Rtx502.2 ID: 0.25 (mm)
 Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg) <u>UG/KG</u>	Q
107028	Acrolein	2000	U
107131	Acrylonitrile	2000	U
75650	tert-Butyl alcohol	3800	U
1634044	Methyl-tert-Butyl ether	880	U
108203	Di-isopropyl ether	590	Ų
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	290	U
75-01-4	Vinyl Chloride	880	U
74-83-9	Bromomethane	590	U
75-00-3	Chloroethane	880	U
75-69-4	Trichlorofluoromethane	590	U
75-35-4	1,1-Dichloroethene	290	U
67-64-1	Acetone	590	U
75-15-0	Carbon Disulfide	290	U
75-09-2	Methylene Chloride	5600	
156-60-5	trans-1,2-Dichloroethene	590	U
75-35-3	1,1-Dichloroethane	290	J
108-05-4	Vinyl Acetate	880	U
78-93-3	2-Butanone	880	U
	cis-1,2-Dichloroethene	290	U
67-66-3	Chloroform	290	U
75-55-6	1,1,1-Trichloroethane	290	υ
56-23-5	Carbon Tetrachloride	590	U
71-43-2	Benzene	290	U
107-06-2	1,2-Dichloroethane	590	U
79-01-6	Trichloroethene	290	U
78-87-5	1,2-Dichloropropane	290	U
75-27-4	Bromodichloromethane	290	U
110-75-8	2-Chloroethyl vinyl ether	590	U
10061-01-5	cis-1,3-Dichloropropene	290	U
108-10-1	4-Methyl-2-Pentanone	590	U
108-88-3	Toluene	290	U
10061-02-6	trans-1,3-Dichloropropene	590	U
79-00-5	1,1,2-Trichloroethane	590	U
127-18-4	Tetrachloroethene	290	Ü
591-78-6	2-Hexanone	590	Ü
126-48-1	Dibromochloromethane	590	Ū
108-90-7	Chlorobenzene	290	Ü
100-41-4	Ethylbenzene	590	Ü

FIELD ID.

Lab Name:	FMETL			NJDEP# 13461	906-A
Project:	980001		Case No.: 3390	Location: B.906 S	DG No.:
Matrix: (soil/	water)	SOIL		Lab Sample ID:	3390.01
Sample wt/v	ol:	10.4	(g/ml) G	Lab File ID:	V03140.D
Level: (low/i	med)	MED		Date Received:	03/06/98
% Moisture:	not dec.	18.23		Date Analyzed:	03/12/98
GC Column:	Rtx50	2.2 ID:	0.25 (mm)	Dilution Factor:	1.0
Soil Extract	Volume:	25000	(uL)	Soil Aliquot Volu	me: 50 (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes	880	U
1330-20-7	o-Xylene	590	U
100-42-5	Styrene	590	Ü
75-25-2	Bromoform	590	U
79-34-5	1,1,2,2-Tetrachloroethane	590	U
541-73-1	1,3-Dichlorobenzene	880	U
106-46-7	1,4-Dichlorobenzene	880	U
95-50-1	1,2-Dichlorobenzene	880	U

FIELD ID.

Lab Name: FMETL NJDEP # 13461 906-TB

Project: 980001 Case No.: 3390 Location: B.906 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 3390.06

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V03141.D

Level: (low/med) MED Date Received: 03/06/98

% Moisture: not dec. 0 Date Analyzed: 03/12/98

GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	Ų
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	4800	
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	Ū
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	υ
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	Ū
108-90-7	Chlorobenzene	250	Ü
100-41-4	Ethylbenzene	500	Ü

FIELD ID.

Lab Name:	FMETL			NJDEP# 13461	906-TB	
Project:	980001		Case No.: 3390	Location: B.906 S	DG No.:	
Matrix: (soil/w	/ater)	SOIL		Lab Sample ID:	3390.06	
Sample wt/vo	oł:	10.0	(g/ml) G	_ Lab File ID:	V03141.D	
Level: (low/m	ned)	MED		Date Received:	03/06/98	
% Moisture: r	not dec.	0		Date Analyzed:	03/12/98	
GC Column:	Rtx502	2.2 ID:	<u>0.25</u> (mm)	Dilution Factor:	1.0	
Soil Extract V	olume:	25000	(uL)	Soil Aliquot Volu	me: <u>50</u>	(uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1E **VOLATILE ORGANICS ANALYSIS DATA SHEET** TENTATIVELY IDENTIFIED COMPOUNDS

FIELD	ID.
-------	-----

Lab Name:	FMETL			NJDEP# 1	3461		/BLK31	
Project:	980001	Case I	No.: <u>3390</u>	Location:	B.906	SDG No.:		
Matrix: (soil/	water)	SOIL		Lab S	Sample ID	: VBLK3	1	
Sample wt/ve	ol:	10.0 (9	ı/ml) <u>G</u>	Lab I	File ID:	V03130	D.D	
Level: (low/r	med)	MED		Date	Received	: <u>03/06/9</u>	8	
% Moisture:	not dec.	0		Date	Analyzed	: 03/12/9	8	
GC Column:	Rtx502	2.2 ID: 0.25	_ (mm)	Diluti	ion Factor	: 1.0		
Soil Extract \	Volume:	25000 (uL)	Soil A	Aliquot Vo	lume: <u>50</u>		(uL
N 1 710				CONCENTRATION	ON UNITS	-		
Number TIC	s tound:	0						
CAS NO.		COMPOUND			RT I	EST. CON	C.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

906-A Lab Name: **FMETL** NJDEP # 13461 Project: 980001 Case No.: 3390 Location: B.906 SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 3390.01 Sample wt/vol: 10.4 (g/ml) G Lab File ID: V03140.D Level: (low/med) MED Date Received: 03/06/98 % Moisture: not dec. 18.23 Date Analyzed: 03/12/98 GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 11

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000111-65-9	Octane	24.91	2100	JN
2. 001678-91-7	Cyclohexane, ethyl-	27.35	1400	JN
3. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	27.64	2200	JN
4.	unknown hydrocarbon	27.75	1700	J
5. 000111-84-2	Nonane	28.74	2800	JN
6.	unknown	30.04	1300	J
7	unknown	30.31	1700	J
8.	unknown	30.56	1500	J
9.	unknown hydrocarbon	30.85	2400	J
10.	unknown hydrocarbon	31.97	1600	J
11. 000124-18-5	Decane	32.08	4400	JN

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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	FMETL			NJDEP#	13461	L	900-15	
Project:	980001	(Case No.: 3390	Location	: B.906	SDG	No.:	
Matrix: (soil/v	vater)	SOIL		Lab	Sample ID): <u>33</u> 9	90.06	
Sample wt/vo	ol:	10.0	(g/ml) <u>G</u>	Lab	File ID:	V0	3141.D	
Level: (low/r	ned)	MED		Dat	e Received	l: <u>03/</u>	06/98	
% Moisture:	not dec.	0		Dat	e Analyzed	i: <u>03/</u>	12/98	
GC Column:	Rtx502	2.2 ID:	0.25 (mm)	Dilu	ution Factor	: <u>1.0</u>) 	
Soil Extract \	/olume:	25000	(uL)	Soi	l Aliquot Vo	olume:	50	(uL)
				CONCENTRAT				
Number TIC:	s found:	8	(ug/L or ug/Kg)	UG/K	<u>G</u>	_	

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	26.96	1100	JN
2.	unknown	27.60	1300	J
3.	unknown hydrocarbon	30.60	1400	J
4. 000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	30.77	9900	JN
5.	unknown	31.12	6300	J
6.	unknown	31.50	6400	J
7. 000098-51-1	4-tert-Butyltoluene	31.82	1200	JN
8.	unknown hydrocarbon	32.07	2000	J

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

		Indicate* Yes, No, N/A
1.	Cover Page, Title Page listing Lab Certification #, facility name & address, & data of report submitted	_
2.	Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted	
3.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s Lab ID's submitted	
4.	Document bound, paginated and legible	
5.	Chain of Custody submitted	
6.	Samples submitted to lab within 48 hours of sample collection	
7 .	Methodology Summary submitted	
8.	Results submitted on a dry weight basis	
9.	Method Detection Limits	
10.	Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP	\ <u></u>
	ooratory Manager or Environmental Consultant's Signature	2

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. 906

Field Location No. & Location	Laboratory Sample ID#	Matrix	Date and Time Of Collection	Date Received		
Trip Blank	4003.01	Aqueous	24-Oct-98	10/26/98		
Field Blank	4003.02	Aqueous	24-Oct-98 08:45	10/26/98		
Bldg. 906 – 13.0'	4003.05	Aqueous	24-Oct-98 11:45	10/26/98		
Field Dup	4003.06	Aqueous	24-Oct-98	10/26/98		

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

> Daniel Wright/Date Laboratory Director

ENCLOSURE: CHAIN OF CUSTODY FIELD DOCUMENTATION RESULTS

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CHAIN OF CUSTODY



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: CA/ WASAR		Project No:			Analysis Parameters								Comments:	
Phone #: X2(2)	Location: BLAGS 671, 718, 906 Sample # Date 'Time Type bottles			Controller Statement Sections (Section										
()DERA (90MA (O	13 N									
Samplers Name / Co			Sample	#	A	+								
Lab Sample I.D.	Sample Location	Date	¹Time	Туре	bottles	Ις	15							Remarks / Preservation Method
4093. 1	TRIP BUNK	10-24-98	_	AQ.	2	X								HCL
2	FICE BLANK))	0845	AQ.	3	×	×							HCL/ 240c
3	BLOG. 671- 7.5'	11	0915	AQ.	3	×	×							,
4	BLOG. 718 - 6.0'	11	1015	AQ.	3	×	×							11
5	BUNG. 906 - 13:0	4	1145	AQ.	3	X	X							n.
6	FICLD DUP	A		AQ.	3	X	۲							11
												:		
									•					
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Mostfur	J. Mullia													
Relinquished by (signature): Date/Time: Report Type: ()Full, ()Reduced, (Standard, ()Screen		Received by (signature): Reline		Relino	quished by (signature):		:	Date/	Time:	Received by (signature):		signature):		
Report Type: (_)Full, (_)	Report Type: ()Full, ()Reduced, ()Stantiard, ()Screen / nor					Remar	ks:							
Turnaround time: Ostano	dard 4 wks, ()Rush Days	(_)ASAP Ve	rbalHr	3.								_,		

FIELD DOCUMENTATION

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

FOR BLDG. #906

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 diarneter hole to a depth below the water table. A piece of schedule 40 PVC screen with 0.010-inch slots and an end cap is placed to the bottom of the hole. Glues or adhesives are not used for joining the casing. Threaded PVC casing is used. No filter or gravel pack is used.

