

United States Army
Fort Monmouth, New Jersey

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

***Building 2707
Charles Wood***

NJDEP UST Registration No. 81515-50

April 2001

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

BUILDING 2707

**CHARLES WOOD
NJDEP UST REGISTRATION NO. 81515-50**

APRIL 2001

PREPARED FOR:

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

PREPARED BY:

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PROJECT NO. 4936-127

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EXECUTIVE SUMMARY

UST Closure

On August 13, 1998, a fiberglass underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) underground storage tank procedures at the Charles Wood area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 81515-50 (Fort Monmouth ID No. 2707), was located west of Building 2707. UST No. 81515-50 was a 2,000-gallon copper sulfate 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. No holes or punctures were noted in the UST and no evidence of potentially contaminated soils was observed surrounding the tank. Samples contained non-detectable levels of TPHC. A VOA analysis (EPA Method 8260) was also completed on all soil samples and all known compounds searched for in the analysis were not detected. Groundwater was not encountered.

Site Restoration

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

Conclusions and Recommendations

Based on the post-excavation soil sampling results, soils concentrations exceeding the NJDEP soil cleanup criteria do not exist in the former location of the UST or associated piping.

No further action is proposed in regard to the closure and site assessment of UST No. 81515-50 at Building 2707.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81515-50, was closed at Building 2707 at the Charles Wood area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on August 13, 1998. Refer to site location map on Figure 1. This report presents the results of the Department of Public Works (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP. The UST was a fiberglass 2,000-gallon tank containing copper sulfate.

Decommissioning activities for UST No. 81515-50 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. 81515-50 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. 81515-50 are included in Appendices A and B, respectively.

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

This UST Closure and Site Investigation Report has been prepared by Versar, to assist the United States Army Directorate of Public Works (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 investigation, are presented in the final section of this report.

1.2 SITE DESCRIPTION

Building 2707 is located in the Charles Wood area of the Fort Monmouth Army Base. UST No. 81515-50 was located west of Building 2707 and appurtenant cast iron piping ran approximately five (5) feet east from the excavation to Building 2707. 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 2707. 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 Charles Wood area.

Regional Geology

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

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

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

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Charles Wood 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 ironoxide encrusted (Minard).

Over the last 80 years, the natural topography of Fort Monmouth has been altered by excavation and filling activities by the military. Topographic elevations for the Charles Wood area range from 20 feet above mean seal level (MSL) to 71 feet above MSL.

Hydrogeology

The water table aquifer in the Charles Wood 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.

Six well records for monitor wells installed at locations within the Charles Wood area in February 1981 were used for reference. The wells were completed to total depths ranging from 20 to 25 feet below ground surface (bgs). Water was encountered at depths ranging from 5 to 12 feet bgs.

The lithologic descriptions for these borings described deposits that were primarily fine to coarse, glauconitic sands, with traces of gravel, silt, and clay. These sediments are part of the Hornerstown Marl, from the Tertiary Period (Paleocene Series, approximately 58 to 66 Ma). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce from 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Shallow groundwater is locally influenced within the Charles Wood 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 Charles Wood 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. Building 2707 is located approximately 400 feet south of an unnamed stream that runs from east to west through the Charles Wood area. Based on the Charles Wood area topography, the groundwater flow in the area of Building 2707 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

- All underground obstructions (utilities, etc.) were identified by the contractor performing the closure prior to excavation activities.
- 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. No free product was present in the piping and the UST. After removal of the associated piping, a manway was made in the UST to allow for proper cleaning. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. No holes or punctures were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually for evidence of contamination. No evidence of contamination was observed. Soil screening was also performed along the piping run associated with the UST closure. No contamination was noted anywhere along the piping length. Groundwater was not encountered. See Figure 3 for a cross-sectional view of the excavated area.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported to Marpal Disposal Company, Inc. See Appendix C for a copy of the UST disposal certificate. The transportation of the UST was in compliance with all applicable regulations and laws.

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

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

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on TPHC analysis and VOA results from the post-excitation soil samples, no soils exhibited signs of contamination. Therefore, the excavated soils were used as backfill following removal of the UST.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with the NJDEP document *Interim Closure Requirements for Underground Storage Tank Systems* (October 1990 and revisions dated November 1, 1991) which was the applicable regulation at the date of the closure. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Investigation Activities:

- 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: (732) 532-4359
NJDEP Company Certification No.: 13461

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator to identify potentially contaminated material. Soil excavated from around the tank and appurtenant piping, as well as the UST excavation sidewalls and bottom, did not exhibit any evidence of potential contamination. Groundwater was not encountered.

2.3 SOIL SAMPLING

On August 26, 1998, following the removal of the UST and associated piping, post-excavation soil samples A, C, D, E, F, G, and DUP D were collected from a total of six (6) locations of the UST excavation. Sidewall samples A, C, D, E, F, and DUP D were collected at a depth of 10.5 feet bgs. Sample E was collected along the former piping length of the excavation, which was approximately five (5) feet in length. The piping sample was collected at a depth of 3.0 feet bgs. All samples were analyzed for TPHC, total solids, and VOCs.

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

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST and associated piping, six (6) post-excavation sample results were compared to NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) (N.J.A.C. 7:26D and revisions dated May 12, 1999). Summaries of analytical results for soils are presented in Tables 1 to 3 and the associated soil sampling locations are shown on Figure 4. The analytical data package is provided in Appendix D.

All post-excavation soil samples collected on August 14, 1998, from the UST excavation and from below piping associated with the UST contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP RDCSCC.

3.2 CONCLUSIONS AND RECOMMENDATIONS

Based on the post-excavation soil sampling results, soils concentrations exceeding the NJDEP soil cleanup criteria do not exist in the former location of the UST or associated piping.

No further action is proposed in regard to the closure and site assessment of UST No. 81515-50 at Building 2707.

TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 2707, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 1

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sampling Method
A	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop
C	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop
D	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop
E	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop
F	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop
G	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop
DUP D	8/14/98	8/17/98	Soil	Post-Excavation	TPHC, VOA	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 2707, CHARLES WOOD AREA
 FORT MONMOUTH, NEW JERSEY

Page 1 of 1

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Method Used	Method Detection Limit (mg/kg)	Compound of Concern	Result (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/10.5=	3810.01	8/14/98	8/17/98	Total Solid	--	--	92.53 %	--	--
				TPHC	165	Yes	ND	10,000	No
C/10.5=	3810.02	8/14/98	8/17/98	Total Solid	--	--	95.00 %	--	--
				TPHC	161	Yes	ND	10,000	No
D/10.5=	3810.03	8/14/98	8/17/98	Total Solid	--	--	90.04 %	--	--
				TPHC	174	Yes	ND	10,000	No
E/10.5=	3810.04	8/14/98	8/17/98	Total Solid	--	--	91.44 %	--	--
				TPHC	166	Yes	ND	10,000	No
F/10.5=	3810.05	8/14/98	8/17/98	Total Solid	--	--	87.82 %	--	--
				TPHC	177	Yes	ND	10,000	No
G/3.0=	3810.06	8/14/98	8/17/98	Total Solid	--	--	86.25 %	--	--
				TPHC	182	Yes	ND	10,000	No
DUP D/10.5 =	3810.07	8/14/98	8/17/98	Total Solid	--	--	90.72 %	--	--
				TPHC	168	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 sample quantitation limit
- TPHC Total Petroleum Hydrocarbons

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) SOILDate Sampled: 8/14/98Location: 2707Lab Sample ID: 3810.01(Sample A)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
107028	Acrolein	1900	U	NA	NA
107131	Acrylonitrile	1900	U	1000	5000
75650	tert-Butyl alcohol	3500	U	NA	NA
1634044	Methyl-tert-Butyl ether	810	U	NA	NA
108203	Di-isopropyl ether	540	U	NA	NA
	Dichlorodifluoromethane	1100	U	NA	NA
74-87-3	Chloromethane	270	U	520000	1000000(d)
75-01-4	Vinyl Chloride	810	U	2000	7000
74-83-9	Bromomethane	540	U	79000	1000000(d)
75-00-3	Chloroethane	810	U	NA	NA
75-69-4	Trichlorofluoromethane	540	U	NA	NA
75-35-4	1, 1-Dichloroethene	270	U	8000	150000
67-64-1	Acetone	540	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	270	U	NA	NA
75-09-2	Methylene Chloride	540	U	49000	210000
156-60-5	trans-1,2-Dichloroethene	540	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	270	U	570000	1000000(d)
108-05-4	Vinyl Acetate	810	U	NA	NA
78-93-3	2-Butanone	810	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	270	U	79000	1000000(d)
67-66-3	Chloroform	270	U	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	270	U	NA	NA
56-23-5	Carbon Tetrachloride	540	U	2000(k)	4000(k)
71-43-2	Benzeze	270	U	3000	13000
107-06-2	1,2-Dichloroethane	540	U	6000	24000

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) SOILDate Sampled: 8/14/98Location: 2707Lab Sample ID: 3810.01(Sample A)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
79-01-6	Trichloroethene	270	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	270	U	10000	43000
75-27-4	Bromodichloromethane	270	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	540	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	270	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	540	U	1000000(d)	1000000(d)
108-88-3	Toluene	270	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	540	U	NA	NA
79-00-5	1,1,2-Trichloroethane	540	U	22000	420000
127-18-4	Tetrachloroethene	270	U	4000(k)	6000(k)
591-78-6	2-Hexanone	540	U	NA	NA
126-48-1	Dibromochloromethane	540	U	NA	NA
108-90-7	Chlorobenzene	270	U	37000	680000
100-41-4	Ethylbenzene	540	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	810	U	NA	NA
1330-20-7	o-Xylene	540	U	NA	NA
100-42-5	Styrene	540	U	23000	97000
75-25-2	Bromoform	540	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	540	U	34000	70000(k)

