

United States Army
Fort Monmouth, New Jersey

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

***Building 2067
Charles Wood Area***

**NJDEP UST Registration No. 192486-37
DICAR No. 94-05-16-1445-30**

April 2001

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

BUILDING 2067

**CHARLES WOOD AREA
NJDEP UST REGISTRATION NO. 192486-37**

APRIL 2001

PREPARED FOR:

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

PREPARED BY:

***Versar* INC.
2558 PEARL BUCK ROAD
SUITE 1
BRISTOL, PA 19007**

PROJECT NO. 4936-127

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EXECUTIVE SUMMARY

UST Closure

On May 16, 1994, a steel underground storage tank (UST) was closed by removal in accordance with New Jersey Department of Environmental Protection (NJDEP) closure procedures at the Charles Wood Area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 00192486-37 (Fort Monmouth ID No. 2067), was located north of Building 2067. UST No. 00192486-37 was a 550-gallon #2 fuel oil UST.

Site Assessment-Soil

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 analyses conducted during the site assessment were performed in accordance with Section 7:26E-2.1 of the *Technical Requirements for Site Remediation*. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, the UST was inspected for corrosion holes or punctures. No holes or punctures were noted in the UST. Stained soil was observed and appeared to be contaminated. Based on the inspection of the excavation, Directorate of Public Works (DPW) concluded that a discharge of petroleum products was associated with this UST. The NJDEP hotline was notified and the case was assigned DICAR No. 94-05-16-1445-30. Groundwater was encountered at 7.0 feet below ground surface and sheen was observed on groundwater.

On May 16, 1994, following the removal of the UST and approximately 20 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples east wall and south wall were collected from two (2) locations within the UST excavation area. Sidewall samples east wall and south wall were collected at a depth of 6.0 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC) and total solids.

On May 18, 1994, following the removal of approximately 30 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A through I were collected from nine (9) locations within the UST excavation. Sidewall samples A through I were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC and total solids.

On May 23, 1994, following the removal of approximately 40 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples J through U were collected from eleven (11) locations within the UST excavation. Sidewall samples J through U were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC and total solids.

Site Assessment-Findings

Analytical results of post-excavation soil samples collected between May 16 and May 23, 1994 contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC).

Site Assessment-Groundwater

In response to the observation of potentially contaminated soil near the shallow water table, two (2) shallow overburden monitoring wells (MW-1 and MW-2) were installed at the Building 2067 area on October 4 and October 5, 1994. MW-1 was installed approximately 70 feet east of the northwestern corner of Building 2067 in the vicinity of the former excavation. It was screened in the 2.5 to 12.5 foot depth interval, across the water table, which is approximately 7.0 feet below ground surface.

A second shallow overburden monitoring well (MW-2) was installed at the Building 2067 area on October 5, 1994. It was installed approximately 75 feet northwest of the northwestern corner of Building 2067 in the vicinity of the former excavation. It was screened in the 2.5 to 12.5 foot depth interval, across the water table, which is approximately 7.0 feet below ground surface.

Between May 22, 1995, and January 2, 2001, monitoring wells MW1 and MW-2 were sampled on a quarterly basis. The wells were analyzed for arsenic and VOCs calibrated for xylene plus 15 TICs.

Findings-Groundwater

A review of the historical groundwater analytical results indicates that concentrations of acetone, methylene chloride, and arsenic have been detected during these sampling events at concentrations that exceed the respective NJDEP GWQS. The highest concentrations historically have been detected in samples collected from MW-1. As part of the long-term monitoring program for Building 2067, the levels of acetone detected previously are declining and are now in compliance with the NJDEP GWQS. Methylene chloride has been detected, however, methylene chloride is commonly found as a laboratory contaminant.

Conclusion and Recommendations

Based on the analytical results of the post-excavation soil samples collected between May 16 and May 23, 1994, soil quality at the Building 2067 UST closure site does not exceed the NJDEP RDCSCC. Therefore, no further action is warranted.

Based on the analytical results of the groundwater samples collected from MW-1 and MW-2, groundwater quality at the Building 2067 UST closure site exceeds the New Jersey Groundwater Quality Standard for arsenic. Continued collection of groundwater samples on a quarterly basis from MW-1 and MW-2 is recommended. The analysis will determine if

the levels of arsenic detected previously are declining. The need for additional actions to address groundwater contamination should be evaluated following receipt of the additional groundwater monitoring data.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 00192486-37, was closed at Building 2067 at the Charles Wood area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on May 16, 1994. Refer to the Site Location Map, Figure 1. This report presents the results of the Department of Public Works' (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP. The UST was a steel 550-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No. 192486-37 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 and 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. 192486-37 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. 192486-37 are included in Appendices A and B, respectively.

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

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

1.2 SITE DESCRIPTION

Building 2067 is located in the Charles Wood area of the Fort Monmouth Army Base. UST No. 00192486-37 was located north of Building 2067 and appurtenant and appurtenant copper piping ran approximately two- (2) feet south to Building 2067. A Site Map is provided as Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area

surrounding Building 2067. 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 thickness 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 iron oxide encrusted (Minard).

Hydrogeology

The water table aquifer at 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.

Based on records of wells drilled in the Charles Woods area, water is typically encountered at depths of 1 to 9 feet below ground surface (bgs). The depth to ground water measured at two monitoring wells installed at Building 2067 ranged between 4.08 feet (MW-1 on February 2, 2001) and 9.53 feet (MW-2 on June 14, 1995).

According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Due to the proximity of the Atlantic Ocean to Fort Monmouth, shallow groundwater may be tidally influenced and may flow toward creeks and brooks as the tide goes out, and away from creeks and brooks as the tide comes in. However, an abundance of clay lenses and sand deposits were noted in borings installed throughout Fort Monmouth. Therefore the direction of shallow groundwater should be determined on a case by case basis.

1.3 HEALTH AND SAFETY

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

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- The contractor performing the closure prior to excavation activities identified all underground obstructions (utilities, etc.).
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an Organic Vapor Analyzer (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 Subsurface Evaluator from the DPW was present during all site assessment activities.

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST and the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was cut in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 572 gallons of liquid from the UST and associated piping were transported by Freehold Cartage, Inc. to the Lionetti Oil Recovery Co., Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifest.

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. No holes were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Soils were stained and appeared to be contaminated. Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length. Groundwater was encountered at 7.0 feet below ground surface and sheen was observed on groundwater. See Figure 3 for a cross-sectional view of the excavation area.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

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

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

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

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on OVA air monitoring and TPHC analysis results from the post-excavation soil samples, approximately 90 cubic yards of potentially contaminated soil were removed from the UST excavation. All potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were transported to the soil staging area. Soils that did not exhibit signs of contamination were used as backfill following the removal of the UST.

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 Subsurface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with the NJDEP document, *Interim Closure Requirements for Underground Storage Tank Systems* (October 1990 and revisions dated November 1, 1991), which was the applicable regulation at the date of the closure. The Fort Monmouth DPW Environmental Office maintains all records of the Site Investigation activities.

The following Parties participated in Closure and Site Investigation Activities:

- Subsurface Evaluator: Charles Appleby
Employer: U.S. Army, Fort Monmouth
Phone Number: (732) 532-0989
NJDEP Certification No.: 002056
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental laboratory
Contact Person: Daniel K. Wright
Phone Number: (732) 532-4359
NJDEP Company Certification No.: 13461
- Hazardous Waste Hauler: Lorco Petroleum Services
Contact Person: David Smith
Phone Number: (732) 721-0900

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Subsurface Evaluator using an OVA and visual observations to identify potentially contaminated material. Approximately 90 cubic yards of potentially petroleum-contaminated soils were removed from the excavation area and transported to the Charles Wood petroleum contaminated soil holding area. Soils were removed from the excavation until no evidence of contamination remained. Groundwater was encountered at 7.0 feet below ground surface and sheen was observed on groundwater.

2.3 SOIL SAMPLING

On May 16, 1994, following the removal of the UST and approximately 20 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples east wall and south wall were collected from two (2) locations within the UST excavation area. Sidewall samples east wall and south wall were collected at a depth of 6.0

feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC) and total solids.

On May 18, 1994, following the removal of approximately 30 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A through I were collected from nine (9) locations within the UST excavation. Sidewall samples A through I were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC and total solids.

On May 23, 1994, following the removal of approximately 40 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples J through U were collected from eleven (11) locations within the UST excavation. Sidewall samples J through U were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC and total solids.

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

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

Two shallow overburden monitoring wells (MW-1 and MW-2) were installed at the Building 2067 area on October 4 and October 5, 1994. MW-1 was installed approximately 70 feet east of the northwestern corner of Building 2067 in the vicinity of the former excavation. It was screened in the 2.5 to 12.5 foot depth interval, across the water table, which is approximately 7.0 feet below ground surface.

A second shallow overburden monitoring well (MW-2) was installed at the Building 2067 area on October 5, 1994. It was installed approximately 75 feet northwest of the northwestern corner of Building 2067 in the vicinity of the former excavation. It was screened in the 2.5 to 12.5 foot depth interval, across the water table, which is approximately 7.0 feet below ground surface.

The two wells were constructed in accordance with NJDEP's well construction protocols outlined in its May 1992 *Field Sampling Procedures Manual*. The NJDEP well permits and well construction logs are presented in Appendix G.

2.4.2 Monitoring Well Sampling

Between May 22, 1995, and January 2, 2001, monitoring wells MW1 and MW-2 were sampled on a quarterly basis. The wells were analyzed for arsenic and VOCs calibrated for xylene plus 15 TICs.

All sampling and analyses were performed in accordance with the NJDEP *Field Sampling Procedures Manual*, and the *Technical Requirements for Site Remediation*, N.J.A.C. 7:26E (*Technical Requirements*).

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST and associated soils, twenty-two (22) 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 Table 2 and the associated soil sampling locations are shown on Figure 4. The analytical data package is provided in Appendix E.

Excavation of potentially contaminated soil from the area surrounding the UST was performed between May 16 and May 23, 1994. Approximately 90 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Charles Wood petroleum contaminated soil staging area.

Analytical results of post-excavation soil samples collected between May 16 and May 23, 1994 contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP RDCSCC.

3.2 GROUNDWATER SAMPLING RESULTS

A review of the historical groundwater analytical results indicates that concentrations of acetone, methylene chloride, and arsenic have been detected during these sampling events at concentrations that exceed the respective NJDEP GWQS. The highest concentrations historically have been detected in samples collected from MW-1. As part of the long-term monitoring program for Building 2067, the levels of acetone detected previously are declining and are now in compliance with the NJDEP GWQS. Methylene chloride has been detected, however, methylene chloride is commonly found as a laboratory contaminant. The groundwater analytical data is summarized in Table 3 and the groundwater sampling locations are shown on Figure 5. Refer to Appendix F for the groundwater analytical data package.

3.3 CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical results of the post-excavation soil samples collected between May 16 and May 23, 1994, soil quality at the Building 2067 UST closure site does not exceed the NJDEP RDCSCC. Therefore, no further action is warranted.

Based on the analytical results of the groundwater samples collected from MW-1 and MW-2, groundwater quality at the Building 2067 UST closure site exceeds the New Jersey Groundwater Quality Standard for arsenic. Continued collection of groundwater samples on a quarterly basis from MW-1 and MW-2 is recommended. The analysis will determine if the levels of arsenic detected previously are declining. The need for additional actions to address groundwater contamination should be evaluated following receipt of the additional groundwater monitoring data.

TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 2067, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 3

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
**East Wall	5/16/94	5/17/94	Soil	Post-Excavation	TPHC	Scoop
**South Wall	5/16/94	5/17/94	Soil	Post-Excavation	TPHC	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

** Sample location was further remediated and resampled

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 2067, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 2 of 3

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
**B	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
C	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
**D	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
E	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
F	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
G	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
H	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop
I	5/18/94	5/18/94	Soil	Post-Excavation	TPHC	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

** Sample location was further remediated and resampled

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 2067, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 3 of 3

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
J	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
K	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
L	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
M	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
N	5/23/94	5/24/94	Soil	Post-excavation	TPHC	Scoop
O	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
P	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
Q	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
R	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
S	5/23/94	5/24/94	Soil	Post-excavation	TPHC	Scoop
T	5/23/94	5/24/94	Soil	Post-Excavation	TPHC	Scoop
U (DUP J)	5/23/94	5/24/94	Soil	Post-excavation	TPHC	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 2
POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 2067, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 3

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
***East Wall/6'	1495.1	5/16/94	5/17/94	Total Solid	--	--	75.00 %	--	--
				TPHC	6.6	Yes	51.80	10,000	No
***South Wall/6'	1495.2	5/16/94	5/17/94	Total Solid	--	--	78.00 %	--	--
				TPHC	69	Yes	6,490	10,000	No

Note:

- * Total Solid results are expressed as a percentage.
- ** NJDEP Residential Direct Contact soil cleanup criteria for total organics
- *** Sample location was further remediated and resampled
- ND Not detected above stated method detection limit
- TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 2067, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 2 of 3

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
A/6.5'	1496.1	5/18/94	5/18/94	Total Solid	--	--	81.00 %	--	--
				TPHC	6.6	Yes	27.40	10,000	No
***B/6.5'	1496.2	5/18/94	5/18/94	Total Solid	--	--	77.00%	--	--
				TPHC	109	Yes	20,800	10,000	Yes
C/6.5'	1496.3	5/18/94	5/18/94	Total Solid	--	--	81.00 %	--	--
				TPHC	9.9	Yes	331	10,000	No
***D/6.5'	1496.4	5/18/94	5/18/94	Total Solid	--	--	78.00 %	--	--
				TPHC	46	Yes	5,050	10,000	No
E/6.5'	1496.5	5/18/94	5/18/94	Total Solid	--	--	80.00%	--	--
				TPHC	6.6	Yes	358	10,000	No
F/6.5'	1496.6	5/18/94	5/18/94	Total Solid	--	--	75.00 %	--	--
				TPHC	6.6	Yes	40.4	10,000	No
G/6.5'	1496.7	5/18/94	5/18/94	Total Solid	--	--	74.00 %	--	--
				TPHC	9.9	Yes	308	10,000	No
H/6.5'	1496.8	5/18/94	5/18/94	Total Solid	--	--	75.00%	--	--
				TPHC	6.6	Yes	36.8	10,000	No
I/4.0'	1496.9	5/18/94	5/18/94	Total Solid	--	--	80.00 %	--	--
				TPHC	6.6	Yes	21	10,000	No

Note:

- * Total Solid results are expressed as a percentage.
 ** NJDEP Residential Direct Contact soil cleanup criteria for total organics
 *** Sample location was further remediated and resampled
 ND Not detected above stated method detection limit
 TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 2067, CHARLES WOOD AREA
FORT MONMOUTH, NEW JERSEY

Page 3 of 3

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
J/6.5'	1501.1	5/23/94	5/24/94	Total Solid	--	--	77.00 %	--	--
				TPHC	6.6	Yes	19.1	10.000	No
K/6.5'	1501.2	5/23/94	5/24/94	Total Solid	--	--	90.00 %	--	--
				TPHC	6.6	Yes	10.5	10.000	No
L/6.5'	1501.3	5/23/94	5/24/94	Total Solid	--	--	79.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
M/6.5'	1501.4	5/23/94	5/24/94	Total Solid	--	--	79.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
N/6.5'	1501.5	5/23/94	5/24/94	Total Solid	--	--	76.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
O/6.5'	1501.6	5/23/94	5/24/94	Total Solid	--	--	73.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
P/6.5'	1501.7	5/23/94	5/24/94	Total Solid	--	--	75.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
O/6.5'	1501.8	5/23/94	5/24/94	Total Solid	--	--	73.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
R/6.5'	1501.9	5/23/94	5/24/94	Total Solid	--	--	82.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
S/6.5'	1501.10	5/23/94	5/24/94	Total Solid	--	--	79.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
T/6.5'	1501.11	5/23/94	5/24/94	Total Solid	--	--	74.00 %	--	--
				TPHC	6.6	Yes	ND	10.000	No
U/6.5'	1501.12	5/23/94	5/24/94	Total Solid	--	--	91.00 %	--	--
				TPHC	3.3	Yes	ND	10.000	No

Note:

* Total Solid results are expressed as a percentage.