2. Installation

- A. Using a Geoprobe, a borehole was advanced with a pre-probe with a diameter slightly larger than the casing. The hole was made to a depth of 16 feet. The water table was at13 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 11 16 feet. Riser casing from 11 +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.

0004

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

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

5. Quality Assurance/Quality Control

A. Decontamination

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

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

B. Field Blanks

- 1 Field blank was shared with bldg. 671 taken on same day.
- C. Sample bottles: Supplied by Environmental Sampling Supply, Oakland, Calif. The sample bottles are certified clean and are sealed upon delivery.
- D. P.V.C. Screens: Supplied by Bedrock Enterprises, Forked River N.J.

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

Morla Javra / Date

0005

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 labe	eled/Compounds identified	
		and method blanks)	YES
2.	Retention times for c	chromatograms provided	yes
3.	GC/MS Tune Specific	ications	
	a.	BFB Meet Criteria	ues
	b.	DFTPP Meet Criteria	Yes
4.		uency - Performed every 24 hours for 600	
	series and 12 hours f	or 8000 series	<u>yes</u>
5.		- Initial Calibration performed before sample	
		ing calibration performed within 24 hours of 600 series and 12 hours for 8000 series	1.05
	sample analysis for o	iou series and 12 homs for bood series	400
6.	GC/MS Calibration r	requirements	
	a.	Calibration Check Compounds Meet Criteria	400
	ь.	System Performance Check Compounds Meet Criteria	yes
7.	Blank Contamination	n - If yes, List compounds and concentrations in each blank:	<u>io</u>
	a.	VOA Fraction	
	b.	B/N Fraction	
	C.	Acid Fraction Loft	
8.	Surrogate Recoveries	s Meet Criteria	<u>yes</u>
	If not met, list the outside the accep	nose compounds and their recoveries, which fall ptable range:	•
	a.	VOA Fraction	
	b.	B/N Fraction	
	c.	Acid Fraction ())	
	If not met, were as "estimated"?	the calculations checked and the results qualified	
9.	Matrix Spike/Matrix	Spike Duplicate Recoveries Meet Criteria) no<
		compounds and their recoveries, which fall	453
	outside the acceptabl		,
	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.		Area/Retention Time Shift Meet Criteria ose compounds, which fall outside the acceptable range)	yes
	a.	VOA Fraction	
	ь.	B/N Fraction	
	C.	Acid Fraction	
11.	Extraction Holdin	ng Time Met	Yes
	If not met, list the	number of days exceeded for each sample:	
12.	Analysis Holding	Time Met	<u>yes</u>
	If not met, list the	number of days exceeded for each sample:	
Add F	itional Comments:	pulpmed on 4003.05 (Bldg 906)	
Lab	oratory Manager:_(Date: 12 3 9 %	

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY NJDEPE # 13461

Definition of Qualifiers

MDL: Method Detection Limit

J : Compound identified below detection limitB : Compound in both sample and blank

D : Results from dilution of sampleU : Compound searched for but not detected

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

Data File Nam vb01881.d

Sample Name

VBLK61

Operator

Skelton

Field ID

VBLK61

1

Date Acquired 28 Oct 98 9:12 am

Sample Multiplier

O L O II	Go samul Nama	ВΨ	D	Donald	Regulatory Level	MDL	0 10
CAS# 107028	Compound Name Acrolein	R.T.	Response	Result not detected	(ug/l)* 50		Qualifler
				not detected		1.85 ug/L	
107131	Acrylonitrile				50	2.78 ug/L	
75650	tert-Butyl alcohol		<u> </u>	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	
71.07.0	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	<u> </u>
74-87-3	Chloromethane		<u> </u>	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	ļ
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	<u> </u>
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		<u> </u>	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	ļ
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 1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene		<u> </u>	not detected	 	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	 	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	 	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		<u> </u>	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		ļ	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 սգ/Լ	
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	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

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	FMETL			Project	980932		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/blk61	
NJDEP#	13461	Ca	se No.: 4003	SDG	No	Loc	ation	UST	
Matrix (soil/wa	ater)	WATER	_	L	ab Sample	e ID: \	/BLK61		
Sample wt/vol	:	5.0	(g/ml) ML		ab File ID:	<u> </u>	/B0188	1.D	_
Level: (low/m	ed)	LOW			ate Recei	ved: 1	0/26/9	3	_
% Moisture: no	ot dec.		·	0	Date Analyz	zed: 1	0/28/9	8	_
GC Column:	HP5MS	S_ ID: <u>0.</u>	25 (mm)	0	Dilution Fac	tor: 1	1.0		_
Soil Extract Vo	olume:		(uL)	S	Soil Aliquot	Volum	ne:		_ (uL)
Number TICs	found:	0		CONCENTRA (ug/L or ug/K	ONCENTRATION UNITS: g/L or ug/Kg) UG/L				
CAS NO.		COMPOL	JND NAME		RT	EST	. CON	c .	Q

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

Data File Nam vb01898.d

Sample Name

4003.01

Operator Sk

Skelton

Field ID

Trip Blank

Date Acquired 28 Oct 98 10:08 pm

Sample Multiplier

127

					Regulatory Level		
CAS#	Compound Name	R.T.	Response	Result	(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	nlo	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	
<u> </u>	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_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_1_	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1 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	
	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 սբ/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
	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_1_	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
	Dibromochloromethane			not detected	10	0.86 ug/L	ļ
	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
	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

1E VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD	ID
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Lab Name:	FMETL		Project	980932		Tri	ip Blar	nk
NJDEP#	13461	Case No.: 400	3 SDG	No	Lo	cation	UST	
Matrix (soil/w	<i>r</i> ater)	WATER	l	_ab Sample	D:	4003.01		
Sample wt/vo	ot:	5.0 (g/ml) ML	<u> </u>	_ab File ID:		VB0189	8.D	_
Level: (low/n	ned)	LOW	1	Date Receiv	ved:	10/26/98	8	
% Moisture: r	not dec.		[Date Analyz	zed:	10/28/98	8	_
GC Column:	HP5M	S ID: 0.25 (mm)	[Dilution Fac	tor:	1.0		
Soil Extract V	olume:	(uL)	Soil Aliquot Volum					(uL)
			CONCENTR					
Number TICs	found:	0						
CAS NO.		COMPOUND NAME		RT	ES	T. CON	c.	Q

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

Data File Nam vb01899.d Operator

Skelton

Sample Name Field ID

4003.02 Field Blank

Date Acquired 28 Oct 98 10:53 pm

Sample Multiplier

1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein		1	not detected	50	1.85 ug/L	\ <u>\</u>
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	 -
100203_	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	1.16 ug/L 1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.10 ug/L 1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected			
75-35-4	1,1-Dichloroethene			not detected	nle	0.50 ug/L	
67-64-1				not detected	700	0.24 ug/L	
	Acetone					1.36 ug/L	
75-15-0	Carbon Disulfide Methylene Chloride			not detected not detected	nle	0.46 ug/L	
75-09-2			 		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	
(7.66.2	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	<u> </u>
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		<u> </u>	not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane	<u> </u>	 	not detected	1 1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1_1_	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
10061-01-5	والمستنا والمستناء والمستناء			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	
	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	ļ
79-00-5	1,1,2-Trichloroethane		 	not detected	3	0.48 ug/L	ļ
127-18-4	Tetrachloroethene			not detected	1_1_	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
	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	nie	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

Oualifiers

B = Compound found in related blank

E = Value above linear range

D = Value from dilution

PQL = Practical Quantitation Limit

MDL = Method Detection Limit NLE = No Limit Established

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

Lab Name:	FMETL				Project	980932		Fie	ld Bla	nk
NJDEP#	13461	Cas	se No.: 4	1003	SDG No)	Lo	cation	UST	
Matrix (soil/w	vater)	WATER			Lal	b Sample	ID:	4003.02		
Sample wt/vo	ol:	5.0	(g/ml)	ML	_ Lai	b File ID:	•	VB0189	9.D	
Level: (low/n	ned)	LOW	_		Da	te Receiv	ed:	10/26/98	3	_
% Moisture:	not dec.				Da	te Analyz	ed:	10/28/98	3	_
GC Column:	HP5M	S ID: 0.2	.5 (mi	m)	Dil	ution Fac	tor:	1.0		
Soil Extract Volume: (uL)				Soil Aliquot Volume:					(uL)	
Number TICs	s found:	0	-		NCENTRAT L or ug/Kg)		•			
CAS NO.		COMPOU	ND NAM	ΙE		RT	EST	T. CON	5.	Q