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
 Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.02(Sample C)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
107028	Acrolein	1800	U	NA	NA
107131	Acrylonitrile	1800	U	1000	5000
75650	tert-Butyl alcohol	3300	U	NA	NA
1634044	Methyl-tert-Butyl ether	760	U	NA	NA
108203	Di-isopropyl ether	510	U	NA	NA
	Dichlorodifluoromethane	1000	U	NA	NA
74-87-3	Chloromethane	250	U	520000	1000000(d)
75-01-4	Vinyl Chloride	760	U	2000	7000
74-83-9	Bromomethane	510	U	79000	1000000(d)
75-00-3	Chloroethane	760	U	NA	NA
75-69-4	Trichlorofluoromethane	510	U	NA	NA
75-35-4	1, 1-Dichloroethene	250	U	8000	150000
67-64-1	Acetone	510	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	250	U	NA	NA
75-09-2	Methylene Chloride	510	U	49000	210000
156-60-5	trans-1,2-Dichloroethene	510	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	250	U	570000	1000000(d)
108-05-4	Vinyl Acetate	760	U	NA	NA
78-93-3	2-Butanone	760	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	250	U	79000	1000000(d)
67-66-3	Chloroform	250	U	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	250	U	NA	NA
56-23-5	Carbon Tetrachloride	510	U	2000(k)	4000(k)
71-43-2	Benzeze	250	U	3000	13000
107-06-2	1,2-Dichloroethane	510	U	6000	24000

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
 Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.02(Sample C)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
79-01-6	Trichloroethene	250	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	250	U	10000	43000
75-27-4	Bromodichloromethane	250	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	510	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	250	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	510	U	1000000(d)	1000000(d)
108-88-3	Toluene	250	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	510	U	NA	NA
79-00-5	1,1,2-Trichloroethane	510	U	22000	420000
127-18-4	Tetrachloroethene	250	U	4000(k)	6000(k)
591-78-6	2-Hexanone	510	U	NA	NA
126-48-1	Dibromochloromethane	510	U	NA	NA
108-90-7	Chlorobenzene	250	U	37000	680000
100-41-4	Ethylbenzene	510	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	760	U	NA	NA
1330-20-7	o-Xylene	510	U	NA	NA
100-42-5	Styrene	510	U	23000	97000
75-25-2	Bromoform	510	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	510	U	34000	70000(k)

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) SOILDate Sampled: 8/14/98Location: 2707Lab Sample ID: 3810.03(Sample D)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
107028	Acrolein	1800	U	NA	NA
107131	Acrylonitrile	1800	U	1000	5000
75650	tert-Butyl alcohol	3400	U	NA	NA
1634044	Methyl-tert-Butyl ether	780	U	NA	NA
108203	Di-isopropyl ether	520	U	NA	NA
	Dichlorodifluoromethane	1000	U	NA	NA
74-87-3	Chloromethane	260	U	520000	1000000(d)
75-01-4	Vinyl Chloride	780	U	2000	7000
74-83-9	Bromomethane	520	U	79000	1000000(d)
75-00-3	Chloroethane	780	U	NA	NA
75-69-4	Trichlorofluoromethane	520	U	NA	NA
75-35-4	1, 1-Dichloroethene	260	U	8000	150000
67-64-1	Acetone	520	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	260	U	NA	NA
75-09-2	Methylene Chloride	520	U	49000	210000
156-60-5	trans-1,2-Dichloroethene	520	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	260	U	570000	1000000(d)
108-05-4	Vinyl Acetate	780	U	NA	NA
78-93-3	2-Butanone	780	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	260	U	79000	1000000(d)
67-66-3	Chloroform	260	U	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	260	U	NA	NA
56-23-5	Carbon Tetrachloride	520	U	2000(k)	4000(k)
71-43-2	Benzeze	260	U	3000	13000
107-06-2	1,2-Dichloroethane	520	U	6000	24000

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
 Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.03(Sample D)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
79-01-6	Trichloroethene	260	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	260	U	10000	43000
75-27-4	Bromodichloromethane	260	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	520	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	260	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	520	U	1000000(d)	1000000(d)
108-88-3	Toluene	260	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	520	U	NA	NA
79-00-5	1,1,2-Trichloroethane	520	U	22000	420000
127-18-4	Tetrachloroethene	260	U	4000(k)	6000(k)
591-78-6	2-Hexanone	520	U	NA	NA
126-48-1	Dibromochloromethane	520	U	NA	NA
108-90-7	Chlorobenzene	260	U	37000	680000
100-41-4	Ethylbenzene	520	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	780	U	NA	NA
1330-20-7	o-Xylene	520	U	NA	NA
100-42-5	Styrene	520	U	23000	97000
75-25-2	Bromoforn	520	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	520	U	34000	70000(k)

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.04(Sample E)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
107028	Acrolein	1700	U	NA	NA
107131	Acrylonitrile	1700	U	1000	5000
75650	tert-Butyl alcohol	3200	U	NA	NA
1634044	Methyl-tert-Butyl ether	740	U	NA	NA
108203	Di-isopropyl ether	490	U	NA	NA
	Dichlorodifluoromethane	990	U	NA	NA
74-87-3	Chloromethane	250	U	520000	1000000(d)
75-01-4	Vinyl Chloride	740	U	2000	7000
74-83-9	Bromomethane	490	U	79000	1000000(d)
75-00-3	Chloroethane	740	U	NA	NA
75-69-4	Trichlorofluoromethane	490	U	NA	NA
75-35-4	1, 1-Dichloroethene	250	U	8000	150000
67-64-1	Acetone	490	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	250	U	NA	NA
75-09-2	Methylene Chloride	490	U	49000	210000
156-60-5	trans-1,2-Dichloroethene	490	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	250	U	570000	1000000(d)
108-05-4	Vinyl Acetate	740	U	NA	NA
78-93-3	2-Butanone	740	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	250	U	79000	1000000(d)
67-66-3	Chloroform	250	U	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	250	U	NA	NA
56-23-5	Carbon Tetrachloride	490	U	2000(k)	4000(k)
71-43-2	Benzeze	250	U	3000	13000
107-06-2	1,2-Dichloroethane	490	U	6000	24000

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
 Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.04(Sample E)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
79-01-6	Trichloroethene	250	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	250	U	10000	43000
75-27-4	Bromodichloromethane	250	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	490	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	250	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	490	U	1000000(d)	1000000(d)
108-88-3	Toluene	250	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	490	U	NA	NA
79-00-5	1,1,2-Trichloroethane	490	U	22000	420000
127-18-4	Tetrachloroethene	250	U	4000(k)	6000(k)
591-78-6	2-Hexanone	490	U	NA	NA
126-48-1	Dibromochloromethane	490	U	NA	NA
108-90-7	Chlorobenzene	250	U	37000	680000
100-41-4	Ethylbenzene	490	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	740	U	NA	NA
1330-20-7	o-Xylene	490	U	NA	NA
100-42-5	Styrene	490	U	23000	97000
75-25-2	Bromoform	490	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	490	U	34000	70000(k)

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) SOILDate Sampled: 8/14/98Location: 2707Lab Sample ID: 3810.05(Sample F)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
107028	Acrolein	1900	U	NA	NA
107131	Acrylonitrile	1900	U	1000	5000
75650	tert-Butyl alcohol	3400	U	NA	NA
1634044	Methyl-tert-Butyl ether	790	U	NA	NA
108203	Di-isopropyl ether	530	U	NA	NA
	Dichlorodifluoromethane	1100	U	NA	NA
74-87-3	Chloromethane	260	U	520000	1000000(d)
75-01-4	Vinyl Chloride	790	U	2000	7000
74-83-9	Bromomethane	530	U	79000	1000000(d)
75-00-3	Chloroethane	790	U	NA	NA
75-69-4	Trichlorofluoromethane	530	U	NA	NA
75-35-4	1, 1-Dichloroethene	260	U	8000	150000
67-64-1	Acetone	530	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	260	U	NA	NA
75-09-2	Methylene Chloride	530	U	49000	210000
156-60-5	trans-1,2-Dichloroethene	530	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	260	U	570000	1000000(d)
108-05-4	Vinyl Acetate	790	U	NA	NA
78-93-3	2-Butanone	790	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	260	U	79000	1000000(d)
67-66-3	Chloroform	260	U	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	260	U	NA	NA
56-23-5	Carbon Tetrachloride	530	U	2000(k)	4000(k)
71-43-2	Benzeze	260	U	3000	13000
107-06-2	1,2-Dichloroethane	530	U	6000	24000

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
 Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.05(Sample F)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
79-01-6	Trichloroethene	260	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	260	U	10000	43000
75-27-4	Bromodichloromethane	260	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	530	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	260	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	530	U	1000000(d)	1000000(d)
108-88-3	Toluene	260	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	530	U	NA	NA
79-00-5	1,1,2-Trichloroethane	530	U	22000	420000
127-18-4	Tetrachloroethene	260	U	4000(k)	6000(k)
591-78-6	2-Hexanone	530	U	NA	NA
126-48-1	Dibromochloromethane	530	U	NA	NA
108-90-7	Chlorobenzene	260	U	37000	680000
100-41-4	Ethylbenzene	530	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	790	U	NA	NA
1330-20-7	o-Xylene	530	U	NA	NA
100-42-5	Styrene	530	U	23000	97000
75-25-2	Bromoform	530	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	530	U	34000	70000(k)