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

ND Not detected above stated method detection limit

TPHC Total Petroleum Hydrocarbons

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 2067
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Acetone	Methylene Chloride	Toluene	2-Butanone	2-Hexanone	4-Methyl-2-Pentanone	Dimethyl sulfide	Arsenic
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		700	2	1000	300	NLE	400	NLE	8
2067MW01	05/22/95	ND	ND	ND	ND	ND	ND	ND	-
2067MW01	06/14/95	ND	ND	ND	ND	ND	ND	ND	-
2067MW01	11/05/96	-	-	-	-	-	-	-	39.10
2067MW01	02/20/97	960	ND	1.58	91	15	ND	ND	13.20
2067MW01	04/15/97	590	ND	ND	59	13	ND	24	16.00
2067MW01	09/03/97	73	15.20	ND	ND	ND	ND	9	31.80
2067MW01	12/04/97	1700	ND	ND	272	24	8.74	4	18.00
2067MW01	03/06/98	1400	ND	ND	149	17	ND	12	13.00
2067MW01	05/21/98	1100	ND	4.50	127	20	5.67	6	12.50
2067MW01	08/26/98	121.08	ND	1.70	11.78	ND	ND	ND	4.80
2067MW01	12/09/98	ND	ND	ND	ND	ND	ND	ND	13.90
2067MW01	02/17/99	ND	ND	ND	ND	ND	ND	ND	4.70
2067MW01	06/18/99	ND	ND	ND	ND	ND	ND	ND	18.50
2067MW01	08/10/99	7.54	ND	ND	ND	ND	ND	ND	36.80
2067MW01	11/15/99	678.10	ND	ND	30.29	ND	4.18	ND	11.80
2067MW01	03/27/00	252.05	ND	ND	ND	ND	ND	ND	4.30
2067MW01	06/15/00	169.34	ND	ND	16.76	ND	ND	ND	14.00
2067MW01	08/31/00	466.83	ND	ND	10.45	ND	ND	ND	11.50
2067MW01	11/09/00	111.81	ND	ND	ND	ND	ND	ND	5.70
2067MW01	02/02/01	163.91	ND	ND	8.91	ND	ND	ND	3.10

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW: Monitoring Well.
 ND: Not Detected.
 ug/L: Micrograms per liter.
 NLE: No Limit Established.
 - Compound was not analyzed for.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 2067
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Acetone	Toluene	Unknown Hydrocarbons	Arsenic
UNITS:		ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		700	1000	NLE	8
2067MW02	05/22/95	ND	ND	ND	-
2067MW02	06/14/95	ND	ND	ND	-
2067MW02	08/21/96	-	-	-	ND
2067MW02	11/06/96	ND	ND	ND	ND
2067MW02	02/20/97	ND	1.2	ND	ND
2067MW02	04/15/97	ND	ND	ND	4
2067MW02	09/03/97	ND	ND	ND	ND
2067MW02	12/04/97	ND	ND	6	0.1
2067MW02	03/06/98	ND	ND	10	1
2067MW02	05/21/98	ND	ND	ND	ND
2067MW02	08/26/98	5.73	ND	ND	2.6
2067MW02	12/09/98	ND	ND	ND	2.5
2067MW02	02/17/99	ND	ND	ND	1
2067MW02	06/18/99	ND	ND	ND	ND
2067MW02	08/10/99	ND	ND	ND	1.5
2067MW02	11/15/99	ND	ND	ND	1.1
2067MW02	03/27/00	ND	ND	ND	ND
2067MW02	06/15/00	ND	ND	ND	5.6
2067MW02	08/31/00	ND	ND	ND	ND
2067MW02	11/09/00	ND	ND	ND	ND
2067MW02	02/02/01	ND	ND	ND	1.7

Note:

Gray shading indicates exceedance of New Jersey Ground Water Quality Criteria (GWQC) defined in NJAC 7:9-6.

Abbreviations:

MW: Monitoring Well.
 ND: Not Detected.
 ug/L: Micrograms per liter.
 NLE: No Limit Established.
 - Compound was not analyzed for.

FIGURES

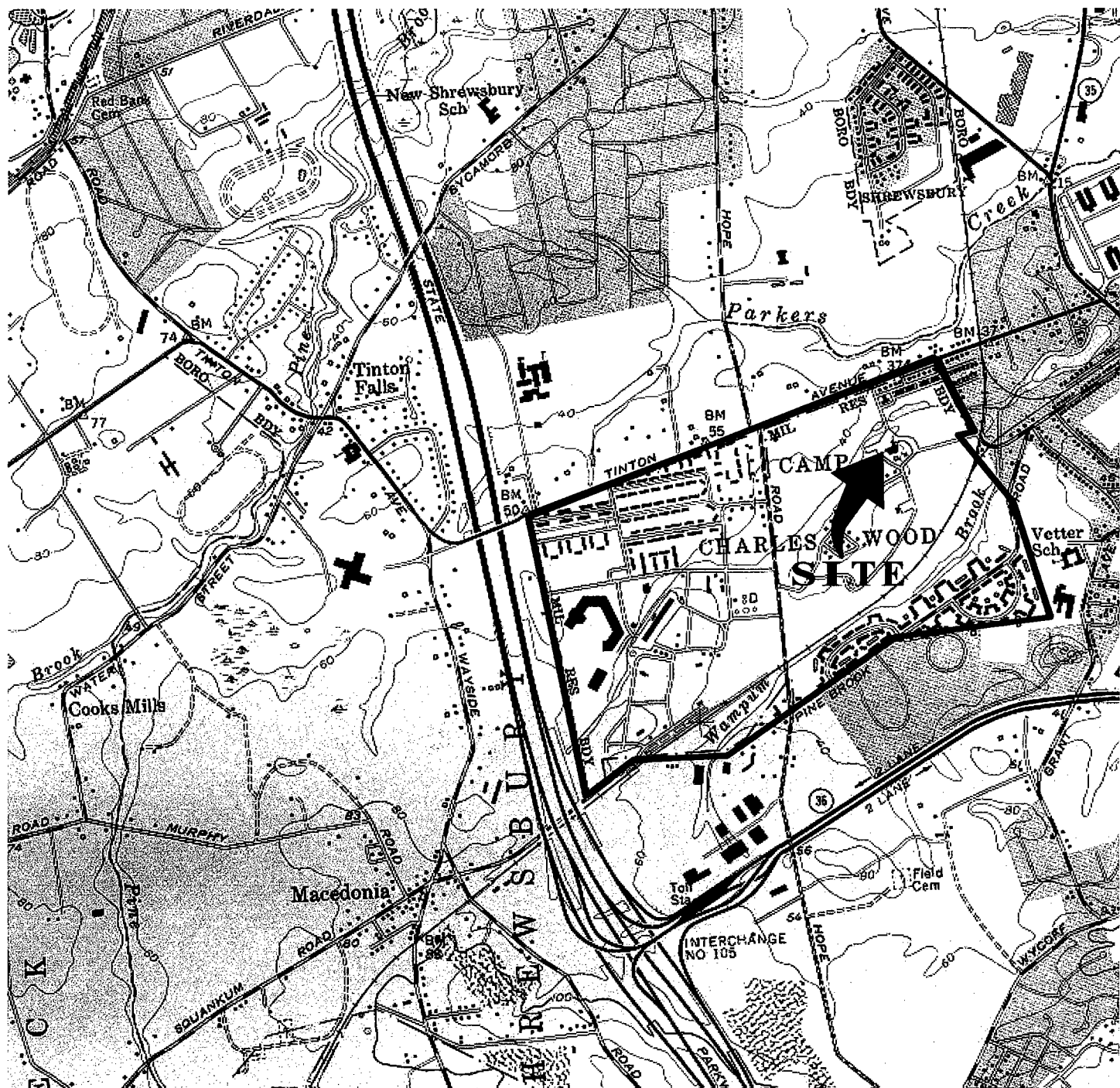


FIGURE 1

LOCATION MAP
 Building 2067
 Charles Wood
 Fort Monmouth Army Base
 Monmouth County, NJ

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

Scale: 1" = 2000'

Date: May 1994

LONG BRANCH, N. J.
 40073-C8-TF-024

1954
 PHOTOREVISED 1981
 DMA 6164 I SE-SERIES V822



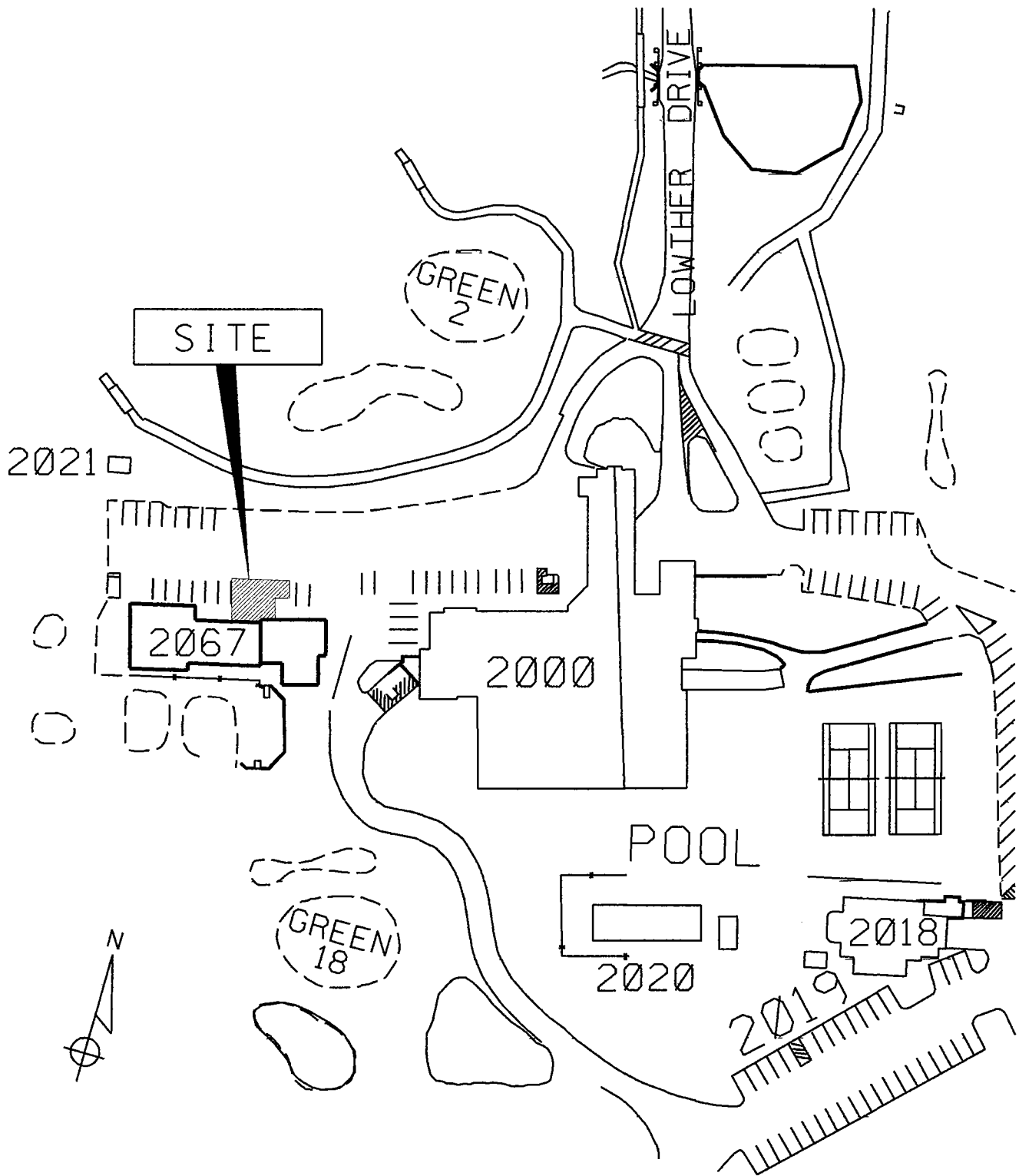


FIGURE 2
SITE MAP
BUILDING 2067
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=100'