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

Data File Nam vb01902.d

Operator

Skelton

Date Acquired 29 Oct 98 1:08 am

Sample Name

Field ID

4003.05 Bldg 906 13'

Sample Multiplier

CAS#	Compound Name	R.T.	Daspapa	Result	Regulatory Level (ug/l)*	MDL	O1155
107028	Acrolein	K.1.	Response	not detected	50	1.85 ug/L	Qualifier
107028	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		ļ 	not detected	nle	0.25 ug/L	
}- -	Dichlorodifluoromethan			not detected	nle	1.68 ug/L	ļ
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		<u> </u>	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	L
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene		L	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_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-Нехапопе			not detected	nle	0.71 ug/L	
	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene 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			
79-34-5	1,1,2,2-Tetrachloroethan			not detected	4	0.70 ug/L	
				المساوح والمستوال والمناط والمستمل والمستوال والمستوال والمستوال والمستوال والمستوال والمستوال والمستوال والمستوال	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		L	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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

F	E	D.	ID

Lab Name:	FMETL			Project	980932		В	ldg906	
NJDEP#	13461	Cas	e No.: 4003	SDG N	0	Loc	cation	UST	
Matrix (soil/w	ater)	WATER		La	ab Sample	ID: 4	1003.05		<u>-</u>
Sample wt/vo	ol:	5.0	(g/ml) ML_	La	b File ID:	<u>\</u>	/B01902	2.D	_
Level: (low/n	ned)	LOW		Da	ate Receiv	ed: <u>1</u>	0/26/98	3	_
% Moisture: n	ot dec.		<u>.</u>	Da	ate Analyz	ed: <u>1</u>	0/29/98	3	_
GC Column:	HP5M	S ID: 0.2	5 (mm)	Di	lution Fact	tor: 1	1.0		_
Soil Extract V	olume:		_ (uL)	Sc	oil Aliquot \	ne:		(uL)	
			_	ONCENTRA	CENTRATION UNITS: or ug/Kg) UG/L				
Number TICs	found:	0	-						
CAS NO.		COMPOU	ND NAME		RT	EST	. CONC) .	Q

- 1

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

Data File Nam vb01903.d
Operator Skelton

Sample Name

4003.06 Field Dup

Date Acquired 29 Oct 98 1:53 am

Field ID Sample Multiplier

1

107028 Acrol 107131 Acryle 75650 tert-B 1634044 Methy 108203 Di-iso Dichle 74-87-3 Chlore 75-01-4 Vinyl 74-83-9 Brome 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-D 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D 108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chlor 110-75-8 2-Chlore 10061-01-5 cis-1,3	omitrile utyl alcohol /l-tert-Butyl ether propyl ether prodiffuoromethan omethane Chloride methane octhane orofluoromethane ichloroethene ne n Disulfide /lene Chloride l,2-Dichloroethene chloroethane Acetate amone 2-Dichloroethene	R.T.	Response	Result not detect	ted	(ug/l)* 50 50 nle nle nle nle 10 nle 2 700 nle 2 100	MDL 1.85 ug/L 2.78 ug/L 0.16 ug/L 0.25 ug/L 1.16 ug/L 1.10 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 0.46 ug/L 0.46 ug/L 0.16 ug/L	Qualifier
107131 Acryle 75650 tert-B 1634044 Methy 108203 Di-iso Dichle 74-87-3 Chlore 75-01-4 Vinyl 74-83-9 Brome 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-Di 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-Di 108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chlore	omitrile utyl alcohol /l-tert-Butyl ether propyl ether prodiffuoromethan omethane Chloride methane octhane orofluoromethane ichloroethene ne n Disulfide /lene Chloride l,2-Dichloroethene chloroethane Acetate amone 2-Dichloroethene			not detect	ted	nle nle nle nle nle nle 30 5 10 nle nle 2 700 nle 2 100	2.78 ug/L 8.52 ug/L 0.16 ug/L 0.25 ug/L 1.68 ug/L 1.10 ug/L 1.00 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 0.46 ug/L 0.46 ug/L 0.24 ug/L 0.46 ug/L	
75650 tert-B 1634044 Methy 108203 Di-iso Dichlo 74-87-3 Chloro 75-01-4 Vinyl 74-83-9 Bromo 75-00-3 Chloro 75-69-4 Trichl 75-35-4 1,1-Di 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-Di 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chloro 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 78-87-5 1,2-Di 75-27-4 Bromo 110-75-8 2-Chloro 110-	utyl alcohol vl-tert-Butyl ether propyl ether prodifluoromethan omethane Chloride omethane oethane orofluoromethane ichloroethene ne n Disulfide vlene Chloride 1,2-Dichloroethene ichloroethane Acetate amone 2-Dichloroethene			not detect	ted	nle nle nle nle 10 nle nle 2 700 nle 2 100	8.52 ug/L 0.16 ug/L 0.25 ug/L 1.68 ug/L 1.16 ug/L 1.10 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 0.46 ug/L 0.44 ug/L 0.46 ug/L 0.24 ug/L	
1634044 Methy 108203 Di-iso Dichlo 74-87-3 Chloro 75-01-4 Vinyl 74-83-9 Brome 75-00-3 Chloro 75-69-4 Trichl 75-35-4 1,1-D 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chloro 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D 79-01-6 Trichl 78-87-5 1,2-D 75-27-4 Brome 110-75-8 2-Chloro 110-75	rl-tert-Butyl ether propyl ether propyl ether prodifluoromethan omethane Chloride omethane pethane pethane pothane ichloroethene ine in Disulfide rlene Chloride 1,2-Dichloroethene ichloroethane Acetate amone 2-Dichloroethene			not detect	ted	nle nle 30 5 10 nle nle 2 700 nle 2 100	0.16 ug/L 0.25 ug/L 1.68 ug/L 1.16 ug/L 1.10 ug/L 1.10 ug/L 0.50 ug/L 0.24 ug/L 0.46 ug/L 0.44 ug/L 0.24 ug/L 0.46 ug/L	
108203 Di-iso Dichle 74-87-3 Chlore 75-01-4 Vinyl 74-83-9 Brome 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-Di 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-Di 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chlore	propyl ether prodifluoromethan omethane Chloride pomethane pethane pethane porofluoromethane ichloroethene in Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate amone 2-Dichloroethene			not detect	ted	nle 30 5 10 nle nle 2 700 nle 2 100	0.25 ug/L 1.68 ug/L 1.16 ug/L 1.00 ug/L 1.10 ug/L 0.50 ug/L 0.24 ug/L 0.46 ug/L 0.44 ug/L 0.24 ug/L	
Dichle 74-87-3 Chlore 75-01-4 Vinyl 74-83-9 Brone 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-D: 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brone 110-75-8 2-Chlore 110-75-8 2-Chlore 110-61-01-5 cis-1,3	ornodifluoromethan omethane Chloride omethane oethane orofluoromethane ichloroethene ine in Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detect	ted	nle 30 5 10 nle nle 2 700 nle 2 100	1.68 ug/L 1.16 ug/L 1.06 ug/L 1.10 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
74-87-3 Chlore 75-01-4 Vinyl 74-83-9 Brome 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-D 67-64-1 Acetor 75-15-0 Carbor 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbor 71-43-2 Benze 107-06-2 1,2-D 79-01-6 Trichl 78-87-5 1,2-D 75-27-4 Brome 110-75-8 2-Chlore 110-75-8 2-Chlore 110-61-01-5 cis-1,3	omethane Chloride omethane octhane orofluoromethane ichloroethene ne n Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detect	ted	30 5 10 nle nle 2 700 nle 2 100	1.16 ug/L 1.06 ug/L 1.10 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
75-01-4 Vinyl 74-83-9 Brome 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-D: 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brome 110-75-8 2-Chlore 10061-01-5 cis-1,3	Chloride comethane coethane corofluoromethane ichloroethene ne n Disulfide clene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detect not not not not not not not not not no	ted	5 10 nle nle 2 700 nle 2 100	1.06 ug/L 1.10 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
74-83-9 Brome 75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-D 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D 108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D 79-01-6 Trichl 78-87-5 1,2-D 75-27-4 Brome 110-75-8 2-Chlore 10061-01-5 cis-1,3	omethane oethane orofluoromethane ichloroethene ne n Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate amone 2-Dichloroethene			not detect not not detect not not detect not not detect not not not not not not not not not no	ted	10 nle nle 2 700 nle 2 100	1.10 ug/L 1.01 ug/L 0.50 ug/L 0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
75-00-3 Chlore 75-69-4 Trichl 75-35-4 1,1-D: 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brome 110-75-8 2-Chlore 10061-01-5 cis-1,3	octhane orofluoromethane ichloroethene ne n Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate amone 2-Dichloroethene			not detect not not detect not not detect not not detect not not not not not not not not not no	ted	nle 2 700 nle 2 100	1.01 ug/L 0.50 ug/L 0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
75-69-4 Trichl 75-35-4 1,1-D: 67-64-1 Acetor 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chloro 75-55-6 1,1,1- 56-23-5 Carbo: 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brome 110-75-8 2-Chloro 110-75-8 2-Chloro 10061-01-5 cis-1,3	orofluoromethane ichloroethene ne n Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detect not not not not not not not not not no	ted ted ted ted ted ted ted	nle 2 700 nle 2 100	0.50 ug/L 0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
75-35-4 1,1-D: 67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chloro 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brome 110-75-8 2-Chloro 110-75-8 2-Chloro 10061-01-5 cis-1,3	ichloroethene ne n Disulfide dene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detect not not detect not not detect not not detect not detect not not detect not not detect not not not not not not not not not no	ted ted ted ted	2 700 nle 2 100	0.24 ug/L 1.36 ug/L 0.46 ug/L 0.24 ug/L	
67-64-1 Aceto 75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brome 110-75-8 2-Chlore 10061-01-5 cis-1,3	ne n Disulfide rlene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detection not detection.	ted ted ted ted	700 nle 2 100	1.36 ug/L 0.46 ug/L 0.24 ug/L	
75-15-0 Carbo 75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-D: 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-D: 79-01-6 Trichl 78-87-5 1,2-D: 75-27-4 Brome 110-75-8 2-Chlore 10061-01-5 cis-1,3	n Disulfide vlene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detection no	ted ted ted	nle 2 100	0.46 ug/L 0.24 ug/L	
75-09-2 Methy 156-60-5 trans- 75-35-3 1,1-Di 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	rlene Chloride 1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detection not detection not detection not detection.	ted ted	2 100	0.24 ug/L	
156-60-5 trans- 75-35-3 1,1-Di 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbon 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	1,2-Dichloroethene ichloroethane Acetate anone 2-Dichloroethene			not detec	ted	100		<u></u>
75-35-3 1,1-Di 108-05-4 Vinyl 78-93-3 2-Buta cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbon 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	ichloroethane Acetate anone 2-Dichloroethene			not detec				
108-05-4 Vinyl 78-93-3 2-Butz cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbox 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	Acetate anone 2-Dichloroethene					70		
78-93-3 2-Buta cis-1,2 67-66-3 Chlord 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	anone 2-Dichloroethene			not detec		<u>70</u>	0.12 ug/L	
cis-1,2 67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbo 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	2-Dichloroethene			not detec		nle	0.78 ug/L	
67-66-3 Chlore 75-55-6 1,1,1- 56-23-5 Carbon 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chlore 10061-01-5 cis-1,3				not detec		300	0.62 ug/L	
75-55-6 1,1,1- 56-23-5 Carboi 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	DIORII I			not detec		10	0.17 ug/L	
56-23-5 Carbon 71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3						6	0.30 ug/L	
71-43-2 Benze 107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	Trichloroethane			not detec		30	0.23 ug/L	
107-06-2 1,2-Di 79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Brome 110-75-8 2-Chle 10061-01-5 cis-1,3	n Tetrachloride			not detec		2	0.47 ug/L	
79-01-6 Trichl 78-87-5 1,2-Di 75-27-4 Bromo 110-75-8 2-Chlo 10061-01-5 cis-1,3				not detec		_1	0.23 ug/L	
78-87-5 1,2-Di 75-27-4 Bromo 110-75-8 2-Chlo 10061-01-5 cis-1,3	chloroethane		~	not detec		2	0.18 ug/L	
75-27-4 Brome 110-75-8 2-Chlo 10061-01-5 cis-1,3				not detec		_1	0.23 ug/L	
110-75-8 2-Chlo 10061-01-5 cis-1,3	chloropropane			not detec		_1	0.40 ug/L	
10061-01-5 cis-1,3	odichloromethane			not detec		1	0.55 ug/L	
	proethyl vinyl ethe			not detec		nle	0.65 ug/L	
				not detec		nle	0.69 ug/L	
	hyl-2-Pentanone			not detec		400	0.59 ug/L	
108-88-3 Toluer				not detec		1000	0.37 ug/L	
10061-02-6 trans-1				not detec		nle_	0.87 ug/L	
	l'richloroethane			not detec		3	0.48 ug/L	
	hloroethene			not detec		1	0.32 ug/L	
591-78-6 2-Hex				not detec		nle	0.71 ug/L	
	nochloromethane			not detec		10	0.86 ug/L	
	benzene			not detec		4	0.39 ug/L	
	enzene			not detect		700	0.65 ug/L	
	(ylenes			not detec		nle	1.14 ug/L	
1330-20-7 o-Xyle	ne			not detec		nle	0.62 ug/L	
100-42-5 Styren	e			not detec	ted	100	0.56 ug/L	
75-25-2 Bromo	form			not detec	ted	4	0.70 ug/L	
79-34-5 1,1,2,2	2-Tetrachloroethan			not detec	ted	2	0.47 ug/L	
				not detec	ted	600	0.55 ug/L	
	chlorobenzene			not detect	ted	75	0.57 ug/L	
95-50-1 1,2-Di	chlorobenzene chlorobenzene			not detec		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