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETL NJDEP # 13461 Matrix: (soil/water) SOIL
Date Sampled: 8/14/98 Location: 2707 Lab Sample ID: 3810.06(Sample G)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
107028	Acrolein	1900	U	NA	NA
107131	Acrylonitrile	1900	U	1000	5000
75650	tert-Butyl alcohol	3500	U	NA	NA
1634044	Methyl-tert-Butyl ether	810	U	NA	NA
108203	Di-isopropyl ether	540	U	NA	NA
	Dichlorodifluoromethane	1100	U	NA	NA
74-87-3	Chloromethane	270	U	520000	1000000(d)
75-01-4	Vinyl Chloride	810	U	2000	7000
74-83-9	Bromomethane	540	U	79000	1000000(d)
75-00-3	Chloroethane	810	U	NA	NA
75-69-4	Trichlorofluoromethane	540	U	NA	NA
75-35-4	1, 1-Dichloroethene	270	U	8000	150000
67-64-1	Acetone	540	U	1000000(d)	1000000(d)
75-15-0	Carbon Disulfide	270	U	NA	NA
75-09-2	Methylene Chloride	540	U	49000	210000
156-60-5	trans-1,2-Dichloroethene	540	U	1000000(d)	1000000(d)
75-35-3	1,1-Dichloroethane	270	U	570000	1000000(d)
108-05-4	Vinyl Acetate	810	U	NA	NA
78-93-3	2-Butanone	810	U	1000000(d)	1000000(d)
156-59-2	cis-1,2-Dichloroethene	270	U	79000	1000000(d)
67-66-3	Chloroform	270	U	19000(k)	28000(k)
75-55-6	1,1,1-Trichloroethane	270	U	NA	NA
56-23-5	Carbon Tetrachloride	540	U	2000(k)	4000(k)
71-43-2	Benzeze	270	U	3000	13000
107-06-2	1,2-Dichloroethane	540	U	6000	24000

Table 3
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: FMETLNJDEP # 13461Matrix: (soil/water) SOILDate Sampled: 8/14/98Location: 2707Lab Sample ID: 3810.06(Sample G)

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

CAS NO.	PARAMETER	MDL	QUALIFIER	RESIDENTIAL	NON-RESIDENTIAL
79-01-6	Trichloroethene	270	U	23000	54000(k)
78-87-5	1, 2-Dichloropropane	270	U	10000	43000
75-27-4	Bromodichloromethane	270	U	11000(g)	46000(g)
110-75-8	2-Chloroethyl vinyl ether	540	U	NA	NA
10061-01-5	cis-1,3-Dichloropropene	270	U	NA	NA
108-10-1	4-Methyl-2-Pentanone	540	U	1000000(d)	1000000(d)
108-88-3	Toluene	270	U	1000000(d)	1000000(d)
10061-02-6	trans-1,3-Dichloropropene	540	U	NA	NA
79-00-5	1,1,2-Trichloroethane	540	U	22000	420000
127-18-4	Tetrachloroethene	270	U	4000(k)	6000(k)
591-78-6	2-Hexanone	540	U	NA	NA
126-48-1	Dibromochloromethane	540	U	NA	NA
108-90-7	Chlorobenzene	270	U	37000	680000
100-41-4	Ethylbenzene	540	U	1000000(d)	1000000(d)
1330-20-7	m+p-Xylenes	810	U	NA	NA
1330-20-7	o-Xylene	540	U	NA	NA
100-42-5	Styrene	540	U	23000	97000
75-25-2	Bromoform	540	U	86000	370000
79-34-5	1,1,2,2-Tetrachloroethane	540	U	34000	70000(k)

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.**
- (H) 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.**
- (J) TYPOGRAPHICAL ERROR.**
- (K) CRITERIA BASED ON INHALATION EXPOSURE PATHWAY, WHICH YIELDED A MORE STRINGENT CRITERION THAN THE INCIDENTAL INGESTION EXPOSURE PATHWAY.**
- (L) NEW CRITERION DERIVED USING METHODOLOGY IN THE BASIS AND BACKGROUND DOCUMENT.**
- (M) CRITERION BASED ON ECOLOGICAL (PHYTOTOXICITY) EFFECTS.**
- (N) LEVEL OF THE HUMAN HEALTH BASED CRITERION IS SUCH THAT EVALUATION FOR POTENTIAL ENVIRONMENTAL IMPACTS ON A SITE BY SITE BASIS IS RECOMMENDED.**

- (O) 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.**

FIGURES

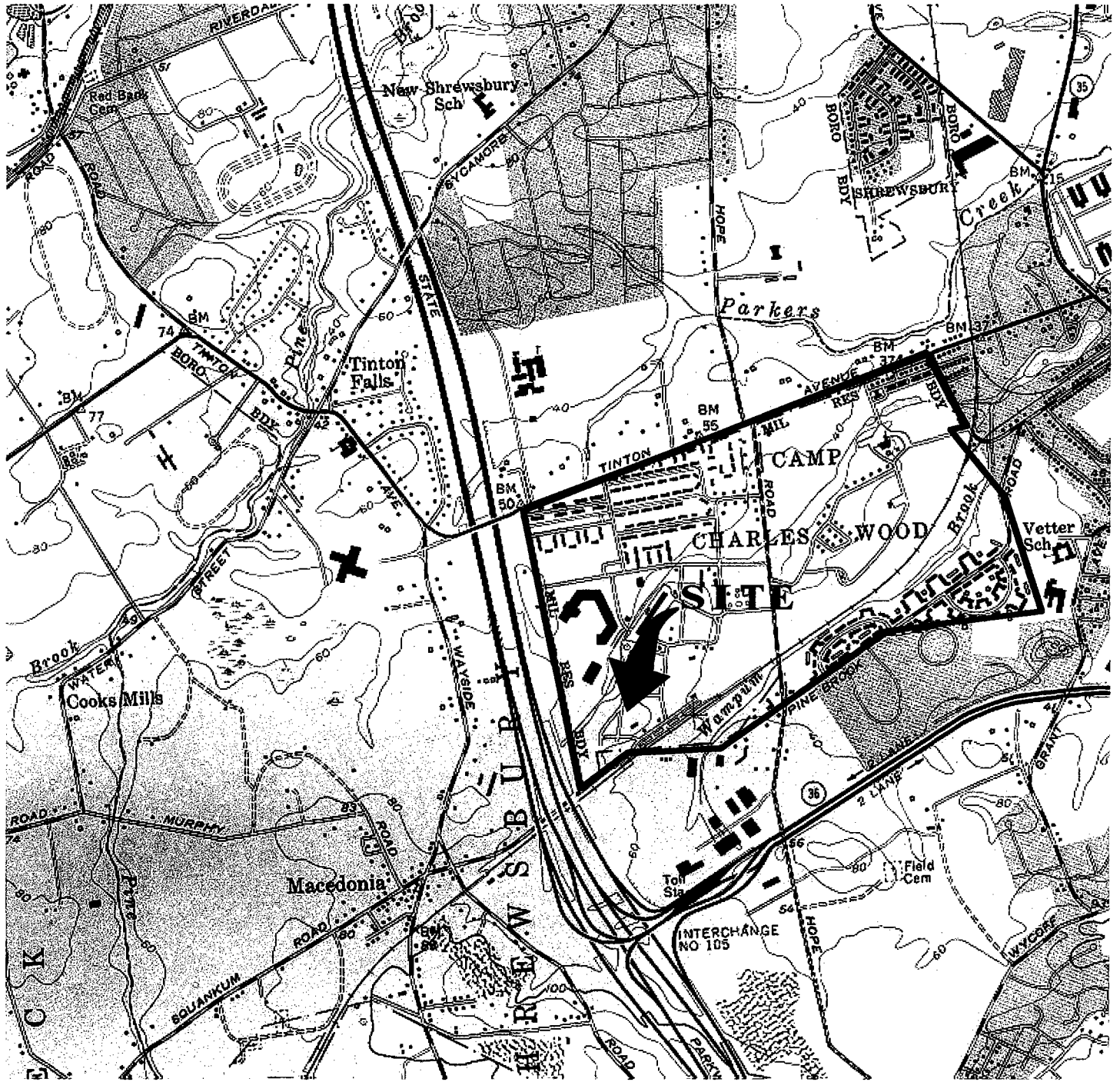


FIGURE 1

LOCATION MAP
 Building 2707
 Charles Wood
 Fort Monmouth Army Base
 Monmouth County, NJ

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

Scale: 1" = 2000'

Date: August 1998

LONG BRANCH, N. J.