DATE: MAY 1994

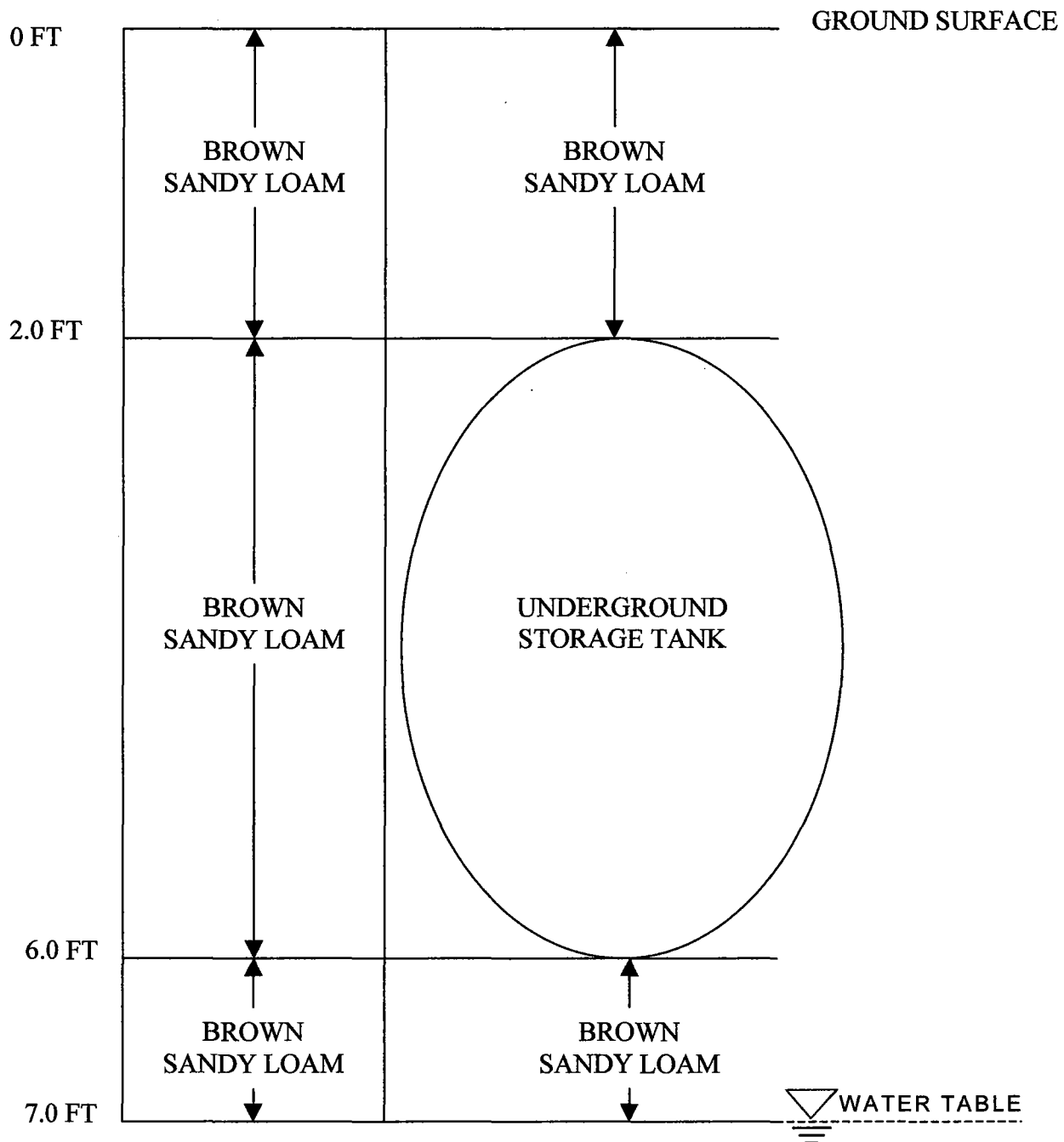
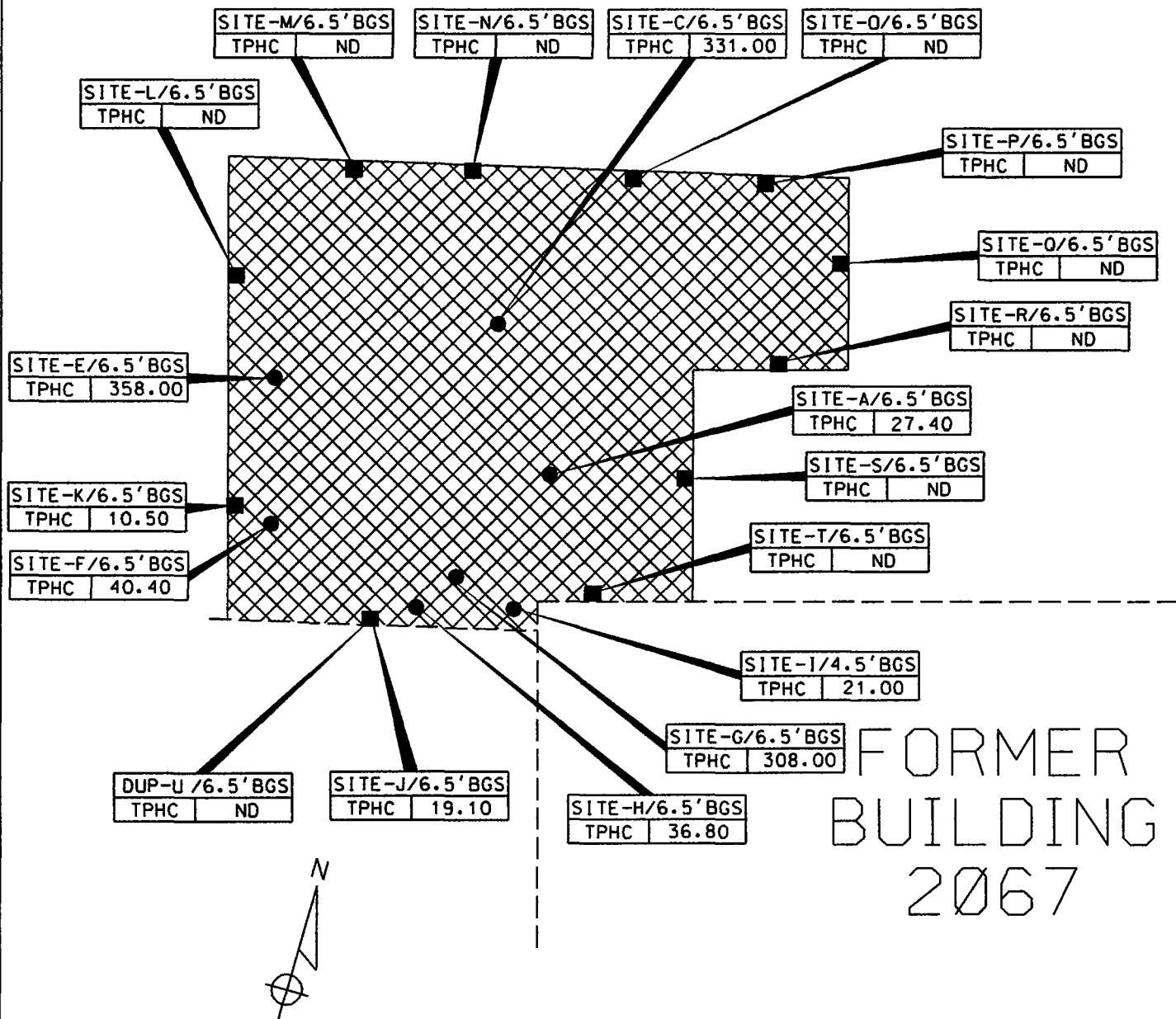


FIGURE 3
CROSS SECTIONAL VIEW
BUILDING 2067
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR
Engineers, Managers, Scientists & Planners
Bristol, Pennsylvania

SCALE: NTS

DATE: May 1994



LEGEND

- SOIL SAMPLE LOCATION (MAY 18, 1994)
- SOIL SAMPLE LOCATION (MAY 23, 1994)
- ▨ LIMIT OF EXCAVATION (MAY 23, 1994)

NOTES:

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

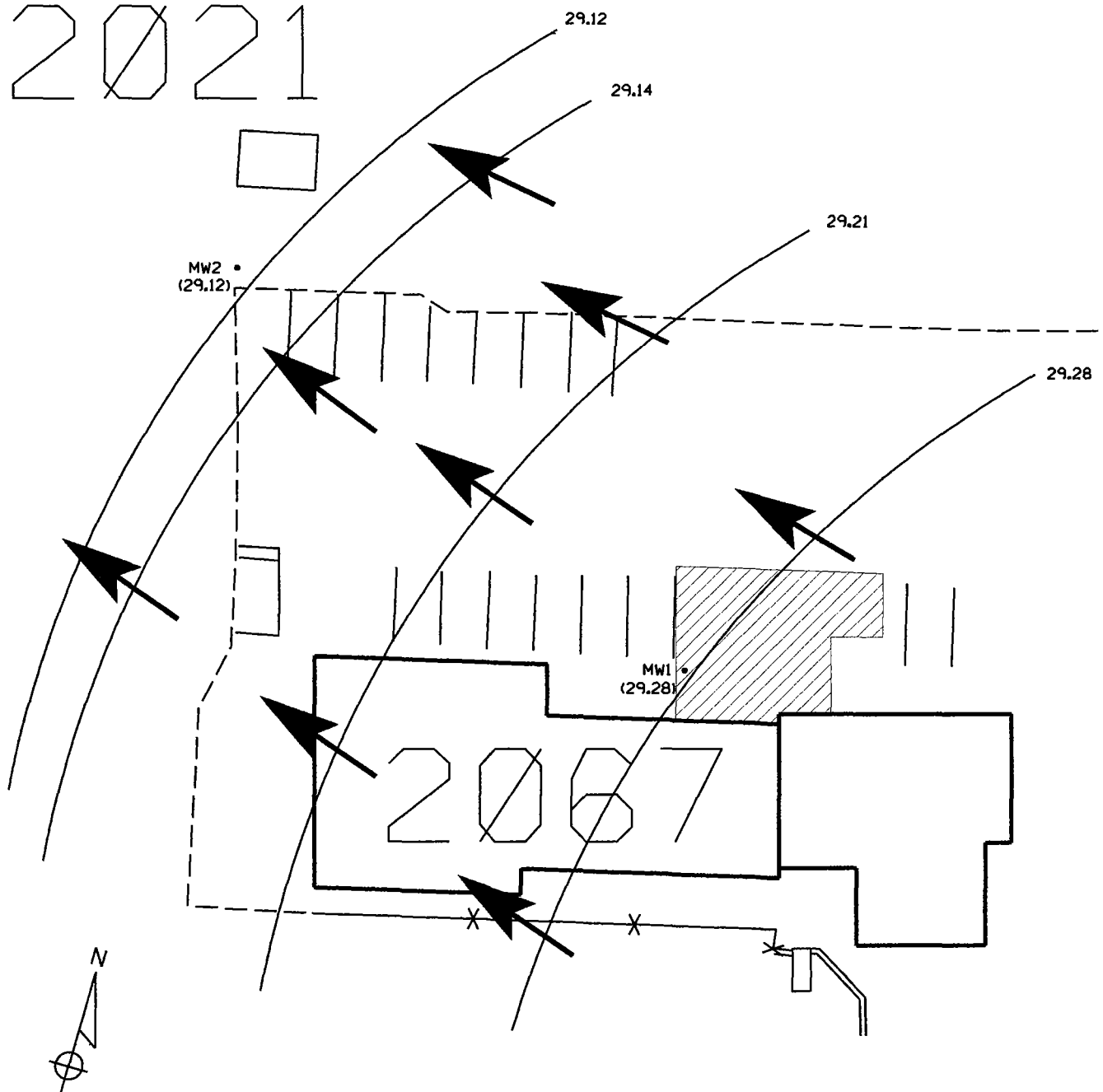
FIGURE 4
SOIL SAMPLING LOCATION MAP
BUILDING 2067
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: MAY 1994

2021



LEGEND

() ESTIMATED GROUNDWATER ELEVATION CONTOUR (FT)
 (29.28) GROUNDWATER ELEVATION ON FEBRUARY 2, 2001

NOTE:

1. SEE TABLE 3 FOR GROUNDWATER SAMPLING RESULTS

FIGURE 5
 WELL LOCATION AND
 GROUNDWATER CONTOUR
 FORT MONMOUTH ARMY BASE
 MONMOUTH COUNTY, NJ

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

SCALE: 1" = 30'

DATE: MAY 1994

2067 FIG5

APPENDIX A

NJDEP-STANDARD REPORTING FORM

APPENDIX B

SITE ASSESSMENT SUMMARY

APPENDIX C

WASTE MANIFEST



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

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

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

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address US Army Communications Electronics Command Charles Wood Area, c/o James Shirghio, Bldg 2504 ATTN: SELFM-DL-EM-MS, Fort Monmouth, NJ 07703		NJ 221002097803193		Manifest Document Number NJA 1603193		
4. Generator's Phone (908) 532-6223		5. Transporter 1 Company Name Freehold Cartage, Inc.		B. State Generator's ID SAME		
6. Transporter 1 US EPA ID Number NJ D054112611614		7. Transporter 2 Company Name		C. State Trans. ID NJDEPE 52265		
8. Transporter 2 US EPA ID Number		9. Designated Facility Name and Site Address Lionetti Oil Recovery, Co., Inc. Runyon & Cheesequake Rds. Old Bridge, NJ 08857		D. Transporter's Phone (908) 462-1001		
10. Designated Facility US EPA ID Number NJ D0840440614		11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) a. X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III		E. State Trans. ID		
b. X Petroleum Oil, N.O.S. Class 3 Combustible Liquid UN 1270 PG III		c. X Petroleum Oil, N.O.S. Class 3 Combustible Liquid UN 1270 PG III		F. Transporter's Phone ()		
d. X Petroleum Oil, N.O.S. Class 3 Combustible Liquid UN 1270 PG III		12. Containers No. Type		G. State Facility's ID		
J. Additional Descriptions for Materials Listed Above Petroleum Oil 95% Water 5% L,T		K. Handling Codes for Wastes Listed Above a. Water 5% L,T b. Petroleum Oil 95% Water 5% L,T		H. Facility's Phone (908) 721-0900		
15. Special Handling Instructions and Additional Information NOT EPA REGULATED. REGULATED AS HAZARDOUS WASTE IN NJ. 24 HOUR EMERGENCY PHONE: 201-427-2881 NJ DECAL# 55182		11a. ERG #27 Bldg. a) Bldg 2337 c) 2000 b) Bldg 2534 d) Bldg 2067		I. Waste No. 001 TTX 523 G X 7 2 2 001 TTX 222 G X 7 2 2 001 TTX 775 G X 7 2 2 001 TTX 572 G X 7 2 2		
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name Joseph M. Fallon		Signature Joseph M. Fallon		Month Day Year 05 12 94		
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name David S. Smith		Signature David S. Smith		Month Day Year 05 12 94		
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name						
Signature						
Month Day Year						