0023

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	FMETL		Project	980932	. [Fie	ld Dup	
NJDEP#	13461	Case No.: 400	3 SDG	No	Loca	tion <u>l</u>	UST	
Matrix (soil/w	vater)	WATER	Ĺ	ab Sample	e ID: 40	03.06		
Sample wt/vo	ol:	5.0 (g/ml) ML	<u> </u>	ab File ID:	VE	301903	.D	
Level: (low/r	med)	LOW	Γ	Date Recei	ved: <u>10</u>	/26/98		
% Moisture:	not dec.		C	Date Analyz	zed: <u>10</u>	/29/98		
GC Column:	HP5M	S ID: 0.25 (mm)	Ε	Dilution Fac	tor: <u>1.0</u>)		
Soil Extract V	/olume:	(uL)	5	Soil Aliquot	Volume	·		(uL
			CONCENTR	ATION UN	ITS:			
Number TICs	s found:	0	(ug/L or ug/K	g) UG	i/L	-		
CAS NO.		COMPOUND NAME		RT	EST.	CONC	Q	 }

= 3

BASE NEUTRALS

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

Data File Name bna01125.d

Sample Name

SBLK153

Operator

Skelton

Misc Info

SBLK153 A 981027

Date Acquired

4 Nov 1998 1:02 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		ार के किल्	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		1	not detected	10	2.59 ug/L	
98-95-3	Nitrobenzene		1	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/1	
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		7.1.4	not detected	NLE	1.62 ug/I	
83-32-9	Acenaphthene		* t	not detected	400	1.98 ug/I	
132-64-9	Dibenzofuran			not detected	NLE	2.13 ug/I	

Semi-Volatile Analysis Report Page 2

Data File Name bna01125.d

Sample Name

SBLK153

Operator

Skelton

Misc Info

SBLK153 A 981027

Date Acquired

4 Nov 1998 1:02 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		
86-73-7	Fluorene		not detected	300	1.93	_	
7005-72-3	4-Chlorophenyl-phenylether		not detected	NLE	1.53		
100-01-6	4-Nitroaniline		not detected	NLE	2.70		
86-30-6	n-Nitrosodiphenylamine		not detected	20	1.73		
103-33-3	Azobenzene		not detected	NLE	1.92		
101-55-3	4-Bromophenyl-phenylether		not detected	NLE	1.54		
118-74-1	Hexachlorobenzene		not detected	10	1.88	_	
85-01-8	Phenanthrene		not detected	NLE	1.67	_	
120-12-7	Anthracene		not detected	2000	1.79	Ī	
84-74-2	Di-n-butylphthalate		not detected	900	1.83		
206-44-0	Fluoranthene		not detected	300	1.85		
92-87-5	Benzidine		not detected	50	4.11		
129-00-0	Pyrene		not detected	200	1.02		
85-68-7	Butylbenzylphthalate		not detected	100	1.15	ug/L	
56-55-3	Benzo[a]anthracene		not detected	10	1.57	_	
91-94-1	3,3'-Dichlorobenzidine		not detected	60	2.28		
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	18 1 50 2	not detected	10	1.31	ug/L	
207-08-9	Benzo[k]fluoranthene	27 .	not detected	2	1.57	ug/L	
50-32-8	Benzo[a]pyrene	,	not detected	20	1.36		
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		
191-24-2	Benzo[g,h,i]perylene		not detected	NLE	1.13		

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	FMETL			Lab Coo	ie 13	3461		Sblk1	53
Project	980932		Case No.: 4003	Locat	ion J	UST	S	DG No.:	
Matrix: (soil/	water)	WATER		ı	ab S	ample	ID:	SBLK153	
Sample wt/ve	ol:	1000	(g/ml) ML	l	.ab Fi	ile ID:		BNA01125.D	
Level: (low/r	med)	LOW		ı	Date F	Receiv	ed:	10/26/98	
% Moisture:		de	ecanted: (Y/N)	<u>N</u> [Date F	Extract	ed:	10/27/98	
Concentrate	d Extract	Volume:	1000 (uL)		Date /	Analyz	ed:	11/04/98	·—
Injection Vol	ume: <u>1.0</u>	0(uL)		Į.	Dilutio	n Fact	or:	1.0	
GPC Cleanu	ip: (Y/N)	N	_ pH: <u>7</u>						
				CONCENTRATION UNITS:					
Number TIC:	s found:	0		(ug/L or	ug/Kg)	UG/	<u>L</u>	
CAS NUME	BER	COMP	OUND NAME	; •	F	RT	ES	ST. CONC.	Q

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

Data File Name bna01078.d

Sample Name

4003.02

Operator

Skelton

Misc Info

Field Blank

Date Acquired 31 Oct 1998 5:56 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		41 15 3	not detected	20	2.22 ug/L	
67-72-1	Hexachloroethane		1 1 1 1 1 1	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	<u>l</u>	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		1.1	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		- #1 P	not detected	400	1.98 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	2.13 ug/L	