40073-C8-TF-024

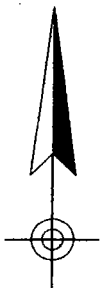
1954

PHOTOREVISED 1981

DMA 6164 I SE-SERIES V822

NEW
 JERSEY

QUADRANGLE LOCATION



2707 F102

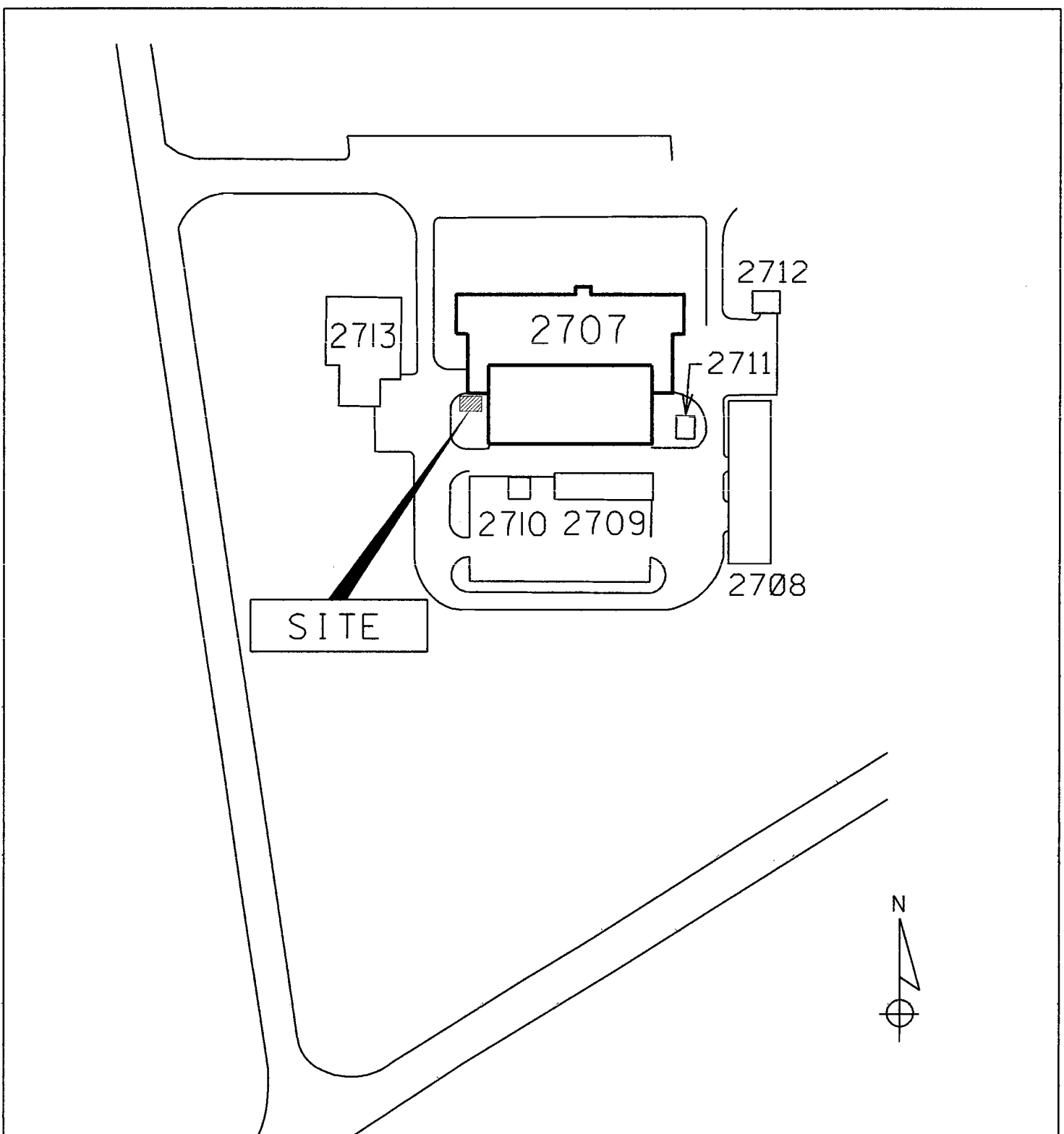
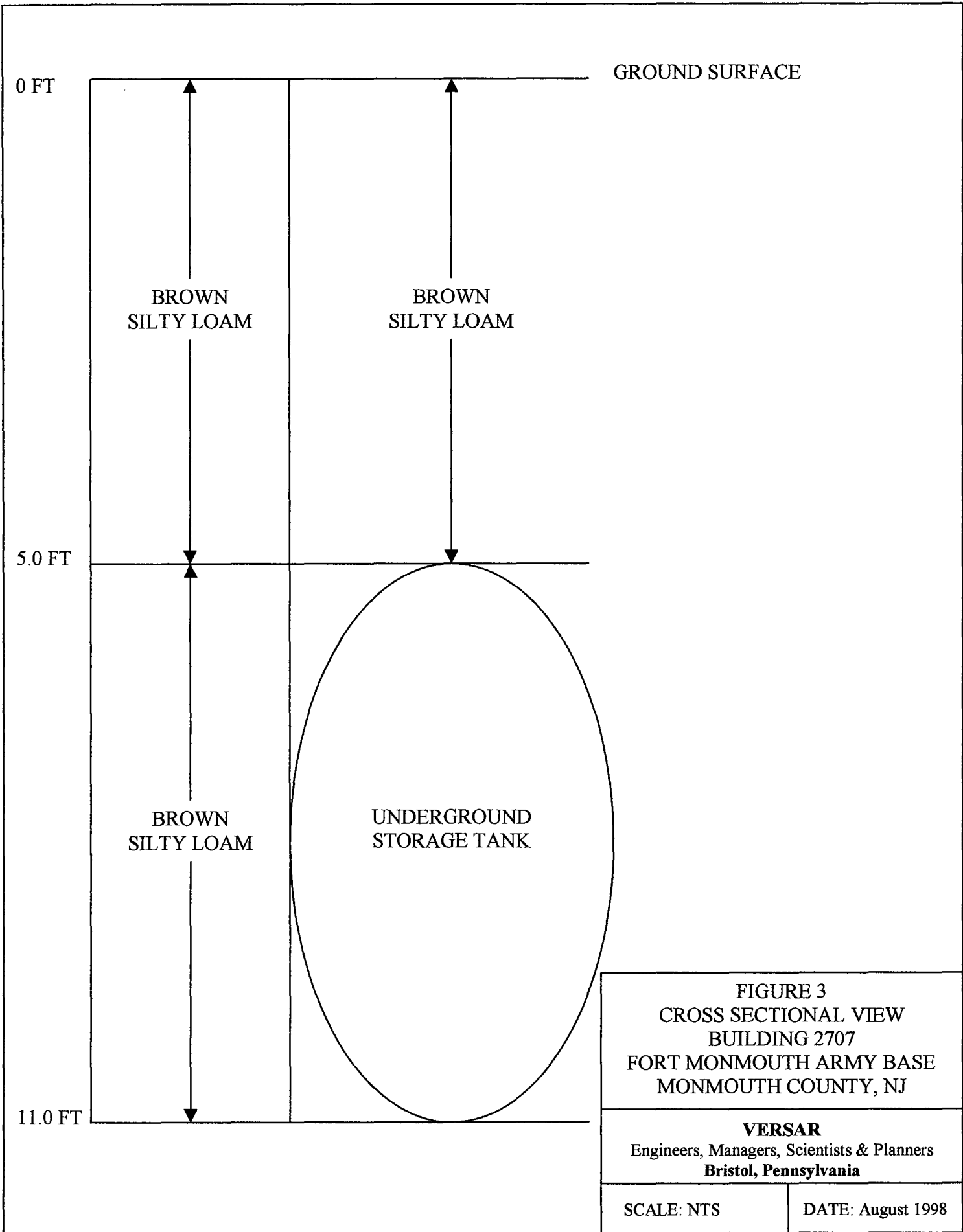


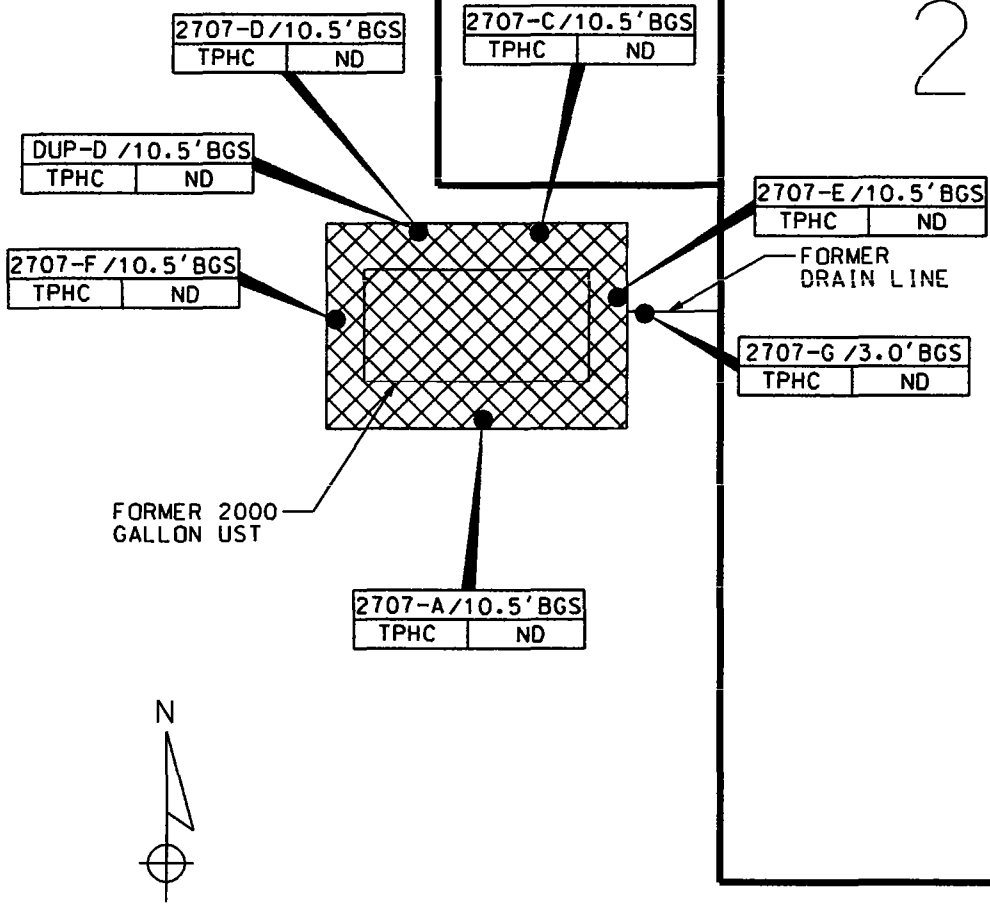
FIGURE 2
SITE MAP
BUILDING 2707
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=100' DATE: AUGUST 1998



BUILDING 2707



LEGEND

- SOIL SAMPLE LOCATION (AUGUST 13, 1998)
- ▣ LIMIT OF EXCAVATION (AUGUST 13, 1998)