**U.S. ARMY, FORT MONMOUTH UST HAZARDOUS WASTE TRACKING FORM
(ONE PER EACH CONTAINER)**

WASTE DESCRIPTION	SOURCE (BLDG. #)	NJDEPE WASTE CODE	QUANT. (GAL.)	HANDLERS NAME/COMPANY	DATE/TIME
#2 OIL TANK Bottoms	2067	X 722	6 gal	Cate - Gen B.	5/10/94
#2 OIL TANK Bottoms	2000	X 722	4		

THIS CONTAINER WAS ACCEPTED INTO (CIRCLE ONE) MP / CW / EA
HAZARDOUS WASTE STORAGE AREA ON

(DATE) 5-10-94 BY

(GOV. REP.) 6/1

THIS FORM MUST ACCOMPANY THE CONTAINER UNTIL A MANIFEST IS
COMPLETED AND SIGNED BY THE GOVERNMENT HAZARDOUS WASTE
COORDINATOR OR HIS REPRESENTATIVE

Cate Protone
NJA 1908881
C. Appleby
6-28-94

Bldg. 2067 - X722 - 6gal - NJA 1908881



State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

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

Form Approved. OMB No. 2000-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address U. S. Army & Communications Electronics Command Charles Wood Area Hexagon C/O James Shirghio, Bldg. 2304 ATTN: SELFH-DL-EX-HS Fort Monmouth, NJ 07703		4. Generator's Phone (708) 532-4359		A. State Manifest Document No. NJ 421 0001	
5. Transporter 1 Company Name Cable Ecology Oil Salvage, Inc. TA Casie/Rm Protank		6. US EPA ID Number NJ D045995693		C. State Trans. ID Number NJ 421 0001	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (609) 696-4401	
9. Designated Facility Name and Site Address Casie Ecology Oil Salvage, Inc. TA Casie/Protank 3209 N. Mill Road Vineland, NJ 08360		10. US EPA ID Number NJ D045995693		E. State Trans. ID Number NJ 421 0001	
11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) a. Oil contaminated solids Non D.O.T. regulated		12. Containers No. Type		13. Total Quantity	14. Unit Wt/Vol
b.		c.		d.	e.
c.		d.		e.	f.
d.		e.		f.	g.
J. Additional Descriptions for Materials Listed Above a. S.T.		K. Handling Codes for Waste Listed Above		L. Waste No. 1712	
b.		c.		d.	
15. Special Handling Instructions and Additional Information This is a NJ regulated waste not a RCRA hazardous waste. 24 hr emergency response /609-696-4401 Greg Clifford					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Charles M. Appleby		Signature [Signature]		Month Day Year 10/28/94	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Jim Veasey		Signature [Signature]		Month Day Year 10/28/94	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name Signature Month Day Year					

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172



FREEHOLD CARTAGE, INC.

P.O. BOX 5010
FREEHOLD, NJ 07728-5010
PHONE: (908) 462-1001
FAX: (908) 308-0924

175 BARTOW MUN. AIRPORT
BARTOW, FL 33830
PHONE: (813) 533-4599
FAX: (813) 533-1613

108 MONAHAN AVENUE
DUNMORE, PA 18512
PHONE: (717) 342-7232
FAX: (717) 342-7367

MANIFEST

FCI EPA ID NO.:
NJD054126164

G52559

STATE MANIFEST NO.:

(X) HM	PROPER U.S. DOT SHIPPING NAME	U.S. DOT HAZARDOUS CLASS	PACKING GROUP	NAUN NO.	FORM	NET QTY.	UNIT MEASURE
1	NON-HAZARDOUS WASTE - WATER	N/A	N/A	N/A	Liq	5500	G
2							
3							

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION (I.E., IDENTIFICATION SHIPMENT OF A NON-HAZARDOUS NATURE WHICH DOES NOT HAVE TO BE MANIFESTED).

NJDEPE 15939 - 23520

GENERATOR NAME/ADDRESS US ARMY COMMUNICATIONS ELECTRONICS COMMAND MAIN POST AND Charles Wood Area FORT MONMOUTH NJ		PHONE 908 (AREA CODE) 532 - 6223		GENERATOR EPA ID NO. Not Reg.	
TRACTOR 63		TRAILER 314		TIME AT GENERATOR (MILITARY TIME ONLY) 07:00 ARRIVAL TIME DEPARTURE TIME	
FCI REP. LOADING (PRINT) David Smith	PROCEDURE —	BOX SPOTTED X	BOX REMOVED X	EQUIPMENT USED Sides, GAL. Bldg 707 81533-226 2400 Bldg 1109 81533-168 160 Bldg 2067 192486-37 2100	
COMMENTS OR DELAYS AT GENERATOR					
GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The wastes described above were consigned to the Transported named. The Treatment, Storage or Disposal Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. I certify that the foregoing is true and correct to the best of my knowledge.					
Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the generator is obligated to pay the agreed rate offered to the contractor.					
GENERATOR'S SIGNATURE X		PLEASE PRINT NAME/TITLE Charles M. Appleby / SELF-MAN-EV		DATE LOADED 5/27/94 MO. DAY YR.	

TSDF NAME/ADDRESS E.I. DUPONT COMPANY CHAMBERS WORKS RT #130 DEERWATER NJ 08023		PHONE 609 (AREA CODE) 540 - 2773		TSDF EPA ID NO. NJ D 0102385730	
TRACTOR 63		TRAILER 314		TIME AT TSDF (MILITARY TIME ONLY) ARRIVAL TIME DEPARTURE TIME	
FCI REP. UNLOADING (PRINT) David Smith	PROCEDURE	BOX SPOTTED X	BOX REMOVED X	EQUIPMENT USED	
COMMENTS OR DELAYS AT TSDF					
TSDF SIGNATURE X		PLEASE PRINT NAME/TITLE		DATE UNLOADED 5/27/94 MO. DAY YR.	

AR H-0257 PC 944	ME ME-HWT-47 ME-WOT-47	MO H-1490 ND WH-429	NOVA SCOTIA, CANADA NSC 000 147	QUEBEC, CANADA QC-6ML-047
CT CT-HW-307	MD HWH-167 91-OP-1765	NH TNH-0047	OH 333-HW	RI RI-535
DE DE-HW-203 DE-SW-203	MA MA-294	NJ S-2265 15939	OK 3358	TX 40705
IL SWH-1540	MN 61572	NY JA-113	ONTARIO, CANADA A 840943 PA PA-AH-0067	WI 11802

Original - FCI Office Copy
Yellow - FCI Office Copy
Blue - FCI Office Copy/Customer
Green - Retained by TSDF
Gold - Retained by Generator

G52559

E.I. DU PONT DE NEMOURS AND COMPANY CHAMBERS WORKS WASTE TREATMENT FACILITY

Part I. Land Disposal Restrictions Status Form

The purpose of this form is to ensure that all wastes accepted for treatment at Chambers Works are correctly classified and treated in accordance with the land ban requirements. After August 8, 1990, all shipments of wastes for treatment and disposal at Chambers Works must be accompanied by a completed Land Disposal Restrictions Status Form.

LAND DISPOSAL RESTRICTIONS STATUS FORM

(You must check one box and sign the form on the reverse side.)

- ☒ 1. This waste is not hazardous under U.S. EPA regulations (40 CFR Part 261).
Waste Description: NON-HAZARDOUS WASTE - WATER

- ☐ 2. This waste is a newly listed or newly characteristic hazardous waste and is not yet subject to the land ban.

Newly Listed Wastes

Code	Waste Description
------	-------------------

Code	Waste Description
------	-------------------

Newly Characteristic Wastes

Wastes previously subject to Bevill exemption.

Code	Waste Description
------	-------------------

Wastes that are hazardous after September 25, 1990 due to toxicity characteristic

☐ D018 Benzene	☐ D031 Heptachlor (and its hydroxide)
☐ D019 Carbon tetrachloride	☐ D032 Hexachlorobenzene
☐ D020 Chlordane	☐ D033 Hexachloro-1,3-butadiene
☐ D021 Chlorobenzene	☐ D034 Hexachloroethane
☐ D022 Chloroform	☐ D035 Methyl ethyl ketone
☐ D023 o-Cresol	☐ D036 Nitrobenzene
☐ D024 m-Cresol	☐ D037 Pentachlorophenol
☐ D025 p-Cresol	☐ D038 Pyridine
☐ D026 Cresol	☐ D039 Tetrachloroethylene
☐ D027 1,4-Dichlorobenzene	☐ D040 Trichloroethylene
☐ D028 1,2-Dichloroethane	☐ D041 2,4,5-Trichlorophenol
☐ D029 1,1-Dichloroethylene	☐ D042 2,4,6-Trichlorophenol
☐ D030 2,4-Dinitrotoluene	☐ D043 Vinyl chloride

- ☐ 3. This waste is a land disposal restricted waste requiring treatment before land disposal. If you check this box, you must complete Part II—Land Disposal Restrictions Notification Form.

_____ California List because of _____

_____ First Third, Second Third, or Third Third waste.

- ☐ 4. This waste is a characteristically hazardous waste that has been pretreated and that meets the land disposal restrictions standards. If you check this box, you must complete Part II—Land Disposal Restrictions Notification Form.

[Note that high TOC ignitable nonwastewaters (TOC $\geq$ 10%), Sulfide reactive wastes, cyanide reactive wastes, and EP toxic pesticides D012-D017 cannot be diluted to meet the treatment standards.]

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268, Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

- ☐ 5. This waste is a land disposal restricted waste subject to a

_____ National Capacity Variance that expires _____ or

_____ Case-by-Case Extension that expires _____

Code	Waste Description
If you check this box, you must complete Part II—Land Disposal Restrictions Notification Form.	

- ☐ 6. This waste is not described by the entries on this form.

Please explain. _____

CERTIFICATION

I believe that all the information submitted in this document is true, accurate, and complete.

1. Charles M. Appleby Environ Prot. Spec. SE6FM-PN-EV
 Signature Title

2. Charles M. Appleby 5-27-94
 Print Name Date

APPENDIX D

UST DISPOSAL CERTIFICATE

UNDERGROUND STORAGE TANK REMOVAL (UST)

(Submit one form for each tank)

PP192486-37

Building No. 2067 NJDEP UST Reg. No. NO UST# 2067

IJO No. 91-0148 Date Tank Removed 5/16/94

ITEM NO.	ITEM OF WORK	UNIT	UNIT PRICE	QUANTITY	TOTAL PRICE
01100-1.1	Rmv ID#27 soil to stockpile	TN	\$14.50	302.43	\$ 4,385.24
01100-1.2	Supply, fill & relocate 55 Gal containers to storage	CT	\$47.50		\$ N/A
01100-1.4	Rmv & dispose of #2 fuel mixed with water Manifest #:NJA	GL	\$ 0.69	3572	\$ 2,464.68
01100-1.5	Rmv & dispose of #2 fuel mixed with solvent Manifest #:NJA	GL	\$ 4.50		\$ N/A
01100-1.6	Rmv & dispose of diesel fuel	GL	\$ 0.69		\$ N/A
01100-1.7	Rmv & dispose of diesel fuel mixed with water Manifest #:NJA	GL	\$ 0.69		\$ N/A
02050-1 & 02050-4	Tank removal	GL	\$ 0.975	550	\$ 536.25
02050-5.1	Sawcut blacktop *	TN	\$27.50	36.09	\$ 992.48
02050-5.2	Sawcut concrete *	TN	\$29.50		\$ N/A
02050-5.3	Sawcut reinforced concrete	TN	\$32.50		\$ N/A
02222-1.1	Backfill cert. clean fill *	TN	\$16.25	196.29	\$ 3,189.71
02222-1.2	3/4" clean stone *	TN	\$17.50	106.14	\$ 1,857.45
02511-1.1	Concrete slab 4" thick	SY	\$19.80		\$ N/A
02511-1.2	Concrete slab 6" thick	SY	\$21.80		\$ N/A
02511-1.3	Concrete slab 8" thick	SY	\$24.50		\$ N/A
02511-1.4	6" Concrete curb	LF	\$16.00		\$ N/A
02551-1.1	6" Base course of 3/4" dirty blend stone	SY	\$ 6.40		\$ N/A
02551-1.2	4" stabilized base	SY	8.00		\$ N/A
02551-1.3	2" top course	SY	\$ 5.50		\$ N/A
02935-1.1	4" top soil & sod	SY	\$ 7.80		\$ N/A
02935-1.2	4" top soil & hydroseed	SY	\$ 5.40		\$ N/A

* Supply certified weight tickets to Contracting Officer at time of request for payment.

\$13,425.81

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

NAME (Print or Type): John Lonergan SIGNATURE: [Signature]

NJDEP UST Closure Cert. #: 0003248 DATE: June 9, 1994

COMPANY NAME: CUTE, Inc.
(Performer of Tank Decommissioning)

NJDEP UST Closure Corp. Cert. #: 0200128

List of Abbreviations:

CT = 55 Gallon Container GL = Gallon TN = Tons
EA = Each SY = Square Yard

CALCULATION SHEET

Building No. 2067

NJDEPE Reg. No. no # -

Tank Size 550 gal

Tank Void 3.8 tons

CLEAN FILL

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
02222-1.1	clean fill	22.8	18707
"	"	21.1	18708
"	"	22.41	18709
"	"	21.75	18719
"	"	22.6	18720
"	"	22.8	18722
"	"	22.13	18723
"	"	22.0	18724
"	"	22.5	18725
	TOTAL	200.09	

STONE

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
02222-1.2	3/4" stone	27.21	929206
"	"	25.87	930771
"	"	25.84	931287
"	"	27.22	931807

TOTAL 106.14

ID#27 soil to stockpile $(200.09 + 106.14) - 3.8 = 302.43$ tons

Chargeable clean fill $200.09 - 3.8 = 196.29$ tons

Chargeable stone 106.14



FREEHOLD CARTAGE, INC.