Semi-Volatile Analysis Report Page 2

Data File Name bna01078.d

31 Oct 1998 5:56 am

Operator

Date Acquired

Skelton

4003.02

Misc Info Field Blank

Sample Multiplier 1

Sample Name

	To a Si						
121-14-2	2,4-Dinitrotoluene	}} -	not detected	10	1.22		
84-66-2	Diethylphthalate		not detected	5000	1.68	$\overline{}$	
<u>86-73-7</u>	Fluorene		not detected	300	1.93		
7005-72-3	4-Chlorophenyl-phenylether		not detected	NLE	1.53		
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	V 1	not detected	100	1.30	ug/L	
205-99-2	Benzo[b]fluoranthene	1000	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		ug/L	
53-70-3	Dibenz[a,h]anthracene		not detected	20		ug/L	
191-24-2	Benzo[g,h,i]perylene		not detected	NLE		ug/L	

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENITATI\	LIDENTIFIED	COMPOUNDS
IENIAIIVELI	I IDEN HEIED	COMPOUNDS

Lab Name:	FMETL		Lab Code 13461	Field Blank
Project	980932	Case No.: 4003	B Location UST SI	DG No.:
Matrix: (soil/	water)	WATER	Lab Sample ID:	4003.02
Sample wt/ve	ol:	1000 (g/ml) ML	Lab File ID:	BNA01078.D
Level: (low/i	med)	LOW	Date Received:	10/26/98
% Moisture:		decanted: (Y/N)	N Date Extracted:	10/27/98
Concentrate	d Extract	Volume: 1000 (uL)	Date Analyzed:	10/31/98
Injection Vol	ume: <u>1.</u> 0	0 (uL)	Dilution Factor:	1.0
GPC Cleanu	ıp: (Y/N)	N pH: 7		
		e.	CONCENTRATION UNI	TS:
Number TIC	s found:	0	(ug/L or ug/Kg) UG/	L
CAS NUMI	BER	COMPOUND NAME	RT ES	ST. CONC. Q

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

Data File Name bna01081.d

Sample Name

4003.05

Operator

Skelton

Misc Info

Bldg 906 13.0'

Date Acquired

31 Oct 1998 8:01 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		3 - 3	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 bna01081.d
Operator Skelton

Sample Name

4003.05

Operator Skelton Misc Info
Date Acquired 31 Oct 1998 8:01 am Sample M

Bldg 906 13.0'

Sample Multiplier 1

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

Qualifiers

E = Value exceded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

TENTATIVE	IVIDEN	ITIFIED C	OMPOL	NDS
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		IENTATIVELT IDENT	IFIED COMP	-00	ND2					
Lab Name:	FMETL		Lab Cod	de	13461		Bldg 9	906 ——		
Project	980932	Case No.: 4003	Loca	tion	UST	S	DG No.:			
Matrix: (soil/	water)	WATER	I	Lab	Sample	ID:	4003.05			
Sample wt/vo	ol:	1000 (g/ml) ML		Lab		BNA01081.D				
Level: (low/r	med)	LOW		Dat	ved:	10/26/98				
% Moisture:		decanted: (Y/N)	<u>N</u>	N Date Extracted:				10/27/98		
Concentrate	d Extract	Volume: 1000 (uL)	1	Dat	e Analyz	zed:	10/31/98			
Injection Volu	ume: <u>1.</u> 0	0 (uL)		Dilu	tion Fac	tor:	1.0			
GPC Cleanu	p: (Y/N)	N pH: 7								
			CONCE	NTF	RATION	UNI	TS:			
Number TIC:	s found:	0	(ug/L or	ug/	Kg)	UG/	L			
CAS NUME	BER	COMPOUND NAME	÷		RT	ES	ST. CONC.			

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

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Data File Name BNA01082.D

Sample Name

4003.06

Operator

Skelton

: Misc Info

Field Dup

Date Acquired 31 Oct 1998 8:43 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		# F F	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 BNA01082.D

Sample Name

4003.06

Operator

Skelton

Misc Info

Field Dup

Date Acquired

31 Oct 1998 8:43 am

Sample Multiplier 1

121-14-2	2.4-Dinitrotoluene	1	not detected	10	1.22	ug/L	
84-66-2	Diethylphthalate		not detected	5000	1.68		
86-73-7	Fluorene		not detected	300		ug/L	
7005-72-3	4-Chlorophenyl-phenylether		not detected	NLE		ug/L	
100-01-6	4-Nitroaniline		not detected	NLE		ug/L	
86-30-6	n-Nitrosodiphenylamine		not detected	20	1.73	ug/L	
103-33-3	Azobenzene		not detected	NLE		ug/L	
101-55-3	4-Bromophenyl-phenylether		not detected	NLE	1.54	ug/L	
118-74-1	Hexachlorobenzene		not detected	10	_	ug/L	
85-01-8	Phenanthrene		not detected	NLE		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 excéded linear range

D = Value from dilution

B = Compound in related blank

MDL = Method Detection Limit

NLE = No Limit Established

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

		=:								
Lab Name:	FMETL	· · · · · · · · · · · · · · · · · · ·		Lab C	Code <u>134</u>	461		Field D	up 	
Project	980932	Case i	No.: 4003	Loc	cation U	JST	SDO	3 No.:		
Matrix: (soil/	water)	WATER			Lab Sa	mple ID): 4	003.06		
Sample wt/vo	ol:	1000 (9	1000 (g/ml) ML			Lab File ID:				
Level: (low/r	ned)	LOW	LOW			Date Received:				
% Moisture:	*	decante	N	Date E	1: 1	10/27/98				
Concentrated	0 (uL)		Date A	l: <u>1</u>	10/31/98					
Injection Volu	ume: <u>1.</u> 0	0 (uL)			Dilution	: <u>1</u>	1.0			
GPC Cleanu	p: (Y/N)	N pH:	: <u>7</u>							
				CONC	ENTRA	TION UI	NITS	S :		
Number TICs	s found:	0		(ug/L	or ug/Kg)	U	G/L			
CAS NUME	BER	COMPOUND	NAME		R	т	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 <u>and</u> in the main body of the report.

1.	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	_
Lab Date	oratory Manager or Environmental Consultant's Signature	

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

Laboratory Certification #13461

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. 906

Field Location No. &	Laboratory	Matrix	Date and Time	Date Received
Location	Sample ID#		Of Collection	
Trip Blank	4116.01	Aqueous	07-Dec-98	12/07/98
Field Blank	4116.02	Aqueous	07-Dec-98 09:12	12/07/98
Bldg. 906	4116.03	Aqueous	07-Dec-98 09:30	12/07/98
Field Dup.	4116.04	Aqueous	07-Dec-98	12/07/98

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

Daniel Wright/Date
Laboratory Director

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CHAIN OF CUSTODY

Fort Monnouth Environmental Testing Laboratory

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

Tel (732)532-4359 Fax (732)532-3484 EMail:appleby@doi:n6.monmouth.army.mil

NJDEP Certification #13461

Chain of Custody Record

Custor	mer: Char.	APPLEBY.	l versar	Project No:				Analysis Parameters					Comments:			
Phone #		24'		Location: 2	LOG. 906			V 8								
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Sample	rs Name / Co	mpany :	More Laura	T.V.S. P	WS-07	Sample	#	4	+							
Lab S	ample I.D.	Sa	mple Location	Date	Time	Type	bottles	15	15							Remarks / Preservation Method
411	6,1	TRIP	BLANK	12-7-98		AQ	2	×								HCL
	2	Fieu	S BLANK	U	0912	,,	3	×	X							HCL / 240C
	3	BUG	906	t _f	0930	11	3	×	X							Ü
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	hed by (signatu	іге):	Date/Time:	Received by	(signature):		Reline	quished	by (sig	nature):	:	Date/	Time:	Receiv	ved by (signature):
N	allen	12-7-98 1155		dill	MILL	N		يونون من		. د د د د د د د د د د د د د د د د د د د						
Relinquis	hed by (signatu	ire):	Date/Time:	Received by	(signature):		Reline	elinquished by (signature): Date/Time: Received by (signature):			signature):					
Report Typ	pe: (_)Full, (x)	Reduced,	(_)Standard, (_)Scre	en / non-certifi	ed	<u> ارون این مواد دی</u>		Rema	ks:	 	<u></u>	لنجيرسيني	نـــيــــن	<u> </u>	·	
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100001A

FIELD DOCUMENTATION

Finding in

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

FOR BLDG. #906

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 16 feet. The water table was at13 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 11 16 feet. Riser casing from 11 +3 feet.

3. Purging

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

4. Sampling

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

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

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

5. Quality Assurance/Quality Control

A. Decontamination

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

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

B. Field Blanks

- 1 Field blank was shared with bldg. 671 taken on same day.
- C. Sample bottles: Supplied by Environmental Sampling Supply, Oakland, Calif. The sample bottles are certified clean and are sealed upon delivery.
- D. P.V.C. Screens: Supplied by Bedrock Enterprises, Forked River N.J.