NOTES:

1. ALL RESULTS IN MG/KG.
2. SEE TABLE 2 FOR TPHC RESULTS
3. SEE TABLE 3 FOR VOA RESULTS
4. BGS = BELOW GROUND SURFACE

FIGURE 4
SOIL SAMPLING LOCATION MAP
BUILDING 2707
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10' DATE: AUGUST 1998

2707 FIG4

APPENDIX A

NJDEP-STANDARD REPORTING FORM

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

FOR STATE USE ONLY

Check In Yes No

STATUS COMCODE
 Active Inactive

UNDERGROUND STORAGE TANK
 FACILITY QUESTIONNAIRE

FACILITY UST # 81515-

BLDG. 2707- SPILL RETENTION TANK

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

[Check appropriate box(es)]

- A. Is this a registration of a proposed or newly installed underground storage tank? (This form must be filed at least 30 days prior to operation)
- B. Is this a registration of an existing underground storage tank not presently registered?
- C. Is this a correction or amendment to an existing facility registration? UST # 81515-50
- D. There have been no changes to the facility registration since last submittal. UST # _____ (Go to certification page for signatures)

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

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

SECTION A - GENERAL FACILITY INFORMATION

1. Facility Name CHARLES WOOD WEST

2. Facility Location FORT MONMOUTH
NUMBER AND STREET

_____ CITY OR MUNICIPALITY

_____ COUNTY N.J. STATE _____ ZIP CODE _____ BLOCK _____ LOT

3. Facility Operator _____ PERSON OR TITLE Contact Tele. No. _____ (Area Code) _____ (Extension)

Operator Address (if different than #2) _____ NUMBER AND STREET

_____ CITY OR MUNICIPALITY

_____ STATE _____ ZIP CODE

4. Tank Owner _____

5. Tank Owner Address _____ NUMBER AND STREET

_____ CITY OR MUNICIPALITY

_____ STATE _____ ZIP CODE

Contact Person (Tank Owner) CHARLES APPELBY Contact Tele. No. 732 532 6224 (Area Code) _____ (Extension)

7. EPA ID # _____

3. Total number of regulated underground storage tanks at facility _____ (Complete Section B for each tank)

9. Total regulated underground storage tank capacity at facility (gallons)

B.2707 SPILL
RETENTION

10. Facility Type: A State C County/Municipal E Charitable / Public School G Other
 B Commercial/ Industrial D Federal F Residence H Farm (as defined in N.J.S.A. 54:4-23.1 et seq.)

11. Is a copy of the facility site plan submitted with this registration pursuant to N.J.A.C. 7:14B-2? YES NO

SECTION B - SPECIFIC TANK INFORMATION

ALL underground tanks, including those taken out of operation (UNLESS THE TANK WAS REMOVED FROM THE GROUND PRIOR TO 9/3/86) must be registered. Report all tank/piping status changes unless previously submitted.

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

Tank Identification Number	TANK NO. [][][][]	TANK NO. [][][][]	TANK NO. [][][][]	TANK NO. [][][][]	TANK NO. [][][][]
8. Type of Monitoring/Detection System	Tank Piping	Tank Piping	Tank Piping	Tank Piping	Tank Piping
K. None	[][]	[][]	[][]	[][]	[][]
L. Other (please specify)					
9. Overfill Protection (tank only) (Mark one X for each tank)					
A. Yes	[]	[]	[]	[]	[]
B. No	[]	[]	[]	[]	[]
10. Spill Containment Around Fill Pipe (Mark one X for each tank)					
A. Yes	[]	[]	[]	[]	[]
B. No	[]	[]	[]	[]	[]
11. Tank Status (Mark one X for each tank)	Tank Piping	Tank Piping	Tank Piping	Tank Piping	Tank Piping
A. In-use	[][]	[][]	[][]	[][]	[][]
B. Empty less than 12 months	[][]	[][]	[][]	[][]	[][]
C. Empty 12 months or more	[][]	[][]	[][]	[][]	[][]
D. Emergency spill tank (sump)	[][]	[][]	[][]	[][]	[][]
E. Emergency backup generator tank	[][]	[][]	[][]	[][]	[][]
F. Abandoned in Place	[][]	[][]	[][]	[][]	[][]
G. Removed	[][]	[][]	[][]	[][]	[][]
H. Other (please specify)					
12. If box 11B, C, or D above has been marked, indicate the estimated date last used (month/day/year)	Mo. Day Year	Mo. Day Year	Mo. Day Year	Mo. Day Year	Mo. Day Year
13. Closure Information - Tank ID No.	TANK NO. 0050	TANK NO. [][][][]	TANK NO. [][][][]	TANK NO. [][][][]	TANK NO. [][][][]
A. Date abandoned in place	Mo. Day Year	Mo. Day Year	Mo. Day Year	Mo. Day Year	Mo. Day Year
B. Date taken temporarily out of service					
C. Date removed	08/31/98				
D. Date of Sale or Transfer					
E. TMS # (if applicable)					
F. ISRA # (if applicable)					

SECTION C - FINANCIAL RESPONSIBILITY

Does this facility have a Financial Responsibility Assurance Mechanism as required in 40 CFR 280? YES NO
 Please list the appropriate financial information below:

Type	Carrier / Issuing Agency
Effective Date: ___/___/___	Policy Number: _____
Expiration Date: ___/___/___	Amount: \$ _____

SECTION D - MONITORING SYSTEMS

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

SECTION E - RECORDKEEPING/COMPLIANCE

- Please answer all the questions in this section on a facility basis. Any one tank not in compliance requires a "NO" answer for the entire facility.
- Does this facility have cathodic protection systems for all steel tanks and piping? YES NO
 If "Yes", are the systems properly operated and maintained pursuant to N.J.A.C. 7:14B-5? YES NO
 - Are the performance claims and documentation of monitoring systems maintained by the owner or operator pursuant to N.J.A.C. 7:14B-5? YES NO
 - Are the proper monitoring, testing, sampling, repair and inventory records kept on-site pursuant to N.J.A.C. 7:14B-5 and 6? YES NO
 - Is the proper Release Response Plan kept on-site pursuant to N.J.A.C. 7:14B-5? YES NO
 - Does the facility have spill and over fill protection systems pursuant to N.J.A.C. 7:14B-4? YES NO
 - Have all Fill Ports been permanently marked as per API #1637 pursuant to N.J.A.C. 7:14B-5? YES NO

IMPORTANT INFORMATION *BLDG. 2707 SPILL RETENTION*

- FEE:** Please make checks payable to: "Treasurer, State of New Jersey". Use of the enclosed return envelope will expedite processing. Registration and Billing Schedule can be found in N.J.A.C. 7:14B.
All Initial Registration fees are \$100 per facility.
- PENALTY:** Failure by owner or operator of a regulated underground storage tank to comply with any requirement of the State UST Act or regulations may result in the penalties set forth in N.J.S.A. 58:10A-10.
- EMERGENCY:** If a discharge or spill occurs, the NJDEP Hotline at (609) 292-7172 must be called IMMEDIATELY - 24 hours a day.
- UPGRADE EXEMPTION:** Residential heating oil underground storage tanks are exempt from all upgrade requirements.

DATES TO KNOW (critical deadlines)

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

CERTIFICATIONS

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

CERTIFICATION NO. 1:

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

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

JAMES OIT
(Typed / Printed Name)
DIRECTOR PUBLIC WORKS
(Title)

(Signature)

(Date)

CERTIFICATION NO. 2:

Must be signed as follows:

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

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

(Typed / Printed Name)

(Title)

(Signature)

(Date)

CERTIFICATION NO. 3:

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

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

(Typed / Printed Name) (Title)

(Name of Firm, if applicable)

(Signature) (Date)

(N.J. Certification Number)

APPENDIX B
SITE ASSESSMENT SUMMARY

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name : U.S. Army Fort Monmouth New Jersey

Facility Street Address : Directorate of Public Works Building 173

Municipality: Oceanport County : Monmouth

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

B. Owner (RP)'s Name:

Street Address: City :

State: Zip: Telephone Number :

C. (Check as appropriate)

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

D. (Complete all that apply)

- Assigned Case Manager : Ian Curtis, Federal Case Manager
UST Registration Number : 81515-50 (7 digits)
Incident Report Number (10 or 12 digits)
Tank Closure Number : Federal Case Manager

E. Certification by the Subsurface Evaluator:

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

Name: Charles Appleby Signature: See signed subsurface removal log UST Cert. No.: 2056

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

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

State: NJ Zip: 07703 Telephone Number : 732-532-6224

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

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

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

- 1. For a Corporation by a person authorized by a resolution of the board of directors to sign the document.
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, federal or other public agency by either a principal executive officer or ranking elected Official.

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

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

Signature:

Company Name: U.S. Army Fort Monmouth Date:

**US ARMY, SELFM-PW-EV
DAILY UST SUBSURFACE REMOVAL LOG**

BLDG.#: 2707 REG.#: 0081515 - 50 CLOSURE#: JVS
 DATE: 8/31/98 TOA: 1350 TOD: 1500
 GOV. SSE: C. Appleby NJDEP CERT.#: 2056
 REMOVAL CONTRACTOR: SME Inc. JVS
 CLOSURE SUPERVISOR: Greg Demetrius NJDEP CERT.#: _____
 WEATHER: Sunny & Warm ~ 89°

ACTIVITY	YES / NO
THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES	YES
THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND <u>SAMPLING ACTIVITIES</u>	YES
ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR)	YES
A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR	NA
THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED	NA
A DISCHARGE WAS REPORTED TO THE NJDEP (609-292-7172), CASE# _____	NA
PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK	JVS
GROUNDWATER WAS ENCOUNTERED AT _____ FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW	NA
IF <u>OVA</u> /Hnu WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC) <u>y</u>	JVS
IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN) <u>y</u>	JVS
ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992 <u>y</u>	JVS
ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/ <u>FID</u> RECORDED SITES IAW 7:26E-3.6 <u>et seq.</u>	YES *
ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY	NA
THE SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER)	NO
ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM <u>Bohr</u>	YES
THE FOLLOWING DOCUMENTS WERE ADDED TO THE PROJECT FOLDER TODAY: (CIRCLE EACH) SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, HAZ. WASTE MANIFEST, DAILY UST CLOSURE LOG, SCALED SITE MAP (SAMPLING), SRF-CLOSURE, CHAIN OF CUSTODY, SOIL ANALYTICAL RESULTS, CLEAN FILL TICKETS (IN YDS'), PHOTOGRAPHS (UST, EXCAVATION, SAMPLING POINTS)	NO

CHECK ALL BOXES, LEAVE NO BLANKS

I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3 and 7:26 et seq.. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment.