P.O. BOX 5010
FREEHOLD, NJ 07728-5010
PHONE: (908) 482-1001
FAX: (908) 308-0824

170 BARTOW MUN. AIRPORT
BARTOW, FL 33830
PHONE: (813) 533-4589
FAX: (813) 533-1619

108 MCMAHAN AVENUE
DUNMORE, PA 15612
PHONE: (717) 842-7232
FAX: (717) 842-7367

MANIFEST

FCI EPA ID NO.:
NJD054128164

52559

STATE MANIFEST NO.:

(X) HAZ	PROPER U.S. DOT SHIPPING NAME	U.S. DOT HAZARDOUS CLASS	PACKING GROUP	NAJUN NO.	FORM	NET QTY.	UNIT MEASURE
1	NON-HAZARDOUS WASTE - WATER	N/A	N/A	N/A	Liq	5500	G
2							
3							

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION (I.E. IDENTIFICATION SHIPMENT OF A NON-HAZARDOUS NATURE WHICH DOES NOT HAVE TO BE MANIFESTED).

NJDEP 15939 - 23520

GENERATOR NAME/ADDRESS US ARMY COMMUNICATIONS ELECTRONICS COMMAND 1200 Rpt AND Charles Wood Avenue FORT MONMOUTH NJ		PHONE (908) (AREA CODE) 532 - 6223		GENERATOR EPA ID NO. NJ01 Dg.	
TRACTOR 63		TRAILER 314		TIME AT GENERATOR (MILITARY TIME ONLY) 07:00	
FCI REP. LOADING (PRINT) David Smith		PROCEDURE —		ARRIVAL TIME 07:00	
BOX SPOTTED *		BOX REMOVED *		DEPARTURE TIME	
COMMENTS OR DELAYS AT GENERATOR				EQUIPMENT USED SLES 8153-226 2400 81533-168 100 81533-37 3100	
GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The wastes described above were consigned to the Transporter named. The Treatment, Storage or Disposal Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. I certify that the foregoing is true and correct to the best of my knowledge. Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the generator is obligated to pay the agreed rate offered by the contractor.					
GENERATOR'S SIGNATURE X		PLEASE PRINT NAME/TITLE Charles M. Arvey / 566-12-61		DATE LOADED 5/27/94 MO. DAY YR.	

TSDF NAME/ADDRESS E.I. DUPONT COMPANY CHAMBERS WORKS RT #130 DEERWATER NJ 08033		PHONE (609) 540-2773		TSDF EPA ID NO. NJ100023857310	
TRACTOR 63		TRAILER 314		TIME AT TSDF (MILITARY TIME ONLY)	
FCI REP. UNLOADING (PRINT) David Smith		PROCEDURE		ARRIVAL TIME	
BOX SPOTTED *		BOX REMOVED *		DEPARTURE TIME	
COMMENTS OR DELAYS AT TSDF				EQUIPMENT USED	
TSDF SIGNATURE X		PLEASE PRINT NAME/TITLE		DATE UNLOADED 5/27/94 MO. DAY YR.	

AR H-0287 FC 944	ME ME-1WOT-47 ME WOT-47	NO H-1490 NO WH-429	NOVA SCOTIA, CANADA NSC 000 147	QUEBEC, CANADA QC-6ML-047
GT GT-HV-307	MD HMA-187	NH TMM-0047	OH 330-HW	RI RI-835
DE DE-HV-303	01-CP-1705	NJ 8-2285	OK 3358	TX 40705
DE SVF-203	MA MA-024	19399	ONTARIO, CANADA A 840948	WI 11602
IL SWH-1540	MN 51572	NV JA-113	PA PA-AH-0067	

Original - FCI Office Copy
Yellow - FCI Office Copy
Blue - FCI Office Copy/Carrier
Green - Retained by TSDF
Gold - Retained by Generator

52559



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

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

Form Approved, GMB No. 2060-0039, Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJ 2121 0101 2097 803793	Manifest Document No. 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address US Army Communications Electronics Command Charles Wood Area, c/o James Shirghio, Bldg 2504 ATTN: SELFM-DL-EM-MS, Fort Monmouth, NJ 07703			Command Manifest Document Number NJA 1603193		
4. Generator's Phone (908) 532-6223			B. State Generator's ID SAME		
5. Transporter 1 Company Name Freehold Cartage, Inc.			C. State Trans. ID NJDEPE 522WS		
6. US EPA ID Number NJID 0514112611614			D. Transporter's Phone (908) 462-1001		
7. Transporter 2 Company Name			E. State Trans. ID		
8. US EPA ID Number			F. Transporter's Phone		
9. Designated Facility Name and Site Address Lionetti Oil Recovery, Co., Inc. Runyon & Cheesequake Rds. Old Bridge, NJ 08857			G. State Facility's ID		
10. US DOT Description (including proper shipping name, hazard class and ID number)			H. Facility's Phone (908) 721-0900		
11. US DOT Description (including proper shipping name, hazard class and ID number)			I. Containers		
			No. Total Unit Waste No.		
a. X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III			XX523G X 7.2.2		
b. X Petroleum Oil, N.O.S. Class 3 Combustible Liquid UN 1270 PG III			001TTX X 2.22G X 7.2.2		
c. X Petroleum Oil, N.O.S. Class 3 Combustible Liquid UN 1270 PG III			001TTX X 7.75G X 7.2.2		
d. X Petroleum Oil, N.O.S. Class 3 Combustible Liquid UN 1270 PG III			001TTX X 5.72G X 7.2.2		
J. Additional Descriptions (including those Listed Above) Petroleum Oil 95% Water 5% L.T. Water 50% AT. T04 Filtration Tot			K. Handling Codes for Wastes Listed Above T04 Filtration Tot		
Petroleum Oil 95% Water 5% L.T. Water 50% AT. T04 Filtration Tot			T04 Filtration Tot		
16. Special Handling Instructions and Additional Information NOT EPA REGULATED. REGULATED AS HAZARDOUS WASTE IN NJ. 11a. ERG #27 Bldg. 24 HOUR EMERGENCY PHONE: 201-427-2881 NJ DECAL# 55182			a) Bldg 2337 c) 2000 b) Bldg 2534 d) Bldg 2067		
18. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this certification are fully and accurately described above by proper shipping name and are classified, packed, resealed, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Joseph M. Fallon			Signature Joseph M. Fallon		
Month Day Year 05 12 94					
17. Transporter 1 Acknowledgment of Receipt of Materials Printed/Typed Name David S. Smith			Signature David S. Smith		
Month Day Year 05 12 94					
18. Transporter 2 Acknowledgment of Receipt of Materials Printed/Typed Name			Signature		
Month Day Year					
19. Discrepancy Indication Space					
20. Facility Owner or Generator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name					
Signature					
Month Day Year					

EPA Form 4000-02 Rev. 1-93 (Hazardous Waste and Emergency Response)

1 - TSD MAIL TO - TSD'S STATE

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

P. 45

FAX NO. 201 423 8050

C. U. T. E.

JUN- 7-94 TUE 13:44

Ent Monmouth
Bldg 2000-00192486-1

Bldg 2067 - no closure available

MAZZA & SONS, INC.

Metal Recyclers
Auto and Truck
3230 Shatto Rd.
Tinton Falls, NJ
(800) 822-8292

NO. _____

DATE 18 May 94

Customer's Name

Cute Inc

Address

Make of
Auto

Tires
Tank
Price:

Bldg 2000 00192486-1
Bldg 2067 No closure

42160 LB 6

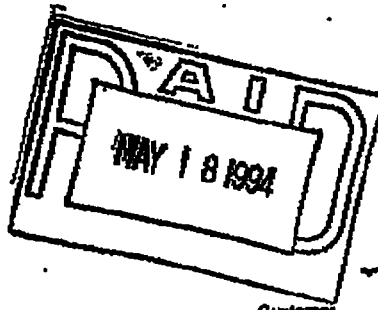
39780 LB 6

3380

Weight Price

Cast Iron	
Steel	67.60
LI. Iron	
Copper #1	
Copper #2	
LI. Copper	
Brass	
Alum Clean	
Lead	
Stainless	
Radiators	
Battery	

TOTAL AMOUNT:



Weight

Customer

Don Ellis

MAZZA & SONS, INC.

Recycling Division

3230 Shafo Road • Tinton Falls, NJ 07753

(908) 922-9292

Asphalt
from
2067

74933

Recycling Material Receipt FormCustomer: Cite Inc

Address: _____

Job Location: E-37Date: 25 MAY 94Truck/Container No. D-3License Plate/D.E.P.# Y175 Y291

- ☐ 10 yd
☐ 20 yd
☐ 30 yd
☐ 40 yd
☐ 50 yd

61860 LB 6

37/20

399%

17.22
17.22

Concrete	
Asphalt	68.2
Slumps	
Brush	
Wood	
Pallets	
Glass	
Tires	
Painted Wood	
Shingles	
TOTAL:	COD ☒ BILL ☐

Weighmaster: [Signature]Customer: Danillo

MAZZA & SONS, INC.

Recycling Division

3230 Shatto Road • Tinton Falls, NJ 07753

(908) 922-9292

Asphalt 74957

Form 2067

Recycling Material Receipt FormCustomer: Cut IncAddress: Midland parkJob Location: EstDate: 23 May 94

Truck/Container No. _____

License Plate/D.E.P.# XA 13 4291☐ 10 yd☐ 20 yd☐ 30 yd☐ 40 yd☐ 50 yd

65163

27420

37.740

18.87

18.87

Concrete	
<u>Asphalt</u>	75.74
Stumps	
Brush	
Wood	
Pallets	
Glass	
Tires	
Painted Wood	
Shingles	
TOTAL:	COD ☒ BILL ☐

Weighmaster: dCustomer: Danelli

P.31

FAX NO. 201 423 6050

JUN-7-94 TUE 13:37 C.U.T.E.

S.C.M.I. BOUND BROOK



CUSTOMER'S COPY

CONTROL NO.

A-929206

Stavola Construction Materials, Inc.

PLANT: CHIMNEY ROCK ROAD, BOUND BROOK, N.J. • 808/356-5700

X *Kay*
DRIVER'S SIGNATURE

RECEIVED & ACCEPTED BY:

X
CUSTOMER'S SIGNATURE

EXECUTIVE OFFICE
HAMILTON ROAD
TINTON FALLS, N.J.
808/542-2328

CRUSHED STONE • SAND
• GRAVEL

ADDRESS REPLY TO
P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
- 2 - DELIVERED
- 3 - NET DELIVERED

DATE	05/20/94	CUST. NO.	08888	JOB NO.	09158	TICKET NO.	929206
CUSTOMER				DELIVER TO		GROSS	
CLEANING UP THE ENVIRONMENT 103 BODWIN AVE. P.O. BOX 237 MIDLAND PARK NJ 07432				ZONE: FT MONMOUTH ***** GIBBS HALL *****		39.21	
TRUCKER				METHOD OF PAYMENT		TARE	
12419				CHARGE		12.00	
TRUCK NO.						NET	
1						27.21	
DRIVER NO.						DELIVERY CODE	
						2	
QUANTITY				UNIT PRICE		ZONE	
27.21				1		030	
PRODUCT CODE/DESCRIPTION				EXTENDED		FREIGHT	
13 3/4 INCH CLEAN S						4.35	
UNIT OF MEASURE				SALES TAX		TOTAL	
T							
COMMENTS						WAIT TIME	
5-11-94 12:48 5-11-94 12:48 5-11-94 12:48 <i>Cliff</i>						GRAND TOTAL	
LOADS						ACCU. TONS	
2						47.82	

S.C.M.I. - BOUND BROOK



CUSTOMER'S COPY

CONTROL NO.

A-930771

Stavola Construction Materials, Inc.

PLANT: CHIMNEY ROCK ROAD, BOUND BROOK, N.J. • 908/356-5700

X

DRIVER'S SIGNATURE

RECEIVED & ACCEPTED BY

X

CUSTOMER'S SIGNATURE

EXECUTIVE OFFICE

HAMILTON ROAD
TINTON FALLS, N.J. 08053-2329

CRUSHED STONE • SAND

GRAVEL

ADDRESS REPLY TO

P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
- 2 - DELIVERED
- 3 - NET DELIVERED

DATE	05/27/94	CUST. NO.	08888	JOB NO.	10:39	TICKET NO.	930771
CUSTOMER				DELIVER TO		GROSS	
CLEANING UP THE ENVIRONMENT				ZONE 1 FT MONMOUTH		39.17	
103 GODWIN AVE.				BLDG 298		TARE	
P.O. BOX 237						13.30	
MIDLAND PARK NJ 07432						NET	
						25.87	
TRUCKER	TRUCK NO.	DRIVER NO.	METHOD OF PAYMENT			DELIVERY CODE	ZONE
36370	1		CHARGE			2	030
QUANTITY	PRODUCT CODE/DESCRIPTION		UNIT OF MEASURE	UNIT PRICE	EXTENDED	FREIGHT	SALES TAX
25.87	13 3/4 INCH CLEAN S		T			4.35	
COMMENTS						WAIT TIME	
LOADS						ACCU. TONS	
						25.87	
						GRAND TOTAL	

P. 33

FAX NO. 201 423 6050

C.U.T.E.

JUN-7-94 TUE 13:38

S.C.M.I. - BOUND BROOK



CUSTOMER'S COPY

CONTROL NO.

A-931287

Stavola Construction Materials, Inc.