Geoprobe Operator: Mark Laura

Employer: U.S. Army, Fort Monmouth

Phone Number: [732] 532-8990

NJDEP License #: J-1486

000004

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 lab	peled/Compounds identified	
		and method blanks)	yes
2.	Retention times for	chromatograms provided	<u>yes</u>
3.	GC/MS Tune Spec	ifications	•
	a.	BFB Meet Criteria	405
	ъ.	DFTPP Meet Criteria	yes
4.	GC/MS Tuning Fre	quency - Performed every 24 hours for 600	_
	series and 12 hours	for 8000 series	<u>yes</u>
5.	GC/MS Calibration	- Initial Calibration performed before sample	•
	analysis and continu	uing calibration performed within 24 hours of	1
	sample analysis for	600 series and 12 hours for 8000 series	<u> Yes</u>
6.	GC/MS Calibration	requirements	•
	a.	Calibration Check Compounds Meet Criteria	ues
	b.	System Performance Check Compounds Meet Criteria	<u>yes</u>
7 .	Blank Contamination	on - If yes, List compounds and concentrations in each blank:	<u>NO</u>
	a.	VOA Fraction	
	b.	B/N Fraction	
	c.	Acid Fraction NA	
8.	Surrogate Recoverie	es Meet Criteria	<u>yes</u>
	If not met, list outside the acc	those compounds and their recoveries, which fall eptable range:	·
	a.	VOA Fraction	
	Ъ.	B/N Fraction	
	c.	Acid Fraction AM	
	If not met, were as "estimated"?	e the calculations checked and the results qualified	
9.	Matrix Snike/Matri	x Spike Duplicate Recoveries Meet Criteria	1105
••		e compounds and their recoveries, which fall	
	outside the acceptal		
	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	yes
	(If not met, list th	ose compounds, which fall outside the acceptable range)	(
	а.	VOA Fraction	
	b.	B/N Fraction	
	c.	Acid Fraction NA	
11.	Extraction Holdin	ng Time Met	yes
	If not met, list the	number of days exceeded for each sample:	•
12.	Analysis Holding	Time Met	<u>ijes</u>
	If not met, list the	number of days exceeded for each sample:	(
	itional Comments:	te Berfrene d on 4116.03 Bld9906	
	oratory Manager:	Date: 2-7-99	

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 vb02313.d Operator Skelton Sample Name

Vblk72 Vblk72

Date Acquired 10 Dec 98 9:59 am

Field ID Sample Multiplier

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

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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID	
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Lab Name:	FMETL			Project	980932)	Vblk	k72
NJDEP#	13461	C:	ase No.: 4116	SDG	No	Loc	ation US	ST
Matrix: (soil/	water)	WATER		ı	Lab Sample	e ID: \	/blk72	
Sample wt/v	ol:	5.0	(g/ml) ML		Lab File ID:	: <u>\</u>	/B02313.D	
Level: (low/	med)	LOW		1	Date Recei	ved: <u>1</u>	2/07/98	
% Moisture:	not dec.			1	Date Analy:	zed: <u>1</u>	2/10/98	
GC Column:	HP5M	S ID: 0	.25 (mm)	f	Dilution Fac	ctor: 1	.0	
Soil Extract	Volume:		(uL)	;	Soil Aliquot	Volum	ne:	(uL)
				CONCENTR	ATION UN	ITS:		
Number TIC	s found:	0		(ug/L or ug/K	(g) <u>UG</u>	/L		
CAS NO.		СОМРО	UND NAME		RT	EST	CONC.	Q

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

Data File Nam vb02322.d Operator

Skelton Date Acquired 10 Dec 98 4:59 pm

Sample Name Field ID

4116.01 Trip Blank

Sample Multiplier

107028 Ac 107131 Ac 75650 ter 1634044 Me 108203 Di Di 74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	ompound Name crolein crylonitrile rt-Butyl alcohol lethyl-tert-Butyl ether i-isopropyl ether ichlorodifluoromethan hloromethane inyl Chloride romomethane hloroethane	R.T.	Response	Result not detected not detected not detected not detected not detected not detected	(ug/l)* 50 50 nle nle	MDL 1.85 ug/L 2.78 ug/L 8.52 ug/L 0.16 ug/L	Qualifier
107131 Ac 75650 ter 1634044 Me 108203 Di Di 74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	crylonitrile rt-Butyl alcohol lethyl-tert-Butyl ether i-isopropyl ether ichlorodifluoromethan hloromethane inyl Chloride romomethane			not detected not detected not detected	50 nle nle	2.78 ug/L 8.52 ug/L	
75650 ter 1634044 Me 108203 Di Di 74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	rt-Butyl alcohol lethyl-tert-Butyl ether i-isopropyl ether ichlorodifluoromethan hloromethane inyl Chloride romomethane			not detected not detected	nle nle	8.52 ug/L	
1634044 Me 108203 Di Di 74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	lethyl-tert-Butyl ether i-isopropyl ether ichlorodifluoromethan hloromethane inyl Chloride romomethane			not detected	nle		
108203 Di Di 74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	i-isopropyl ether ichlorodifluoromethan hloromethane inyl Chloride romomethane						
Di 74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	ichlorodifluoromethan hloromethane inyl Chloride romomethane			not detected			
74-87-3 Ch 75-01-4 Vi 74-83-9 Br 75-00-3 Ch	hloromethane inyl Chloride romomethane		-	not detected	nle	0.25 ug/L	
75-01-4 Vi 74-83-9 Br 75-00-3 Ch	inyl Chloride romomethane				nle	1.68 ug/L	
74-83-9 Br 75-00-3 Ch	romomethane			not detected not detected	30	1.16 ug/L	
75-00-3 Ch					5	1.06 ug/L	
	nioroeinane i			not detected not detected	10	1.10 ug/L	
/3-09-4 11					nle	1.01 ug/L	
75.25.4 1.1	richlorofluoromethane			not detected	nle	0.50 ug/L	
	1-Dichloroethene			not detected	2	0.24 ug/L	
	cetone			not detected	700	1.36 ug/L	
	arbon Disulfide		_	not detected	nle	0.46 ug/L	
	lethylene Chloride			not detected	2	0.24 ug/L	
	ans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
	1-Dichloroethane			not detected	70	0.12 ug/L	
	inyl Acetate			not detected	nle	0.78 ug/L	
	Butanone			not detected	300	0.62 ug/L	
	s-1,2-Dichloroethene			not detected	10	0.17 ug/L	
	hloroform			not detected	6	0.30 ug/L	
	1,1-Trichloroethane			not_detected	30	0.23 ug/L	
	arbon Tetrachloride			not detected	2	0.47 ug/L	
	enzene			not detected	1	0.23 ug/L	
	2-Dichloroethane			not detected	2	0.18 ug/L	
	richloroethene			not detected	1	0.23 ug/L	
	2-Dichloropropane			not detected	1	0.40 ug/L	
	romodichloromethane			not detected	1	0.55 ug/L	
	Chloroethyl vinyl ethe			not detected	nle	0.65 ug/L	
	s-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
	Methyl-2-Pentanone			not detected	400	0.59 ug/L	
	oluene			not detected	1000	0.37 ug/L	
	ns-1,3-Dichloroprope	.,.		not detected	nle	0.87 ug/L	
	1,2-Trichloroethane			not detected	3	0.48 ug/L	
	etrachloroethene			not detected	1	0.32 ug/L	
591-78-6 2-I	Hexanone]		not detected	nle	0.71 ug/L	, - -
126-48-1 Dil	ibromochloromethane			not detected	10	0.86 ug/L	
	nlorobenzene			not detected	4	0.39 ug/L	
100-41-4 Ett	hylbenzene			not detected	700	0.65 ug/L	
1330-20-7 m+	+p-Xylenes			not detected	nle	1.14 ug/L	
_	Xylene			not detected	nle	0.62 ug/L	
	yrene			not detected	100	0.56 ug/L	
	romoform			not detected	4	0.70 ug/L	
	1,2,2-Tetrachloroethan			not detected	2	0.47 ug/L	
	3-Dichlorobenzene	\neg		not detected	600	0.55 ug/L	-
	4-Dichlorobenzene			not detected	75	0.57 ug/L	-
	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

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Lab Name: FN	METL		Project	980932		Trip	Blank
NJDEP# 13	461	Case No.: 4116	SDG N	No	Loc	ation <u>L</u>	JST
Matrix: (soil/wate	er) <u>WATE</u>	R	La	ab Sample	e ID: 4	116.01	··-
Sample wt/vol:	5.0	(g/ml) ML	L	ab File ID:	: <u>v</u>	B02322.	D
Level: (low/med	l) <u>LOW</u>		D	ate Recei	ved: <u>1</u>	2/07/98	
% Moisture: not	dec.		D	ate Analyz	zed: 1	2/10/98	
GC Column: <u>H</u>	HP5MS ID:	0.25 (mm)	D	ilution Fac	ctor: <u>1</u>	.0	
Soil Extract Volu	ıme:	(uL)	S	oil Aliquot	Volum	ie:	(uL)
Number TICs for	und: 0		CONCENTRA (ug/L or ug/Ko				
CAS NO.	COM	POUND NAME		RT	EST	. CONC.	Q

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

Data File Nam vb02323.d Operator

Skelton

Sample Name Field ID

4116.02 Field Blank

Date Acquired 10 Dec 98 5:44 pm

Sample Multiplier

			_		Regulatory Level		
CAS#	Compound Name	R.T.	Response	Result	(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		L	not detected	700	1.36 ug/L	
	Carbon Disulfide			not detected	nle	0.46 ug/L	
	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	
	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	
	Toluene			not detected	1000	0.37 ug/L	
	trans-1,3-Dichloroprope			not detected	nle	0.87 ug/L	
	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	
	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	
	m+p-Xylenes		 	not detected	nle	1.14 ug/L	
	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	0.47 ug/L 0.55 ug/L	
	TO TOTAL OF THE STATE OF THE ST			noi aciotica	UUU	v.JJ ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 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

F	EL	D	ID

Lab Name:	FMETL			Project	980932		Fie	ia Bia	.nk
NJDEP#	13461	Case No.	: 4116	SDG N	0	Loc	cation	UST	
Matrix: (soil/	water)	WATER		La	ıb Sample	D: 4	116.02		
Sample wt/v	ol:	5.0 (g/m	l) ML	La	b File ID:	<u>\</u>	/B0232	3.D	
Level: (low/i	med)	LOW		Da	ate Receiv	/ed: <u>1</u>	2/07/98	3	
% Moisture:	not dec.			Da	ate Analyz	zed: 1	2/10/98	3	
GC Column:	HP5M	S ID: 0.25	(mm)	Di	lution Fac	tor: 1	1.0	x	
Soil Extract	Volume:	(uL)		Sc	oil Aliquot	Volun	ne:		(uL)
Number TIC:	s found:	0	-	NCENTRA g/L or ug/Kg					
CAS NO.		COMPOUND N	AME		RT	EST	. CON	5 .	Q