SIGNATURE: [Signature] DATE: 8/31/98
 ca\ms\ust\removal\sitessls.doc Chris Appleby

* Sampling was biased toward accessible areas. Due to buried H-voltage electric lines full excavation of return lines was not possible. (see site map for this date). other activities today at this site - Break concrete at 3 ust site.

SRF sent 9/18/98 CJ

APPENDIX C

UST DISPOSAL CERTIFICATE



DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey 07703 - 5101



2500 AREA

REPLY TO
ATTENTION OF

Directorate of Public Works

Date: October 6, 1998

Marpal Disposal Company, Inc.
P.O. Box 188
Lincroft, New Jersey 07738

Re: Non-Hazardous waste disposal
Dumpster number: # 2065ADK
Contract number: DAAB07-96-C-8252
Size: 20 cubic yards

Dear Sirs:

I certify that the above referenced dumpster provided by Marpal Disposal Company, Inc. contains only fiberglass underground storage tanks that previously stored No. 2 heating oil or were never utilized. The tanks were cleaned in accordance with acceptable industry standards and NJDEP protocol. No free liquids are present in the dumpster.

If you should require any additional information or help at this time, please contact Mr. Charles Appleby, Environmental Protection Specialist. He can be reached at the following telephone number: (732) 532-6224.

Sincerely,

James Ott, PL
Director, Public Works

Attachments: None



**MONMOUTH COUNTY
RECLAMATION CENTER**
TINTON FALLS, NJ

MAILING ADDRESS: 6000 ASBURY AVE.
NEPTUNE, NJ 07753

CUSTOMER COPY

FACILITY I.D. NO. 1336F1SP01

RECEIPT DOCUMENT NUMBER

01723947

BILL TO

MARP508937
MARPAL COMPANY
PO BOX 188
LINCROFT NJ 07738

BILL TO

MARP508937
MARPAL COMPANY
PO BOX 188
LINCROFT NJ 07738
Escrow Level: 2400.00

78109

DATE	ENTRY TIME	OPER.	EXIT TIME	OPER.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT
10/08/98	07:45	VJF	08:01	KRW	(22300 LB) Scale 02	(26540 LB) Scale 04	5820 LB 2.91 T
00074427	Scale 02		Scale 04		(21.18 T)	(18.27 T)	

VEHICLE NUMBER	VEHICLE TYPE	PLATE NUMBER	TRANSACTION TYPE
2065AU	Rolloff Open	XX89HD	TUS (2500 Awt) Normal

QUANTITY	WC	DESCRIPTION/ORIGIN	UNITS	UNIT PRICE	AMOUNT
2.9100	13	Bulky Waste - (MRF) MONMOUTH COUNTY EATONTOWN BOROUGH	Tons 100.00%	88.15	256.32

I hereby certify that the information provided herein is true to the best of my knowledge.

81806.32 ***

DRIVER NAME
PRINT

R. Jacques

SIGNATURE

[Signature]

DOCUMENT
TOTAL

256.32



DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey 07703 - 5101



2500 AREA

REPLY TO
ATTENTION OF

Directorate of Public Works

Date: October 6, 1998

Marpal Disposal Company, Inc.
P.O. Box 188
Lincroft, New Jersey 07738

Re: Non-Hazardous waste disposal
Dumpster number: # 2065ADU
Contract number: DAAB07-96-C-8252
Size: 20 cubic yards

Dear Sirs:

I certify that the above referenced dumpster provided by Marpal Disposal Company, Inc. contains only fiberglass underground storage tanks that previously stored No. 2 heating oil or were never utilized. The tanks were cleaned in accordance with acceptable industry standards and NJDEP protocol. No free liquids are present in the dumpster.

If you should require any additional information or help at this time, please contact Mr. Charles Appleby, Environmental Protection Specialist. He can be reached at the following telephone number: (732) 532-6224.

Sincerely,

James Ott, PE
Director, Public Works

Attachments: None



MONMOUTH COUNTY RECLAMATION CENTER TINTON FALLS, NJ

MAILING ADDRESS: 6000 ASBURY AVE. NEPTUNE, NJ 07753

CUSTOMER COPY

FACILITY I.D. NO. 1336F1SP01

RECEIPT DOCUMENT NUMBER

01724037

BILL TO

MARP508937 MARPAL COMPANY PO BOX 188

LINCROFT

NJ 07738

HAULER

MARP508937 MARPAL COMPANY PO BOX 188

LINCROFT

78108

NJ 07738

Escrow Level: 2400.00

DATE	ENTRY TIME	OPERL	EXIT TIME	OPERL	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT
10/08/98	10:25	PMN	10:40	BER	(43400 LB) Scale 01	(36600 LB) Scale 03	(6720 LB) (3.36 T)

VEHICLE NUMBER	VEHICLE TYPE	PLATE NUMBER	TRANSACTION TYPE
2065AU	Roll off Open	XX89HI	TOS (2500 AKA)

QUANTITY	WC	DESCRIPTION	ORIGIN	UNITS	UNIT PRICE	AMOUNT
3.3600	13	Bulky Waste - MRF	MONMOUTH COUNTY EATONTOWN BOROUGH	Tons	88.15	296.18

I hereby certify that the information provided on this form is true to the best of my knowledge.

*** Prepayment Balance Remaining: 77179.02

DRIVER NAME PRINT

R. Jacques

SIGNATURE

[Signature]

DOCUMENT TOTAL

296.18

APPENDIX D

SOIL 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: #98-0001/BLDG.2707

BLDG. 2707/2000 GAL. SILL RETENTION TANK

Field Location No. & Location	Laboratory Sample ID#	Matrix	Date and Time Of Collection	Date Received
2707-A	3810.01	Soil	14-Aug-98 15:35	08/14/98
2707-C	3810.02	Soil	14-Aug-98 15:42	08/14/98
2707-D	3810.03	Soil	14-Aug-98 15:38	08/14/98
2707-E	3810.04	Soil	14-Aug-98 15:45	08/14/98
2707-F	3810.05	Soil	14-Aug-98 15:33	08/14/98
2707-G	3810.06	Soil	14-Aug-98 15:50	08/14/98
2707-DUP.	3810.07	Soil	14-Aug-98	08/14/98
T.B.	3810.08	Methanol	14-Aug-98	08/14/98

ANALYSIS:
FORT MONMOUTH ENVIRONMENTAL LAB
VOA+15, TPHC, %SOLIDS


Daniel Wright/Date
. Laboratory Director

ENCLOSURE:
CHAIN OF CUSTODY
RESULTS

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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.

Method Summary

EPA SW-846 Method 8260

Gas Chromatographic Determination of Volatiles in Soil

A 50uL volume of methanol soil sample 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 is 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) yes

2. Retention times for chromatograms provided yes

3. GC/MS Tune Specifications yes
 - a. BFB Meet Criteria yes
 - b. DFTPP Meet Criteria NA

4. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series yes

5. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series yes

6. GC/MS Calibration Requirements yes
 - a. Calibration Check Compounds Meet Criteria yes
 - b. System Performance Check Compounds Meet Criteria yes

7. Blank Contamination - If yes, List compounds and concentrations in each blank: NO
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____

8. Surrogate Recoveries Meet Criteria yes

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

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

If not met, were the calculations checked and the results qualified as "estimated"? _____

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

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

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

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)

yes

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

11. Extraction Holding Time Met

N/A

If not met, list number of days exceeded for each sample: _____

12. Analysis Holding Time Met

yes

If not met, list number of days exceeded for each sample: _____

Additional Comments:

Laboratory Manager



Date:


10/15/96

PHC Conformance/Non-conformance Summary Report

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

Laboratory Authentication Statement

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



 Daniel K. Wright
 Laboratory Manager



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NJDEP Certification #13461

Chain of Custody Record

Customer: Charles Appleby		Project No: 98-0001		Analysis Parameters					Comments:		
Phone #: X26224		Location: <u>B 2707</u>		TPHC	% SOLIDS	VOA+15	VOA ID Number	OVA	* = Samples Kept <4 Celsius		
()DERA (X)OMA UST Assessment		UST# <u>2, GAL. SPILL RETENTION TANK</u>							Remarks / Preservation Method		
Samplers Name / Company : Gary DiMartinis TVS				Sample #							
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	TPHC	% SOLIDS	VOA+15	VOA ID Number	OVA	Remarks / Preservation Method
<u>61</u>	<u>2707-A</u>	<u>8-13-98</u>	<u>1535</u>	<u>SOIL</u>	<u>2</u>	X	X	X	<u>883</u>	<u>ND</u>	<u>SIDEWALL @ 10.5' *</u>
<u>62</u>	<u>B</u>		<u>—</u>						<u>885^{hd}</u>	<u>ND</u>	<u>NOT COLLECTED</u>
<u>63</u>	<u>C</u>		<u>1542</u>						<u>886^{hd} 885</u>	<u>ND</u>	<u>SIDEWALL @ 10.5'</u>
<u>64</u>	<u>D</u>		<u>1538</u>						<u>887^{hd} 886</u>	<u>ND</u>	
<u>65</u>	<u>E</u>		<u>1545</u>						<u>888</u>	<u>ND</u>	
<u>66</u>	<u>F</u>		<u>1533</u>						<u>888</u>	<u>ND</u>	
<u>67</u>	<u>G</u>		<u>1550</u>						<u>889</u>	<u>ND</u>	<u>Piping Run @ 3.0'</u>
<u>68</u>	<u>DUP</u>		<u>—</u>	↓	↓	↓	↓	↓	<u>884</u>	<u>—</u>	<u>FIELD DUPLICATE</u>
<u>69</u>	<u>TB</u>		<u>—</u>	↓	↓	↓	↓	↓	<u>890</u>	<u>—</u>	<u>TRIP BLANK</u>