PLANT: CHIMNEY ROCK ROAD, BOUND BROOK, N.J. - 908/358-5700

X

DRIVER'S SIGNATURE

Tom

RECEIVED & ACCEPTED BY

X

CUSTOMER'S SIGNATURE

[Signature]

EXECUTIVE OFFICE

HAMILTON ROAD
TINTON FALLS, N.J.
908/542-2328

CRUSHED STONE • SAND

• GRAVEL

ADDRESS REPLY TO

P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
- 2 - DELIVERED
- 3 - NET DELIVERED

DATE	06/01/94	CUST. NO.	08888	JOB NO.	09129	TICKET NO.	931286
CUSTOMER				DELIVER TO		GROSS	
CLEANING UP THE ENVIRONMENT				ZONE: FT MONMOUTH		39.69	
103 GOODWIN AVE.				BIBBS HALL / GOLF COURSE		TARE	
P.O. BOX 237						13.85	
MIDLAND PARK NJ 07432						NET	
						25.84	
TRUCKER	TRUCK NO.	DRIVER NO.	METHOD OF PAYMENT			DELIVERY CODE	ZONE
12979	1		CHARGE			2	030
QUANTITY	PRODUCT CODE/DESCRIPTION		UNIT OF MEASURE	UNIT PRICE	EXTENDED	FREIGHT	SALES TAX
25.84	13 3/4 INCH CLEAN S		T			4.35	
COMMENTS						WAIT TIME	
LOADS						GRAND TOTAL	
2						53.06	

P. 34

FAX NO. 201 423 8050

C.U.T.E.

JUN- 7-84 TUE 13:38

S.C.M.I. - BOUND BROOK



CUSTOMER'S COPY

CONTROL NO:
A-931807

Stavola Construction Materials, Inc.

PLANT: CHIMNEY ROCK ROAD, BOUND BROOK, N.J. • 908/358-5700

X *Ez*
DRIVER'S SIGNATURE

RECEIVED & ACCEPTED BY:

X *[Signature]*
CUSTOMER'S SIGNATURE

EXECUTIVE OFFICE
HAMILTON ROAD
TUNTON FALLS, N.J.
908/542-2328

CRUSHED STONE • SAND

• GRAVEL

ADDRESS REPLY TO
P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
- 2 - DELIVERED
- 3 - NET DELIVERED

DATE	06/01/84	CUST. NO.	08888	JOB NO.	09125	TICKET NO.	931807
CUSTOMER				DELIVER TO		GROSS	
CLEANING UP THE ENVIRONMENT				ZONE: FT MONMOUTH		40.82	
103 GODWIN AVE.				BIBBS HALL / GOLF COURSE		TARE	
P.O. BOX 237						13.60	
MIDLAND PARK N.J. 07432						NET	
						27.22	
TRUCKER	TRUCK NO.	DRIVER NO.	METHOD OF PAYMENT			DELIVERY CODE	ZONE
74786	1		CHARGE			2	030
QUANTITY	PRODUCT CODE/DESCRIPTION		UNIT OF MEASURE	UNIT PRICE	EXTENDED	FREIGHT	SALES TAX
27.22	13 3/4 INCH CLEAN S		T			4.35	
COMMENTS						WAIT TIME	
LOADS						GRAND TOTAL	
ACCU. TONS							
27.22							



1453 W. Park Ave., Wayside
Astbury Park, N.J. 07712
908-483-9333

18707

Order Date July 1, 19

Deliver Date / /

Delivered ☐ G.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Name E. H. 1764

Address _____

Clean Fill

Bldg# 296

A-10

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 71600		
	T 26000	22.8 tons	
	N 45600		

Driver WILLIAM J. BROWN

Received _____

* Company not responsible for damage done off public roads. Color not guaranteed.

**These gravel will travel
since 1925**

Sub Total

Delivery

NLI Tax

Total



1453 W. Park Ave., Wayland
Asbury Park, N.J. 07712
808-493-3333

18708

Order Date

June 1, 1994

Deliver Date

1/1/1

Delivered

☐

C.O.D.

☐

F.O.B./P.U.

☐

Charge

☒

Name

Big A Trucking

Address

C/CON Fill A-10

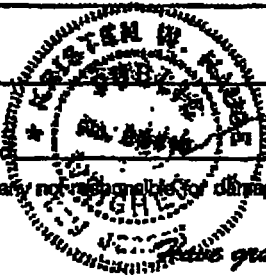
Golf Ball Packing Lot

Item(s)	Quantity / Measure (tons, lbs, yds, ea.)	Unit Price	Total
C	68 200		
T	21 000	21.10 tons	
M	42 200		

Driver

Receiver

* Company not responsible for damage done off public roads. Color not guaranteed



Have gravel will travel
since 1925

Sub Total

Delivery

N.J. Tax

Total



1463 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18709

Order Date June 1, 94

Deliver Date 1/1

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Name Big A Trucking

Address Clon Fill

Item(s)	Quantity / Measure (tons, lbs, yds, ea.)	Unit Price	Total
	S 70810		
	T 26000	22.41 tons	
	N 44810		

Driver

Received

* Company not responsible for damage done off public roads. * Cash not guaranteed

Have gravel with gravel!
since 1925

Sub Total

Delivery

N.J. Tax

Total



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18719

Order Date June 1, 1994

Name Big A Trucking

Deliver Date 1/1/

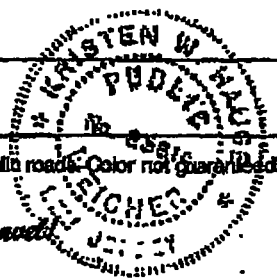
Address CLAN FILL

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 69500		
	T 26000	21.75 tons	
	N 43500		

Driver [Signature]
Received [Signature]
* Company not responsible for damage done off public roads. Color not guaranteed.



*Have gravel with gravel
since 1925*

Sub Total	
Delivery	
N.J. Tax	
Total	



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

18720

Order Date Jan 1, 94

Name Big A Trucking

Deliver Date 1/1/94

Address _____

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Clear Fill

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 71200		
	T 21200	22.6 tons	
	N 42200		

Driver _____

Sub Total

Received _____

Delivery

* Company not responsible for damage done off public roads. Color not guaranteed!

N.J. Tax

*Have gravel mill installed
since 1985*

Total



1453 W. Park Ave., Weyside
Asbury Park, N.J. 07712
808-493-3333

18722

Name Big A Trucking
Address CLAM Fill

Order Date 11/17/94Delivery Date 1/1/95Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
		71600	
		26000	22.8 tons
		9600	

Driver COOPER

Received

Company not responsible for damage done on public roads. Color not guaranteed!



Sub Total

Delivery

N.J. Tax

Total



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3393

18723

Order Date May 17, 94

Name Big A Trucking

Deliver Date 1/1/1

Address CIAN Fill

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs, yds, ea.)	Unit Price	Total
		702.50	
		26000	22.13 tons
		44250	

Driver _____

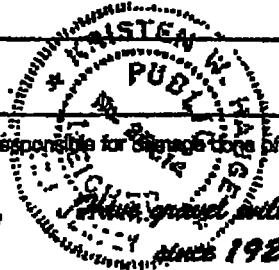
Sub Total

Received _____

Delivery

* Company not responsible for damage to or off public roads. Color not guaranteed

N.J. Tax



Total



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

18724

Order Date May 17, 94

Deliver Date

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Name Big A Trucking

Address 210 N F, 11

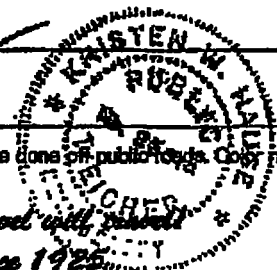
Item(s)	Quantity / Measure (tons, lbs., yds, ea.)	Unit Price	Total
		70.000	
		26.000	22 tons
		44.000	

Driver [Signature]

Received A-3

* Company not responsible for damage done on public roads. Cost not guaranteed

*Have gravel with gravel
since 1925*



Sub Total

Delivery

N.J. Tax

Total

P. 43

FAX NO. 201 423 8050

C. U. T. E.

JUN- 7-84 TUE 13:43



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18725

Order Date May 17, 84

Name Big A Trucking

Deliver Date 1-1-1

Address ELAN F.I.I.

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds, ea.)	Unit Price	Total
		71000	
		26000	22.5 t
		48000	

Driver _____

Sub Total

Received _____

Delivery

* Company not responsible for damage done on public roads. Cash not guaranteed!

N.J. Tax

*Have gravel with gravel
since 1925*

Total

UNDERGROUND STORAGE TANK REMOVAL (UST)

(Submit one form for each tank)

Building No. 2067 NJDEPE UST Reg. No. _____

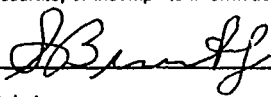
IJO No. 91-0148 Date Tank Removed _____

ITEM NO.	ITEM OF WORK	UNIT	UNIT PRICE	QUANTITY	TOTAL PRICE
01100-1.1	Rmv ID#27 soil to stockpile	TN	\$14.50		\$
01100-1.2	Supply, fill & relocate 55 Gal containers to storage	CT	\$47.50		\$
01100-1.4	Rmv & dispose of #2 fuel mixed with water Manifest #:NJA	GL	\$ 0.69		\$
01100-1.5	Rmv & dispose of #2 fuel mixed with solvent Manifest #:NJA	GL	\$ 4.50		\$
01100-1.6	Rmv & dispose of diesel fuel	GL	\$ 0.69		\$
01100-1.7	Rmv & dispose of diesel fuel mixed with water Manifest #:NJA	GL	\$ 0.69		\$
02050-1 & 02050-4	Tank removal	GL	\$ 0.975		\$
02050-5.1	Sawcut blacktop *	TN	\$27.50	33.41	\$ 918.78
02050-5.2	Sawcut concrete *	TN	\$29.50		\$
02050-5.3	Sawcut reinforced concrete	TN	\$32.50		\$
02222-1.1	Backfill cert. clean fill *	TN	\$16.25		\$
02222-1.2	3/4" clean stone *	TN	\$17.50		\$
02511-1.1	Concrete slab 4" thick	SY	\$19.80		\$
02511-1.2	Concrete slab 6" thick	SY	\$21.80		\$
02511-1.3	Concrete slab 8" thick	SY	\$24.50		\$
02511-1.4	6" Concrete curb	LF	\$16.00		\$
02551-1.1	6" Base course of 3/4" dirty blend stone	SY	\$ 6.40		\$
02551-1.2	4" stabilized base	SY	8.00		\$
02551-1.3	2" top course	SY	\$ 5.50		\$
02935-1.1	4" top soil & sod	SY	\$ 7.80		\$
02935-1.2	4" top soil & hydroseed	SY	\$ 5.40		\$

* Supply certified weight tickets to Contracting Officer at time of request for payment.

\$ 918.78

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

NAME (Print or Type): George Bernotsky SIGNATURE: 

NJDEPE UST Closure Cert. #: 0003249 DATE: 8/12/94

COMPANY NAME: CUTE Inc
(Performer of Tank Decommissioning)

NJDEPE UST Closure Corp. Cert. #: 0200128

List of Abbreviations:

CT = 55 Gallon Container GL = Gallon TN = Tons
EA = Each SY = Square Yard



STAVOLA ASPHALT CO. - TINTON FALLS

Stavola Asphalt Co., Inc.**ASPHALT PLANTS**Old Bergen Mill Rd.
Millstone, NJ
(908) 446-7700Hamilton Rd.
Tinton Falls, NJ
(908) 542-2328Yellowbrook Rd.
Farmingdale, NJ
(908) 938-2801**OFFICE COPY**

CONTROL NO.

B362020

THESE AREAS MUST BE SIGNED PRIOR TO UNLOADING OF MATERIAL

NOTE**ATTENTION DRIVER:
CUSTOMER MUST SIGN BELOW
AND RETURN YELLOW COPY TO SCALE**

RECEIVED & ACCEPTED BY:

X *Donella*
DRIVER'S SIGNATURE**X**
CUSTOMER'S SIGNATURE**EXECUTIVE OFFICE**
HAMILTON ROAD
TINTON FALLS, NJ
908 / 542-2328

• ASPHALT
CRUSHED STONE • SAND
• GRAVEL

ADDRESS REPLY TO
P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
- 2 - DELIVERED
- 3 - NET DELIVERED

DATE	07/12/94	CUST. NO.	08888	JOB NO.	13:59	TICKET NO.	B362020
CUSTOMER CLEAN UP ENVIRONMENT				DELIVER TO ZONE: TANDEM 18.32 tons		GROSS 6422.00 TARE 276.50 NET 3655.50	
TRUCKER	TRUCK NO.	DRIVER NO.	METHOD OF PAYMENT			DELIVERY CODE	ZONE
08888	1		CHARGE			1	
QUANTITY	PRODUCT CODE/DESCRIPTION		UNIT OF MEASURE	UNIT PRICE	EXTENDED	FREIGHT	SALES TAX
1.00	48 RAP INCOMING		LD.				
WAITING TIME OVER 20 MINUTES MUST BE SIGNED BELOW BY CUSTOMER						H/WAIT TIME 20	
SIGN ON JOB			TIME OFF JOB			GRAND TOTAL	
			X				
			LOADS 4			ACCU. TONS 4.00	

(SIGNATURE)



STAVOLA ASPHALT CO., TINTON FALLS

Stavola Asphalt Co., Inc.**ASPHALT PLANTS****OFFICE COPY**

CONTROL NO.