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

Data File Nam vb02324.d Operator

Skelton

Date Acquired 10 Dec 98 6:29 pm

Sample Name

Field ID

4116.03 Bldg906

Sample Multiplier

1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifie
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	ı	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	
	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

Qualifiers

B = Compound found in related blank

E = 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

Lab Name:	FMETL		Project	980932		BI	dg. 906	.]
NJDEP#	13461	Case No.: 41	16 SDG	No	Loca	ition	UST	
Matrix: (soil/	water)	WATER		Lab Sample	e ID: 41	16.03		
Sample wt/v	ol:	5.0 (g/ml) <u>M</u>	1L	Lab File ID:	VE	30232	4.D	_
Level: (low/i	med)	LOW		Date Recei	ved: 12	2/07/98	3	_
% Moisture:	not dec.			Date Analy:	zed: 12	2/10/98	3	_
GC Column:	HP5M	S ID: 0.25 (mm)	Dilution Fac	ctor: 1.0	0		_
Soil Extract	Volume:	(uL)		Soil Aliquot	Volume	e:		(uL)
			CONCENTR					
Number TIC:	s found:	0	(<u> </u>				
CAS NO.		COMPOUND NAME		RT	EST.	CON	5.	Q

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

Data File Nam vb02325.d Operator Skelton Sample Name Field ID 4116.04 Field Dup

Date Acquired 10 Dec 98 7:14 pm

Sample Multiplier

1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Oualifier
107028	Acrolein	K. I.	Response	not detected	50	1.85 ug/L	Qualitier
107028	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		
108203	Dichlorodifluoromethan			not detected		0.25 ug/L	
74-87-3	Chloromethane			not detected	nle 30	1.68 ug/L 1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5		
	 	 		not detected		1.06 ug/L	
74-83-9	Bromomethane	\vdash		not detected	10	1.10 ug/L	-
75-00-3	Chloroethane	 			nle	1.01_ug/L	
75-69-4	Trichlorofluoromethane	<u> </u>		not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene	10.50	60405	not detected	2	0.24 ug/L	
67-64-1	Acetone	10.52	60405	4.08 ug/L	700	1.36 ug/L	
75-15-0	Carbon Disulfide		-	not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ethe			not detected	nle	0.65 u g/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	0.47 ug/L 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	0.57 ug/L 0.64 ug/L	
72-20-1	1,2-Dichiologenzene	<u> </u>	CDOLL	not detected	000	U.04 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

F	ΙE	LD	D

Lab Name:	FMETL			Project	980932	<u>.</u>	Fi	eld Du	ıp
NJDEP#	13461	Ca	se No.: 4116	SDG	No	Lo	cation	UST	
Matrix: (soil/	water)	WATER		L	ab Sample	e ID:	4116.04		
Sample wt/v	ol:	5.0	(g/ml) ML	L	ab File ID	: .	VB0232	.5.D	
Level: (low/	med)	LOW	_		Date Recei	ved:	12/07/9	8	
% Moisture:	not dec.				Date Analy	zed:	12/10/9	8	
GC Column:	HP5M	S ID: 0.	.25 (mm)		Dilution Fa	ctor:	1.0		
Soil Extract	Volume:		(uL)	8	Soil Aliquot	Volu	me:		_ (uL)
Number TIC	s found:	0		CONCENTRA (ug/L or ug/K					
CAS NO.		COMPO	UND NAME		RT	ES	T. CON	c.	Q

BASE NEUTRAL

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name

BN02424.D

Sample Name

Sblk177

Sblk177 A 981208

Operator

Date Acquired

Skelton 19-Dec-98 Misc Info

Sample Multiplier

					Regulatory Level			
CAS#	Name	R.T.	Response	Result	(ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00		
62-75-9	N-nitroso-dimethylamine		·	not detected	20	0.94		
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
111-44-4	bis(2-Chloroethyl)ether	+		not detected	10	0.48		
106-46-7	1,4-Dichlorobenzene	+		not detected	75	0.23		
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene	+		not detected	600	0.16	ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	300	0.61	บg/L	
67-72-1	Hexachloroethane	+	<u></u>	not detected	10	0.33	ug/L	
98-95-3	Nitrobenzene		ļ.,	not detected	10	0.46	ug/L	
78-59-1	Isophorone			not detected	100	0.35	ug/L	
111-91-1	bis(2-Chloroethoxy)methane	┸		not detected	NLE	0.46	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	ļ
120-82-1	1,2,4-Trichlorobenzene		ļ	not detected	9	0.25	ug/L	
91-20-3	Naphthalene	 		not detected	NLE	0.25	ug/L	ļ
106-47-8	4-Chloroaniline	1		not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene	1		not detected	1	0.38	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	ļ
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.32	ug/L	
88-74-4	2-Nitroaniline	1	ļ	not detected	NLE	0.21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.19	ug/L_	ļ
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
132-64-9	Dibenzofuran		<u> </u>	not detected	NLE	0,32	ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate		ļ	not detected	5000	0.82	ug/L	ļ
86-73-7	Fluorene			not_detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	Ī	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90		<u> </u>
86-30-6	n-Nitrosodiphenylamine			not detected	20	0,23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0,80		
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10		ug/L	
85-01-8	Phenanthrene		ļ	not detected	NLE	0.18		
120-12-7	Anthracene			not detected	2000	0.19		
84-74-2	Di-n-butylphthalate			not detected	900	0.23		
206-44-0	Fluoranthene	ļ	ļ. <u></u>	not detected	300		ug/L	
92-87-5	Benzidine	_		not detected	50	1.45		
129-00-0	Ругепе	1		not detected	200	0.32		
85-68-7	Butylbenzylphthalate	4		not detected	100	0.47		
56-55-3	Benzo[a]anthracene	<u> </u>		not detected	10	0.22		
91-94-1	3,3'-Dichlorobenzidine	_	ļ	not detected	60	0,46		
218-01-9	Chrysene	-		not detected	20	0,20		
117-81-7	bis(2-Ethylhexyl)phthalate	-		not detected	30	0.51		
117-84-0	Di-n-octylphthalate	+		not detected	100	0.82		
205-99-2	Benzo[b]fluoranthene	1		not detected	10	0.37		
207-08-9	Benzo[k]fluoranthene	1		not detected	_2	0.32		
50-32-8	Benzo[a]pyrene			not detected	20	0.31		
193-39-5	Indeno[1,2,3-cd]pyrene	1		not detected	20	0.79		
53-70-3	Dibenz[a,h]anthracene		L	not detected	20	0.28	ug/L	

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

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

Benzo[g,h,i]perylene

191-24-2

B= Compound in Related Blank

PQL= Practical Quantitation Limit

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

NLE

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Field ID:

	TENTATIVELY IDENTIFIED COMPOUNDS							
Lab Name:	FMETL		Lab Co	d <u>1</u>	3461		Sblk1	
Project:	98-0932	Case No.: 4116	Loca	tion:	UST	_ SI	DG No:	
Matrix: (soil/	water)	WATER		Lab S	Sample	ID:	Sblk177	
Sample wt/ve	ol:	1000 (g/ml) ML		Lab F	File ID:		BN02424.D	
Level: (low/r	med)	LOW		Date	Receiv	ed:	12/7/98	
% Moisture:		decanted: (Y/N)	<u>N</u>	Date	Extract	ted:	12/8/98	
Concentrate	d Extract	Volume: <u>1000</u> (uL)		Date	Analyz	ed:	12/19/98	
Injection Vol	ume: 1.	0 (uL)		Diluti	on Fac	tor:	1.0	
GPC Cleanu	p: (Y/N)	NpH:						
			CONCE	NTR	ATION	UNI	TS:	
Number TIC	s found:	0	(ug/L or	ug/K	g)	UG/I	L	
CAS NUME	BER	COMPOUND NAME			RT	FS	T CONC	Q