Note: OVA(#A51903) Calibrated With 95 ppm Methane & Zero Air @ 1525 on 8-13-98 by Gary DiMartinis

Relinquished by (signature): <u>[Signature]</u>	Date/Time: <u>8-14-98 0925</u>	Received by (signature): <u>[Signature]</u>	Relinquished by (signature):	Date/Time:	Received by (signature):
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified

Turnaround time: (X) Standard 4 wks, () Rush _____ Days, () ASAP Verbal _____ Hrs.

Remarks: Dedicated Sampling Tools Used

VOLATILES

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

VBLK39

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: VBLK39

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01322.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 0 Date Analyzed: 08/24/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

VBLK39

Lab Name: FMETL NJDEP # 13561
 Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
 Matrix (soil/water) SOIL Lab Sample ID: VBLK39
 Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01322.D
 Level: (low/med) MED Date Received: 08/14/98
 % Moisture: not dec. 0 Date Analyzed: 08/24/98
 GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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.

VBLK39

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix (soil/water) SOIL Lab Sample ID: VBLK39
Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01322.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 0 Date Analyzed: 08/24/98
GC Column: RTX-502 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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

A

Lab Name: FMETL NJDEP # 13561
 Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
 Matrix (soil/water) SOIL Lab Sample ID: 3810.01
 Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01329.D
 Level: (low/med) MED Date Received: 08/14/98
 % Moisture: not dec. 7.17 Date Analyzed: 08/25/98
 GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

107028	Acrolein	1900	U
107131	Acrylonitrile	1900	U
75650	tert-Butyl alcohol	3500	U
1634044	Methyl-tert-Butyl ether	810	U
108203	Di-isopropyl ether	540	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	270	U
75-01-4	Vinyl Chloride	810	U
74-83-9	Bromomethane	540	U
75-00-3	Chloroethane	810	U
75-69-4	Trichlorofluoromethane	540	U
75-35-4	1,1-Dichloroethene	270	U
67-64-1	Acetone	540	U
75-15-0	Carbon Disulfide	270	U
75-09-2	Methylene Chloride	540	U
156-60-5	trans-1,2-Dichloroethene	540	U
75-35-3	1,1-Dichloroethane	270	U
108-05-4	Vinyl Acetate	810	U
78-93-3	2-Butanone	810	U
	cis-1,2-Dichloroethene	270	U
67-66-3	Chloroform	270	U
75-55-6	1,1,1-Trichloroethane	270	U
56-23-5	Carbon Tetrachloride	540	U
71-43-2	Benzene	270	U
107-06-2	1,2-Dichloroethane	540	U
79-01-6	Trichloroethene	270	U
78-87-5	1,2-Dichloropropane	270	U
75-27-4	Bromodichloromethane	270	U
110-75-8	2-Chloroethyl vinyl ether	540	U
10061-01-5	cis-1,3-Dichloropropene	270	U
108-10-1	4-Methyl-2-Pentanone	540	U
108-88-3	Toluene	270	U
10061-02-6	trans-1,3-Dichloropropene	540	U
79-00-5	1,1,2-Trichloroethane	540	U
127-18-4	Tetrachloroethene	270	U
591-78-6	2-Hexanone	540	U
126-48-1	Dibromochloromethane	540	U
108-90-7	Chlorobenzene	270	U
100-41-4	Ethylbenzene	540	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

A

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.01

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01329.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 7.17 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

1330-20-7	m+p-Xylenes	810	U
1330-20-7	o-Xylene	540	U
100-42-5	Styrene	540	U
75-25-2	Bromoform	540	U
79-34-5	1,1,2,2-Tetrachloroethane	540	U
541-73-1	1,3-Dichlorobenzene	810	U
106-46-7	1,4-Dichlorobenzene	810	U
95-50-1	1,2-Dichlorobenzene	810	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

A

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix: (soil/water) SOIL Lab Sample ID: 3810.01
Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01329.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 7.17 Date Analyzed: 08/25/98
GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

Number TICs found: 0

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

C

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.02

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB01330.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 5 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3300	U
1634044	Methyl-tert-Butyl ether	760	U
108203	Di-isopropyl ether	510	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	760	U
74-83-9	Bromomethane	510	U
75-00-3	Chloroethane	760	U
75-69-4	Trichlorofluoromethane	510	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	510	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	510	U
156-60-5	trans-1,2-Dichloroethene	510	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	760	U
78-93-3	2-Butanone	760	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	510	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	510	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	510	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	510	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	510	U
79-00-5	1,1,2-Trichloroethane	510	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	510	U
126-48-1	Dibromochloromethane	510	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	510	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

C

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.02

Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB01330.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 5 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		760	U
1330-20-7	o-Xylene		510	U
100-42-5	Styrene		510	U
75-25-2	Bromoform		510	U
79-34-5	1,1,2,2-Tetrachloroethane		510	U
541-73-1	1,3-Dichlorobenzene		760	U
106-46-7	1,4-Dichlorobenzene		760	U
95-50-1	1,2-Dichlorobenzene		760	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

C

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix (soil/water) SOIL Lab Sample ID: 3810.02
Sample wt/vol: 10.3 (g/ml) G Lab File ID: VB01330.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 5 Date Analyzed: 08/25/98
GC Column: RTX-502 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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

D

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.03

Sample wt/vol: 10.7 (g/ml) G Lab File ID: VB01331.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 9.96 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		1800	U
107131	Acrylonitrile		1800	U
75650	tert-Butyl alcohol		3400	U
1634044	Methyl-tert-Butyl ether		780	U
108203	Di-isopropyl ether		520	U
	Dichlorodifluoromethane		1000	U
74-87-3	Chloromethane		260	U
75-01-4	Vinyl Chloride		780	U
74-83-9	Bromomethane		520	U
75-00-3	Chloroethane		780	U
75-69-4	Trichlorofluoromethane		520	U
75-35-4	1,1-Dichloroethene		260	U
67-64-1	Acetone		520	U
75-15-0	Carbon Disulfide		260	U
75-09-2	Methylene Chloride		520	U
156-60-5	trans-1,2-Dichloroethene		520	U
75-35-3	1,1-Dichloroethane		260	U
108-05-4	Vinyl Acetate		780	U
78-93-3	2-Butanone		780	U
	cis-1,2-Dichloroethene		260	U
67-66-3	Chloroform		260	U
75-55-6	1,1,1-Trichloroethane		260	U
56-23-5	Carbon Tetrachloride		520	U
71-43-2	Benzene		260	U
107-06-2	1,2-Dichloroethane		520	U
79-01-6	Trichloroethene		260	U
78-87-5	1,2-Dichloropropane		260	U
75-27-4	Bromodichloromethane		260	U
110-75-8	2-Chloroethyl vinyl ether		520	U
10061-01-5	cis-1,3-Dichloropropene		260	U
108-10-1	4-Methyl-2-Pentanone		520	U
108-88-3	Toluene		260	U
10061-02-6	trans-1,3-Dichloropropene		520	U
79-00-5	1,1,2-Trichloroethane		520	U
127-18-4	Tetrachloroethene		260	U
591-78-6	2-Hexanone		520	U
126-48-1	Dibromochloromethane		520	U
108-90-7	Chlorobenzene		260	U
100-41-4	Ethylbenzene		520	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

D

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix: (soil/water) SOIL Lab Sample ID: 3810.03

Sample wt/vol: 10.7 (g/ml) G Lab File ID: VB01331.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 9.96 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

1330-20-7	m+p-Xylenes	780	U
1330-20-7	o-Xylene	520	U
100-42-5	Styrene	520	U
75-25-2	Bromoform	520	U
79-34-5	1,1,2,2-Tetrachloroethane	520	U
541-73-1	1,3-Dichlorobenzene	780	U
106-46-7	1,4-Dichlorobenzene	780	U
95-50-1	1,2-Dichlorobenzene	780	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

D

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix: (soil/water) SOIL Lab Sample ID: 3810.03
Sample wt/vol: 10.7 (g/ml) G Lab File ID: VB01331.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 9.96 Date Analyzed: 08/25/98
GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

E

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.04

Sample wt/vol: 11.1 (g/ml) G Lab File ID: VB01332.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 8.56 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

107028	Acrolein	1700	U
107131	Acrylonitrile	1700	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	740	U
108203	Di-isopropyl ether	490	U
	Dichlorodifluoromethane	990	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	740	U
74-83-9	Bromomethane	490	U
75-00-3	Chloroethane	740	U
75-69-4	Trichlorofluoromethane	490	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	490	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	490	U
156-60-5	trans-1,2-Dichloroethene	490	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	740	U
78-93-3	2-Butanone	740	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	490	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	490	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	490	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	490	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	490	U
79-00-5	1,1,2-Trichloroethane	490	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	490	U
126-48-1	Dibromochloromethane	490	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	490	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