B362012Old Bergen Mill Rd.
Millstone, NJ
(908) 446-7700Hamilton Rd.
Tinton Falls, NJ
(908) 342-2328Yellowbrook Rd.
Farmingdale, NJ
(908) 938-2801

THESE AREAS MUST BE SIGNED PRIOR TO UNLOADING OF MATERIAL

NOTE**ATTENTION DRIVER:
CUSTOMER MUST SIGN BELOW
AND RETURN YELLOW COPY TO SCALE**

X *Don Ellis*
DRIVER'S SIGNATURE

RECEIVED & ACCEPTED BY:

X
CUSTOMER'S SIGNATURE

EXECUTIVE OFFICE
HAMILTON ROAD
TINTON FALLS, NJ
908 / 542-2328

• ASPHALT
CRUSHED STONE • SAND
• GRAVEL

ADDRESS REPLY TO
P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
- 2 - DELIVERED
- 3 - NET DELIVERED

DATE	07/12/94	CUST. NO.	08888	JOB NO.	12151	TICKET NO.	362012
CUSTOMER				DELIVER TO		GROSS	
CLEAN UP ENVIRONMENT				ZONE 1		57880.00	
				TANDEM		TARE	
				15.09 tons		27508.00	
						NET	
						30180.00	
TRUCKER		TRUCK NO.	DRIVER NO.	METHOD OF PAYMENT		DELIVERY CODE	
08888		1		CHARGE		ZONE	
QUANTITY	PRODUCT CODE/DESCRIPTION		UNIT OF MEASURE	UNIT PRICE	EXTENDED	FREIGHT	SALES TAX
1.00	4B RAP INCOMING		LD.				
WAITING TIME OVER 20 MINUTES MUST BE SIGNED BELOW BY CUSTOMER						H/WAIT TIME	
E ON JOB		TIME OFF JOB		LOADS		ACCU. TONS	
				3		3.00	
(SIGNATURE)				X		GRAND TOTAL	

APPENDIX E

SOIL ANALYTICAL DATA PACKAGE

APPENDIX F

GROUNDWATER ANALYTICAL DATA PACKAGE

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732)532-6224 FAX: (732)532-6263

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT FOR

Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : UST/Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 2067

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
562	2067MW01	29-31778	02/02/01
563	2067MW02	29-31779	02/02/01

NJDEP Laboratory Certification # 13461


Daniel Wright/Date: 2-21-01
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18 th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING

U.S. ARMY FORT MONMOUTH MONITORING WELL SAMPLING DATA

LOCATION: 2067
MW#: 2067MW01
NJDEP ID #: 29-31778
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02 /02 /01
WEATHER: Overcast, and cold.
TIDE: N/A

LNAPLs: N
DNAPLs :N
ELEV. OF INNER CASING SURVEY MARK: N/Aft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 4.08 ft
DEPTH OF WELL: 10.25 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 6.17 ft
(6.17) X .65 X 3 = 12.03
GALLONS OF H2O TO BE PURGED: 12 gal
PURGE METHOD: (FLOW OF >0.5 TO <5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 13:35
pH 12.05 su
DISSOLVED O2 4.71 ppm
TEMP 8.7 °C
SPECIFIC CONDUCTIVITY 2.14 us/cm

PURGE END TIME: 14:27
pH 11.04 su
DISSOLVED O2 4.21 ppm
TEMP 8.4 °C
SPECIFIC CONDUCTIVITY 2.17 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 5.79 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 12 gal

SAMPLE START TIME: 14:28
pH 11.03 su
DISSOLVED O2 4.20 ppm
TEMP 8.1 °C
SPECIFIC CONDUCTIVITY 2.15 us/cm

SAMPLE END TIME: 14:30

COMMENTS: Very high pH. Recalibrate instrument still high pH.

U.S. ARMY FORT MONMOUTH MONITORING WELL SAMPLING DATA

LOCATION: 2067
MW#: 2067MW02
NJDEP ID #: 29-31779
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 02 /02 /01
WEATHER: Overcast, and cold.
TIDE: N/A

LNAPLs: N
DNAPLs :N
ELEV. OF INNER CASING SURVEY MARK: N/Aft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 4.30 ft
DEPTH OF WELL: 13.75 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 9.45 ft
(9.45) X .65 X 3 = 18.42
GALLONS OF H2O TO BE PURGED: 18 gal
PURGE METHOD: (FLOW OF >0.5 TO <5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 13:37
pH 4.57 su
DISSOLVED O2 5.47 ppm
TEMP 9.7 °C
SPECIFIC CONDUCTIVITY 455 us/cm

PURGE END TIME: 14:55
pH 4.59 su
DISSOLVED O2 4.87 ppm
TEMP 9.6 °C
SPECIFIC CONDUCTIVITY 457 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 6.83 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 18 gal

SAMPLE START TIME: 14:56
pH 4.59 su
DISSOLVED O2 4.85 ppm
TEMP 9.6 °C
SPECIFIC CONDUCTIVITY 456 us/cm

SAMPLE END TIME: 14:58

COMMENTS:

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	:	Method Detection Limit
J	:	Compound identified below detection limit
B	:	Compound found in blank
D	:	Results are from a dilution of the sample
U	:	Compound searched for but not detected
E	:	Compound exceeds calibration limit
PQL	:	Practical Quantitation Limit
NLE	:	No limit established
RT	:	Retention time

VOLATILES

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

Data File **VC004877.D**
 Operator **Skelton**
 Date Acquired **5-Feb-01**

Sample Name **MB**
 Field ID **MB 020501**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

MB 020501

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 562-563 Location: 2067 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: MB
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004877.D
Level: (low/med) LOW Date Received: 2/2/01
% Moisture: not dec. Date Analyzed: 2/5/01
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC004906.D**
 Operator **Skelton**
 Date Acquired **6-Feb-01**

Sample Name **562**
 Field ID **2067MW01**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	8.84	9867869	153.83 ug/L	700	1.36 ug/L	E
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	15.24	372463	8.91 ug/L	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

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

Data File **VC004908.D**
 Operator **Skelton**
 Date Aquired **6-Feb-01**

Sample Name **562**
 Field ID **2067MW01**
 Multiplier **5**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	9.25 ug/L	
107131	Acrylonitrile			not detected	50	13.90 ug/L	
75650	tert-Butyl alcohol			not detected	nle	42.60 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.80 ug/L	
108203	Di-isopropyl ether			not detected	nle	1.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	8.40 ug/L	
74-87-3	Chloromethane			not detected	30	5.80 ug/L	
75-01-4	Vinyl Chloride			not detected	5	5.30 ug/L	
74-83-9	Bromomethane			not detected	10	5.50 ug/L	
75-00-3	Chloroethane			not detected	nle	5.05 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	2.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	1.20 ug/L	
67-64-1	Acetone	8.85	2071714	163.91 ug/L	700	6.80 ug/L	D
75-15-0	Carbon Disulfide			not detected	nle	2.30 ug/L	
75-09-2	Methylene Chloride			not detected	2	1.20 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.80 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.60 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	3.90 ug/L	
78-93-3	2-Butanone			not detected	300	3.10 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.85 ug/L	
67-66-3	Chloroform			not detected	6	1.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	1.15 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	2.35 ug/L	
71-43-2	Benzene			not detected	1	1.15 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.90 ug/L	
79-01-6	Trichloroethene			not detected	1	1.15 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	2.75 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	3.25 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	3.45 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	2.95 ug/L	
108-88-3	Toluene			not detected	1000	1.85 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	4.35 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	2.40 ug/L	
127-18-4	Tetrachloroethene			not detected	1	1.60 ug/L	
591-78-6	2-Hexanone			not detected	nle	3.55 ug/L	
126-48-1	Dibromochloromethane			not detected	10	4.30 ug/L	
108-90-7	Chlorobenzene			not detected	4	1.95 ug/L	
100-41-4	Ethylbenzene			not detected	700	3.25 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	5.70 ug/L	
1330-20-7	o-Xylene			not detected	nle	3.10 ug/L	
100-42-5	Styrene			not detected	100	2.80 ug/L	
75-25-2	Bromoform			not detected	4	3.50 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	2.35 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	2.75 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	2.85 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	3.20 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7-9-6 2-Sept 97

Qualifiers

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

2067MW01

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 562-563 Location: 2067 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: 562
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004906.D
Level: (low/med) LOW Date Received: 2/2/01
% Moisture: not dec. Date Analyzed: 2/6/01
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC004907.D**
 Operator **Skelton**
 Date Acquired **6-Feb-01**

Sample Name **563**
 Field ID **2067MW02**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6.2-Sept 97

Qualifiers

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

2067MW02

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 562-563 Location: 2067 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: 563
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC004907.D
Level: (low/med) LOW Date Received: 2/2/01
% Moisture: not dec. Date Analyzed: 2/6/01
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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METALS

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

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

Lab ID #: 562-563
Sample Received: NA
Analysis Start: 02/14/01
Analysis Completed: 02/14/01

Site: Ft. Monmouth
Building 2067

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3113B
Method of Digestion: NA

TEST PARAMETER: ARSENIC

Laboratory ID#	Sample Location Identification	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Method Blank	NA	ND	8	1.0

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

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

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

Lab ID #: 562-563
Sample Received: 02/02/01
Analysis Start: 02/14/01
Analysis Completed: 02/14/01

Site: Ft. Monmouth
Building 2067

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3113B
Method of Digestion: NA

TEST PARAMETER: ARSENIC

Laboratory ID#	Sample Location Identification	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
562	2067MW01	3.1	8	1.0
563	2067MW02	1.7	8	1.0

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

LTM

	Laboratory	Acetone	Methylene Chloride	Toluene	2-Butanone	2-Hexanone	4-Methyl-2-Pentanone	Dimethyl sulfide	Arsenic	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:		700	2	1000	300	NLE	400	NLE	8.0	-	-
05/22/1995	EMSL	ND	ND	ND	ND	ND	ND	ND	-	8.63	V, S
06/14/1995	EMSL	ND	ND	ND	ND	ND	ND	ND	-	9.30	V
11/05/1996	FMETL	-	-	-	-	-	-	-	39.1	5.44	As
02/20/1997	FMETL	960	ND	1.58	91	15	ND	ND	13.2	4.57	V, As
04/15/1997	FMETL	590	ND	ND	59	13	ND	24	16.0	4.75	V, As
09/03/1997	FMETL	73	15.2	ND	ND	ND	ND	9	31.8	5.90	V, As
12/04/1997	FMETL	1700	ND	ND	272	24	8.74	4	18.0	5.10	V, As
03/06/1998	FMETL	1400	ND	ND	149	17	ND	12	13.0	5.48	V, As
05/21/1998	FMETL	1100	ND	4.5	127	20	5.67	6	12.5	3.54	V, As
08/26/1998	FMETL	121.08	ND	1.70	11.78	ND	ND	ND	4.8	6.40	V, As
12/09/1998	FMETL	ND	ND	ND	ND	ND	ND	ND	13.9	8.15	V, As
02/17/1999	FMETL	ND	ND	ND	ND	ND	ND	ND	4.7	5.05	V, As
06/18/1999	FMETL	ND	ND	ND	ND	ND	ND	ND	18.5	6.28	V, As
08/10/1999	FMETL	7.54	ND	ND	ND	ND	ND	ND	36.8	7.91	V, As
11/15/1999	FMETL	678.1	ND	ND	30.29	ND	4.18	ND	11.8	5.83	V, As
03/27/2000	FMETL	252.05	ND	ND	ND	ND	ND	ND	4.3	5.04	V, As
06/15/2000	FMETL	169.34	ND	ND	16.76	ND	ND	ND	14.0	5.30	V, As
08/31/2000	FMETL	466.83	ND	ND	10.45	ND	ND	ND	11.5	5.21	V, As
11/09/2000	FMETL	111.81	ND	ND	ND	ND	ND	ND	5.7	5.89	V, As
02/02/2001	FMETL	163.91	ND	ND	8.91	ND	ND	ND	3.1	4.08	V, As

SOURCE: 2067MW01

Sampling Dates:
05/22/1995 - 02/02/2001

NOTES:

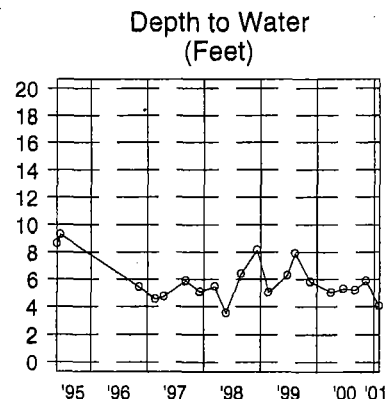
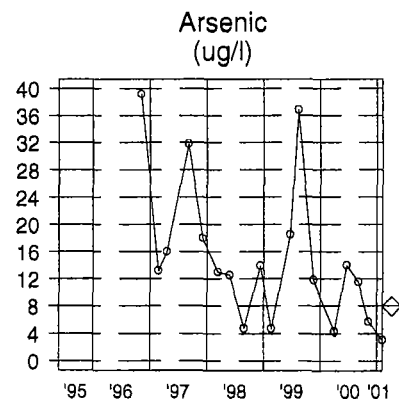
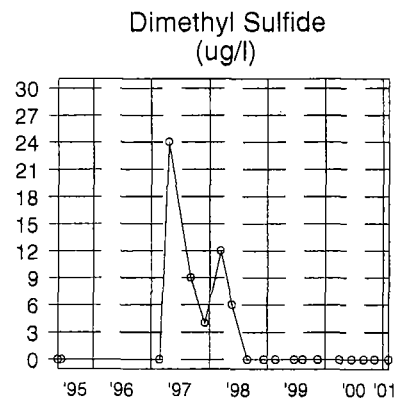
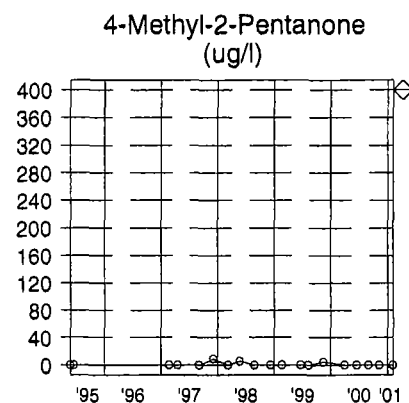
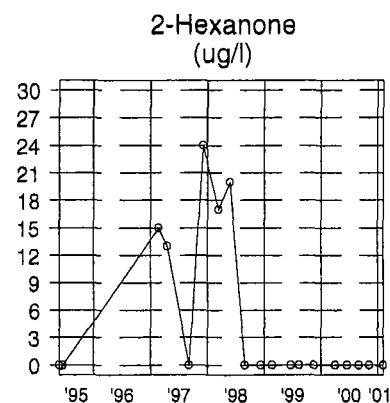
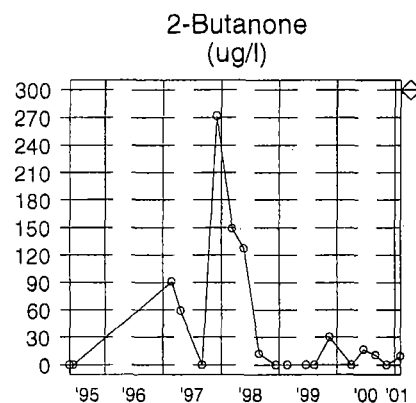
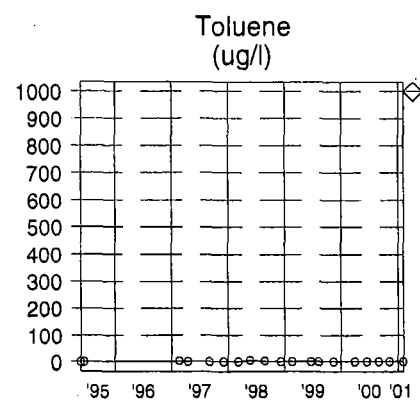
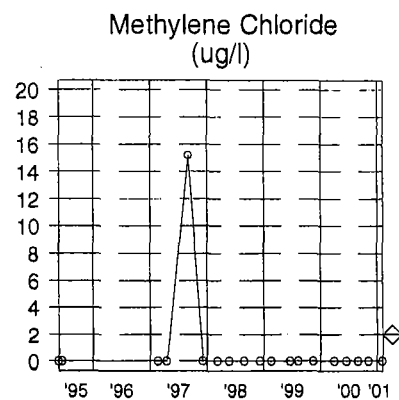
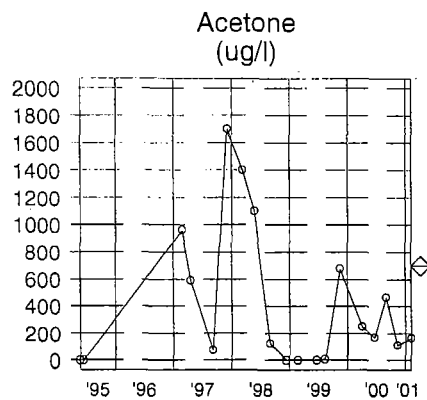
FORT MONMOUTH