Semi-Volatile Analysis Report

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

Data File Name Operator

BN02429.D Skelton

Sample Name Misc Info

4116.02 Field Blank

Date Acquired

19-Dec-98

Sample Multiplier

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	0.94	ug/L	
62-53-3	Aniline			not detected	NLE	0.15	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.48	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.16	ug/L	
108-60-1	bis(2-chloroisopropyl)ether	\perp		not detected	300	0.61	ug/L	
67-72-1	Hexachloroethane			not detected	10	0,33	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78 - 59-1	Isophorone	\perp		not detected	100	0.35	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.46	ug/L	
65-85-0	Benzoic Acid			not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene	_		not detected	9	0.25	ug/L	
91-20-3	Naphthalene			not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene			not detected	- 1	0.38	ug/L	
91-57-6	2-Methylnaphthalene	\bot		not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	1.50	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0,32	ug/L	<u> </u>
88-74-4	2-Nitroaniline			not detected	NLE	0.21	ug/L	ļ
131-11-3	Dimethylphthalate	1 1		not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene	1		not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene	 		not detected	NLE	0.31	ug/L	ļ
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
132-64-9	Dibenzofuran	4		not detected	NLE	0.32	ug/L	ļ
121-14-2	2,4-Dinitrotoluene		· · · · · · ·	not detected	10		ug/L	
84-66-2	Diethylphthalate	 		not detected	5000	0.82	ug/L	
86-73-7	Fluorene	1 1	_	not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE		ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90		
86-30-6	n-Nitrosodiphenylamine	+		not detected	20	0.23		
103-33-3	Azobenzene		·	not detected	_ NLE	0.80		
101-55-3	4-Bromophenyl-phenylether			not detected	NLE		ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82		
85-01-8	Phenanthrene	+		not detected	NLE	0.18		
120-12-7	Anthracene	+		not detected	2000	0.19		
84-74-2	Di-n-butylphthalate	++		not detected	900	0.23		
206-44-0	Fluoranthene	+		not detected	300	0.41	_	
92-87-5	Benzidine	+ +		not detected	50	1.45		
129-00-0	Pyrene	+ +		not detected	200	0.32		
85-68-7	Butylbenzylphthalate	+		not detected	100	0.47		
56-55-3	Benzo[a]anthracene	+ +		not detected	10	0.22		
91-94-1	3,3'-Dichlorobenzidine	1 -1		not detected	60		ug/L	
218-01-9	Chrysene	+ +		not detected	20		ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	┨╌┈┤		not detected	30		ug/L	
117-84-0	Di-n-octylphthalate	+ +		not detected	100	0.82		
205-99-2	Benzo[b]fluoranthene	-{}		not detected	10	0.37		
207-08-9	Benzo[k]fluoranthene	+		not detected	2	0.32		-
50-32-8	Benzo[a]pyrene	+		not detected	20	0.31	-	
93-39-5	Indeno[1,2,3-cd]pyrene Dibenz[a,h]anthracene	╂══╃	-	not detected	20 20	0.79 0.28	-	-
3-70-3				not detected			/1	

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

Qualifiers

E= Value Exceeds Linear Range D= Value from dilution

B= Compound in Related Blank

PQL= Practical Quantitation Limit

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

		IENI	ALIVELY IDENTI	-IED COMP	F	11-			
Lab Name:	FMETL			Lab Cod	d	13461		Field B	ıank
Project:	98-0932	2	Case No.: 4116	Locat	tion	: UST	_ SI	DG No:	
Matrix: (soil/	water)	WATE	R	4	Lab	Sample	ID:	4116.02	
Sample wt/ve	ol:	1000	(g/ml) ML	!	Lab	File ID:		BN02429.D	<u>.</u>
Level: (low/r	med)	LOW		I	Dat	e Receiv	/ed:	12/7/98	
% Moisture:		(decanted: (Y/N)	<u>N</u> 1	Dat	e Extrac	ted:	12/8/98	
Concentrate	d Extract	Volume	: <u>1000</u> (uL)	1	Dat	e Analyz	ed:	12/19/98	
Injection Vol	ume: <u>1.</u>	0 (ul	.)	1	Dilu	ition Fac	tor:	1.0	
GPC Cleanu	p: (Y/N)	N	pH:						
Number TIC	s found:	0		CONCE			UNI ⁻ UG/I		
CAS NUMI	BER	COME	POUND NAME			RT	ES	T. CONC.	Q

Semi-Volatile Analysis Report

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

 Data File Name
 BN02430,D
 Sample Name
 4116.03

 Operator
 Skelton
 Misc Info
 Bldg906

 Date Acquired
 19-Dec-98
 Sample Multiplier
 1

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

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

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

Benzo[g,h,i]perylene

191-24-2

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

NLE

0.40 ug/L

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELV	IDENTIFIED	COMPOUNDS
IENIAIIVELT	IDEN HEICU	COMPOUNDS

Field ID:

		IENIA	TATIVELY IDENTIFIED COMPOUNDS					
Lab Name:	FMETL			Lab Cod	13461		Bldg.	306
Project:	98-0932	C:	ase No.: 4116	Locatio	n: <u>UST</u>	SI	DG No:	
Matrix: (soil/	water)	WATER		La	ab Sample	e ID:	4116.03	
Sample wt/vo	ol:	1000	(g/ml) ML	La	ab File ID:		BN02430.D	
Level: (low/r	ned)	LOW		Da	ate Recei	ved:	12/7/98	
% Moisture:		de	canted: (Y/N)	N Da	ate Extra	cted:	12/8/98	
Concentrated	d Extract	Volume:	1000 (uL)	Da	ate Analy	zed:	12/19/98	
Injection Vol	ume: <u>1.</u> 0) (uL)		Di	lution Fac	ctor:	1.0	
GPC Cleanu	p: (Y/N)	N	pH:					
Number TIC:	s found:	0		CONCEN (ug/L or ug		UNIT UG/L		
CAS NUME	BER	СОМРО	UND NAME		RT	ES	T. CONC.	Q

Semi-Volatile Analysis Report

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

Data File NameBN02431.DSample Name4116.04OperatorSkeltonMisc InfoField Dup

Date Acquired 19-Dec-98 Sample Multiplier

					Regulatory Level			
CAS#	Name	R.T.	Response	Result	(ug/L)*	MDL		Qualifiers
110-86-1	Pyridine	1		not detected	NLE	5.00	ug/L	
62-75-9	N-nitroso-dimethylamine	 -i		not detected	20	0.94	ug/L	
62-53-3	Aniline	╀—-		not detected	NLE	0.15	ug/L	
111-44-4	bis(2-Chloroethyl)ether	1		not detected	10	0.48	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.23	ug/L	
100-51-6	Benzyl alcohol	+		not detected	NLE	0.18	ug/L	
95-50-1	1,2-Dichlorobenzene	+		not detected	600	0.16	ug/L	<u> </u>
108-60-1	bis(2-chloroisopropyl)ether	 		not detected	300	0.61	ug/L	
67-72-1	Hexachloroethane	 		not detected	10	0.33	ug/L	<u> </u>
98-95-3	Nitrobenzene			not detected	10	0.46	ug/L	
78-59-1	Isophorone	┦——	- ·	not detected	100	0.35	ug/L	
111-91-1	bis(2-Chloroethoxy)methane	-		not detected	NLE	0.46	ug/L	L
65-85-0	Benzoic Acid	 _ 		not detected	NLE	0.26	ug/L	
120-82-1	1,2,4-Trichlorobenzene	1		not detected	9	0.25	ug/L	
91-20-3	Naphthalene	\perp		not detected	NLE	0.25	ug/L	
106-47-8	4-Chloroaniline	44		not detected	NLE	0.19	ug/L	
87-68-3	Hexachlorobutadiene	11		not detected	11	0.38	ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	0.16	ug/L	
77-47-4	Hexachlorocyclopentadiene	1 1		not detected	50	1,50	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0,32	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0,21	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.18	ug/L	
208-96-8	Acenaphthylene	11		not detected	NLE	0.19	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.31	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	0.26	ug/L	
83-32-9	Acenaphthene			not detected	400	0.26	ug/L	
132-64-9	Dibenzofuran	1		not detected	NLE	0.32	ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	10	0.36	ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.82	ug/L	
<u>86-7</u> 3-7	Fluorene			not detected	300	0.29	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.31	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	0.90	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.23	ug/L	
103-33-3	Azobenzene			not detected	NLE	0.80	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.55	ug/L	
118-74-1	Hexachlorobenzene			not detected	10	0.82	ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.18	ug/L	
120-12-7	Anthracene			not detected	2000	0.19	ug/L	
84-74-2	Di-n-butylphthalate	1		not detected	900	0,23	ug/L	
206-44-0	Fluoranthene			not detected	300	0.41	ug/L	
92-87-5	Benzidine		-	not detected	50	1.45	ug/L	
129-00-0	Ругепе			not detected	200	0.32	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.47	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.22	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	0.46		
218-01-9	Chrysene			not detected	20	0.20		
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	0.51	ug/L	
117-84-0	Di-n-octylphthalate	1		not detected	100	0.82		
205-99-2	Benzo[b]fluoranthene			not detected	10	0.37		
207-08-9	Benzo[k]fluoranthene			not detected	2	0.32		
50-32-8	Benzo[a]pyrene	1		not detected	20	0.31		
193-39-5	Indeno[1,2,3-cd]pyrene	1		not detected	20	0.79		
53-70-3	Dibenz[a,h]anthracene	1 1		not detected	20	0.28		
	- IO CITE CALIFORNIA CALIFO							

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

Qualifiers

E= Value Exceeds Linear Range
D= Value from dilution
B= Compound in Related Blank
PQL= Practical Quantitation Limit

MDL= Method Detection Limit NLE= No Limit Established R.T.=Retention Time 1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Field ID:

		TENTA	TIVELY	IDENTIF	FIED COMPO	UNDS	Field D
Lab Name:	FMETL			· · · · · ·	Lab Cod	13461	Field Dup.
Project:	98-0932	C	ase No.:	4116	Location	n: <u>UST</u> S	SDG No:
Matrix: (soil/	water)	WATER			La	b Sample ID:	4116.04
Sample wt/ve	ol:	1000	_ (g/ml) <u>ML</u>	La	b File ID:	BN02431.D
Level: (low/r	med)	LOW	_		Da	te Received:	12/7/98
% Moisture:		de	canted:	(Y/N) _	N Da	ite Extracted:	12/8/98
Concentrate	d Extract \	Volume:	1000	(uL)	Da	ite Analyzed:	12/19/98
Injection Vol	ume: <u>1.0</u>	(uL)			Dil	ution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:				
					CONCENT	RATION UN	ITS:
Number TIC	s found:	0			(ug/L or ug	/Kg) UG	i/L

RT

EST. CONC.

Q

COMPOUND NAME

CAS NUMBER

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	_
	oratory Manager or Environmental Consultant's Signature	

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

Laboratory Certification #13461

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