E

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.04

Sample wt/vol: 11.1 (g/ml) G Lab File ID: VB01332.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 8.56 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

1330-20-7	m+p-Xylenes	740	U
1330-20-7	o-Xylene	490	U
100-42-5	Styrene	490	U
75-25-2	Bromoform	490	U
79-34-5	1,1,2,2-Tetrachloroethane	490	U
541-73-1	1,3-Dichlorobenzene	740	U
106-46-7	1,4-Dichlorobenzene	740	U
95-50-1	1,2-Dichlorobenzene	740	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

E

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix: (soil/water) SOIL Lab Sample ID: 3810.04
Sample wt/vol: 11.1 (g/ml) G Lab File ID: VB01332.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 8.56 Date Analyzed: 08/25/98
GC Column: RTX-502 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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

F

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.05

Sample wt/vol: 10.8 (g/ml) G Lab File ID: VB01333.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 12.18 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

107028	Acrolein	1900	U
107131	Acrylonitrile	1900	U
75650	tert-Butyl alcohol	3400	U
1634044	Methyl-tert-Butyl ether	790	U
108203	Di-isopropyl ether	530	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	260	U
75-01-4	Vinyl Chloride	790	U
74-83-9	Bromomethane	530	U
75-00-3	Chloroethane	790	U
75-69-4	Trichlorofluoromethane	530	U
75-35-4	1,1-Dichloroethene	260	U
67-64-1	Acetone	530	U
75-15-0	Carbon Disulfide	260	U
75-09-2	Methylene Chloride	530	U
156-60-5	trans-1,2-Dichloroethene	530	U
75-35-3	1,1-Dichloroethane	260	U
108-05-4	Vinyl Acetate	790	U
78-93-3	2-Butanone	790	U
	cis-1,2-Dichloroethene	260	U
67-66-3	Chloroform	260	U
75-55-6	1,1,1-Trichloroethane	260	U
56-23-5	Carbon Tetrachloride	530	U
71-43-2	Benzene	260	U
107-06-2	1,2-Dichloroethane	530	U
79-01-6	Trichloroethene	260	U
78-87-5	1,2-Dichloropropane	260	U
75-27-4	Bromodichloromethane	260	U
110-75-8	2-Chloroethyl vinyl ether	530	U
10061-01-5	cis-1,3-Dichloropropene	260	U
108-10-1	4-Methyl-2-Pentanone	530	U
108-88-3	Toluene	260	U
10061-02-6	trans-1,3-Dichloropropene	530	U
79-00-5	1,1,2-Trichloroethane	530	U
127-18-4	Tetrachloroethene	260	U
591-78-6	2-Hexanone	530	U
126-48-1	Dibromochloromethane	530	U
108-90-7	Chlorobenzene	260	U
100-41-4	Ethylbenzene	530	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

F

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.05

Sample wt/vol: 10.8 (g/ml) G Lab File ID: VB01333.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 12.18 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

1330-20-7	m+p-Xylenes	790	U
1330-20-7	o-Xylene	530	U
100-42-5	Styrene	530	U
75-25-2	Bromoform	530	U
79-34-5	1,1,2,2-Tetrachloroethane	530	U
541-73-1	1,3-Dichlorobenzene	790	U
106-46-7	1,4-Dichlorobenzene	790	U
95-50-1	1,2-Dichlorobenzene	790	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

F

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix: (soil/water) SOIL Lab Sample ID: 3810.05
Sample wt/vol: 10.8 (g/ml) G Lab File ID: VB01333.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 12.18 Date Analyzed: 08/25/98
GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

G

Lab Name: FMETL NJDEP # 13561
 Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
 Matrix: (soil/water) SOIL Lab Sample ID: 3810.06
 Sample wt/vol: 10.8 (g/ml) G Lab File ID: VB01334.D
 Level: (low/med) MED Date Received: 08/14/98
 % Moisture: not dec. 13.75 Date Analyzed: 08/25/98
 GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

107028	Acrolein	1900	U
107131	Acrylonitrile	1900	U
75650	tert-Butyl alcohol	3500	U
1634044	Methyl-tert-Butyl ether	810	U
108203	Di-isopropyl ether	540	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	270	U
75-01-4	Vinyl Chloride	810	U
74-83-9	Bromomethane	540	U
75-00-3	Chloroethane	810	U
75-69-4	Trichlorofluoromethane	540	U
75-35-4	1,1-Dichloroethene	270	U
67-64-1	Acetone	540	U
75-15-0	Carbon Disulfide	270	U
75-09-2	Methylene Chloride	540	U
156-60-5	trans-1,2-Dichloroethene	540	U
75-35-3	1,1-Dichloroethane	270	U
108-05-4	Vinyl Acetate	810	U
78-93-3	2-Butanone	810	U
	cis-1,2-Dichloroethene	270	U
67-66-3	Chloroform	270	U
75-55-6	1,1,1-Trichloroethane	270	U
56-23-5	Carbon Tetrachloride	540	U
71-43-2	Benzene	270	U
107-06-2	1,2-Dichloroethane	540	U
79-01-6	Trichloroethene	270	U
78-87-5	1,2-Dichloropropane	270	U
75-27-4	Bromodichloromethane	270	U
110-75-8	2-Chloroethyl vinyl ether	540	U
10061-01-5	cis-1,3-Dichloropropene	270	U
108-10-1	4-Methyl-2-Pentanone	540	U
108-88-3	Toluene	270	U
10061-02-6	trans-1,3-Dichloropropene	540	U
79-00-5	1,1,2-Trichloroethane	540	U
127-18-4	Tetrachloroethene	270	U
591-78-6	2-Hexanone	540	U
126-48-1	Dibromochloromethane	540	U
108-90-7	Chlorobenzene	270	U
100-41-4	Ethylbenzene	540	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

G

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.06

Sample wt/vol: 10.8 (g/ml) G Lab File ID: VB01334.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 13.75 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

1330-20-7	m+p-Xylenes	810	U
1330-20-7	o-Xylene	540	U
100-42-5	Styrene	540	U
75-25-2	Bromoform	540	U
79-34-5	1,1,2,2-Tetrachloroethane	540	U
541-73-1	1,3-Dichlorobenzene	810	U
106-46-7	1,4-Dichlorobenzene	810	U
95-50-1	1,2-Dichlorobenzene	810	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

G

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix (soil/water) SOIL Lab Sample ID: 3810.06
Sample wt/vol: 10.8 (g/ml) G Lab File ID: VB01334.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 13.75 Date Analyzed: 08/25/98
GC Column: RTX-502 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: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.20	5400	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

DUP

Lab Name: FMETL NJDEP # 13561
 Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
 Matrix (soil/water) SOIL Lab Sample ID: 3810.07
 Sample wt/vol: 11.1 (g/ml) G Lab File ID: VB01335.D
 Level: (low/med) MED Date Received: 08/14/98
 % Moisture: not dec. 9.28 Date Analyzed: 08/25/98
 GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		1700	U
107131	Acrylonitrile		1700	U
75650	tert-Butyl alcohol		3200	U
1634044	Methyl-tert-Butyl ether		740	U
108203	Di-isopropyl ether		500	U
	Dichlorodifluoromethane		990	U
74-87-3	Chloromethane		250	U
75-01-4	Vinyl Chloride		740	U
74-83-9	Bromomethane		500	U
75-00-3	Chloroethane		740	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		500	U
156-60-5	trans-1,2-Dichloroethene		500	U
75-35-3	1,1-Dichloroethane		250	U
108-05-4	Vinyl Acetate		740	U
78-93-3	2-Butanone		740	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	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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

DUP

Lab Name: FMETL NJDEP # 13561

Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.07

Sample wt/vol: 11.1 (g/ml) G Lab File ID: VB01335.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 9.28 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

1330-20-7	m+p-Xylenes	740	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	740	U
106-46-7	1,4-Dichlorobenzene	740	U
95-50-1	1,2-Dichlorobenzene	740	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

DUP

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix: (soil/water) SOIL Lab Sample ID: 3810.07
Sample wt/vol: 11.1 (g/ml) G Lab File ID: VB01335.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 9.28 Date Analyzed: 08/25/98
GC Column: RTX-502 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: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	7.20	1100	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

TB

Lab Name: FMETL NJDEP # 13561

Project: 98001 Case No.: 3100 SDG No: _____ Location: B2707

Matrix (soil/water) SOIL Lab Sample ID: 3810.08

Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01336.D

Level: (low/med) MED Date Received: 08/14/98

% Moisture: not dec. 0 Date Analyzed: 08/25/98

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

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	U
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	U
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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

TB

Lab Name: FMETL NJDEP # 13561
 Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
 Matrix (soil/water) SOIL Lab Sample ID: 3810.08
 Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01336.D
 Level: (low/med) MED Date Received: 08/14/98
 % Moisture: not dec. 0 Date Analyzed: 08/25/98
 GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	<u>UG/KG</u>	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.

TB

Lab Name: FMETL NJDEP # 13561
Project: 980001 Case No.: 3100 SDG No: _____ Location: B2707
Matrix: (soil/water) SOIL Lab Sample ID: 3810.08
Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB01336.D
Level: (low/med) MED Date Received: 08/14/98
% Moisture: not dec. 0 Date Analyzed: 08/25/98
GC Column: RTX-502 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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

Laboratory Manager or Environmental Consultant's Signature _____

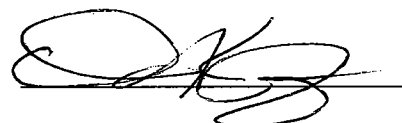
Date 10/15/93

Laboratory Certification #13461

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

Laboratory Authentication Statement

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



Daniel K. Wright
Laboratory Manager