GW MONITORING
Bldg.2067

Source 3 of 4



U.S. ARMY
FORT MONMOUTH
SELF-M-PW-EV



SOURCE: 2067MW01

Sampling Dates:
05/22/1995 - 02/02/2001

LEGEND:

PARAMETER

o = Date
Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg.2067

Source 3 of 4, Graph



U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

	Laboratory	Acetone	Toluene	Unknown Hydro carbon	Arsenic	Depth to Water					Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	Feet					-
NJDEP Criteria:		700	1000	NLE	8.0	-					-
05/22/1995	EMSL	ND	ND	ND	-	8.96					V, S
06/14/1995	EMSL	ND	ND	ND	-	9.53					V
08/21/1996	FMETL	-	-	-	ND	7.0					As
11/06/1996	FMETL	ND	ND	ND	ND	7.30					V, As
02/20/1997	FMETL	ND	1.2	ND	ND	6.32					V, As
04/15/1997	FMETL	ND	ND	ND	4.0	6.35					V, As
09/03/1997	FMETL	ND	ND	ND	ND	7.00					V, As
12/04/1997	FMETL	ND	ND	6	0.1	6.6					V, As
03/06/1998	FMETL	ND	ND	10	1.0	6.21					V, As
05/21/1998	FMETL	ND	ND	ND	ND	6.01					V, As
08/26/1998	FMETL	5.73	ND	ND	2.6	6.40					V, As
12/09/1998	FMETL	ND	ND	ND	2.5	8.44					V, As
02/17/1999	FMETL	ND	ND	ND	1.0	6.62					V, As
06/18/1999	FMETL	ND	ND	ND	ND	8.01					V, As
08/10/1999	FMETL	ND	ND	ND	1.5	9.17					V, As
11/15/1999	FMETL	ND	ND	ND	1.1	7.30					V, As
03/27/2000	FMETL	ND	ND	ND	ND	6.34					V, As
06/15/2000	FMETL	ND	ND	ND	5.6	6.79					V, As
08/31/2000	FMETL	ND	ND	ND	ND	6.69					V, As
11/09/2000	FMETL	ND	ND	ND	ND	7.40					V, As
02/02/2001	FMETL	ND	ND	ND	1.7	4.30					V, As

SOURCE: 2067MW02

Sampling Dates:
05/22/1995 - 02/02/2001

NOTES:

FORT MONMOUTH

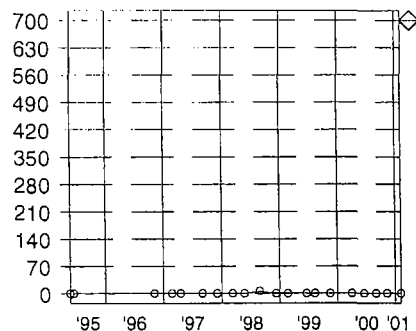
GW MONITORING
Bldg.2067

Source 4 of 4

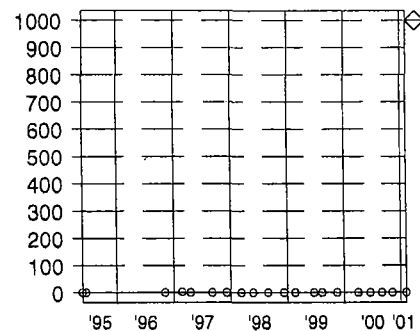


U.S. ARMY
FORT MONMOUTH
SELFM-PW-EV

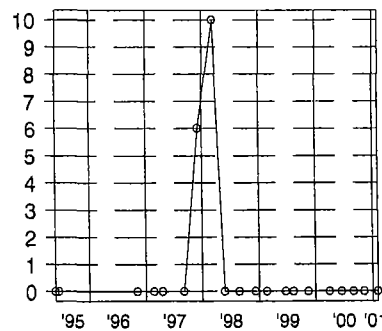
Acetone
(ug/l)



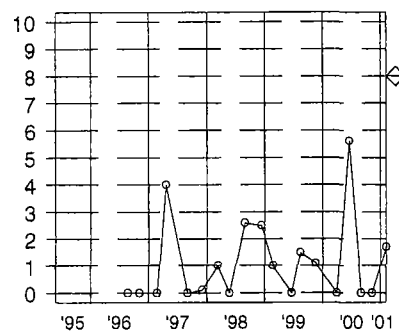
Toluene
(ug/l)



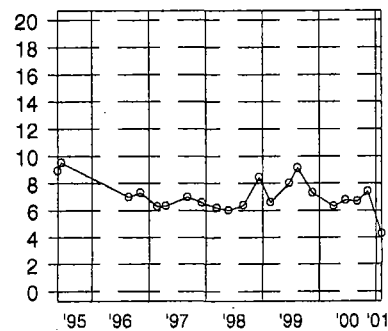
Unknown Hydrocarbon
(ug/l)



Arsenic
(ug/l)



Depth to Water
(Feet)



SOURCE: 2067MW02

Sampling Dates:
05/22/1995 - 02/02/2001

LEGEND:

PARAMETER

o = Date
Sampled

NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg.2067

Source 4 of 4, Graph



U.S. ARMY
FORT MONMOUTH
SELF-M-PW-EV

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732)532-6224 FAX: (732)532-6263

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING



ANALYTICAL DATA REPORT FOR

Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : UST/Monitoring Program

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 2067

LABORATORY ID #	MONITOR WELL#	NJDEP WELL ID#	SAMPLE DATE
16095.01	2067MW01	29-31778	05/01/01
16095.02	2067MW02	29-31779	05/01/01

NJDEP Laboratory Certification # 13461


Daniel Wright/Date: 5-30-01
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST	Standard Methods, 18 th ed.
Aluminum	3120B
Antimony	3120B
Arsenic	3120B
Barium	3120B
Beryllium	3120B
Cadmium	3120B
Calcium	3120B
Chromium	3120B
Cobalt	3120B
Copper	3120B
Iron	3120B
Lead	3120B
Magnesium	3120B
Manganese	3120B
Mercury	3112B
Nickel	3120B
Potassium	3120B
Selenium	3120B
Silver	3120B
Sodium	3120B
Thallium	3120B
Vanadium	3120B
Zinc	3120B
TARGET COMPOUND LIST	Federal Register 40 CFR Part 136 Appendix A
Base/Neutrals and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticides and PCB's by GC	608

SAMPLING



Fort Monmouth Environmental Testing Laboratory

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

Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil

NJDEP Certification #13461

Chain of Custody Record

[illegible]



Fort Monmouth Environmental Testing Laboratory

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NJDEP Certification #13461

Chain of Custody Record

Customer: <u>J. Fallon</u>		Project No:		Analysis Parameters										Comments:		
Phone #: <u>202223</u>		Location: <u>CW6 wells</u>												<u>L4°C / HCL / HNO₃</u>		
() DERA () OMA () Other:		<u>2nd Qtr '01</u>														
Samplers Name / Company: <u>Cora McCormack, TVS</u>				Sample #												
LIMS/Work Order #	Sample Location	Date	Time	Type	bottles	VOTIS	TALMIS	Pest/PCB	BNA+25						Flu Read	Remarks / Preservation Method
<u>16094</u>	<u>.01 Trip</u>	<u>5/1/01</u>	<u>0737</u>	<u>AQ</u>	<u>2</u>	<u>✓</u>									<u>1</u>	
	<u>.02 Field Blank</u>		<u>1130</u>		<u>5</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						<u>1</u>	
	<u>.03 Dupe</u>		<u>—</u>		<u>5</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						<u>1</u>	
	<u>.04 CW6 mw01</u>		<u>1258</u>		<u>5</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						<u>0.0</u>	<u>29-30970</u>
	<u>.05 CW6 mw02</u>		<u>1255</u>		<u>5</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						<u>0.0</u>	<u>29-30971</u>
	<u>.06 CW6 mw03</u>		<u>1309</u>		<u>5</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						<u>0.0</u>	<u>29-30972</u>
	<u>.07 CW6 mw34</u>		<u>1316</u>	<u>✓</u>	<u>9</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						<u>0.0</u>	<u>29-32599</u>
<u>DTW Only</u>																
<u>29-32600</u>	<u>CW6 mw35</u>	<u>4.11'</u>														
<u>29-32601</u>	<u>CW6 mw36</u>	<u>4.71'</u>														
Relinquished by (signature): <u>Cora McCormack</u>		Date/Time: <u>5/1/01 1430</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, () Reduced, (☒) Standard, () Screen / non-certified, () EDD						Remarks: <u>Shues T/FB/D w/ 2000 Sme date. cm</u>										
Turnaround time: (☒) Standard 3 wks, () Rush Days, () ASAP Verbal Hrs.						Tide: <u>N/A</u>										

U.S. ARMY FORT MONMOUTH MONITORING WELL SAMPLING DATA

LOCATION: 2067
MW#: 2067MW01
NJDEP ID #: 29-31778
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/01/01
WEATHER: Sunny, and warm.
TIDE: N/A

LNAPLs: N
DNAPLs :N
ELEV. OF INNER CASING SURVEY MARK: N/Aft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 4.87 ft
DEPTH OF WELL: 10.25 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 5.38 ft
(5.38) X .65 X 3 = 10.49
GALLONS OF H2O TO BE PURGED: 10 gal
PURGE METHOD: (FLOW OF >0.5 TO <5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 08:25
pH 12.48 su
DISSOLVED O2 5.00 ppm
TEMP 15.8 °C
SPECIFIC CONDUCTIVITY 2.37 ms/cm

PURGE END TIME: 09:08
pH 12.47 su
DISSOLVED O2 5.23 ppm
TEMP 15.3 °C
SPECIFIC CONDUCTIVITY 2.38 ms/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 5.63 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 10 gal

SAMPLE START TIME: 09:09
pH 12.49 su
DISSOLVED O2 5.22 ppm
TEMP 15.1 °C
SPECIFIC CONDUCTIVITY 2.38 ms/cm

SAMPLE END TIME: 09:12

COMMENTS: Very high pH.

U.S. ARMY FORT MONMOUTH MONITORING WELL SAMPLING DATA

LOCATION: 2067
MW#: 2067MW02
NJDEP ID #: 29-31779
NJDEP CERT #: 13461
SAMPLING CONTRACTOR: TVS
SAMPLER: Corey McCormack
DATE: 05/01/01
WEATHER: Sunny, and warm.
TIDE: N/A

LNAPLs: N
DNAPLs :N
ELEV. OF INNER CASING SURVEY MARK: N/Aft
INNER CASING DIA.: 4 INCH
DEPTH TO WATER: 6.47 ft
DEPTH OF WELL: 13.75 ft
DEPTH TO TOP OF SCREEN: N/A ft
HEIGHT OF WATER: 7.28 ft
(7.28) X .65 X 3 = 14.19
GALLONS OF H2O TO BE PURGED: 14 gal
PURGE METHOD: (FLOW OF >0.5 TO <5.0 gpm) : PERISTALTIC
PURGE RATE: 0.23 gpm
Hnu READING: 0.0 ppm

PURGE START TIME: 08:30
pH 4.37 su
DISSOLVED O2 5.97 ppm
TEMP 12.7 °C
SPECIFIC CONDUCTIVITY 422 us/cm

PURGE END TIME: 09:31
pH 4.33 su
DISSOLVED O2 5.24 ppm
TEMP 12.4 °C
SPECIFIC CONDUCTIVITY 424 us/cm

DEPTH TO H2O AFTER PURGE AND BEFORE SAMPLING: 7.07 ft
(SAMPLING METHOD: DEDICATED (IAW NJDEP FSPM 1992) TEFLON ® BAILER)
TOTAL VOLUME PURGED: 14 gal

SAMPLE START TIME: 09:32
pH 4.32 su
DISSOLVED O2 5.22 ppm
TEMP 12.3 °C
SPECIFIC CONDUCTIVITY 424 us/cm

SAMPLE END TIME: 09:35

COMMENTS: Low pH.

VOLATILES

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

MDL	:	Method Detection Limit
J	:	Compound identified below detection limit
B	:	Compound found in blank
D	:	Results are from a dilution of the sample
U	:	Compound searched for but not detected
E	:	Compound exceeds calibration limit
PQL	:	Practical Quantitation Limit
NLE	:	No limit established
RT	:	Retention time

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

Data File **VC005652.D**
 Operator **Skelton**
 Date Acquired **4-May-01**

Sample Name **MB**
 Field ID **MB**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

MB 1757

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 16094 Location: CW6 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: MB
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005652.D
Level: (low/med) LOW Date Received: 5/1/01
% Moisture: not dec. Date Analyzed: 5/4/01
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC005686.D**
 Operator **Skelton**
 Date Acquired **7-May-01**

Sample Name **MB**
 Field ID **MB**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

MB 1764

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 16095 Location: 2067 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: MB
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005686.D
Level: (low/med) LOW Date Received: 5/1/01
% Moisture: not dec. Date Analyzed: 5/7/01
GC Column: RTX502 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC005677.D**
 Operator **Skelton**
 Date Acquired **5-May-01**

Sample Name **1609401**
 Field ID **Trip Blank**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6.2-Sept 97

Qualifiers

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

Trip Blank

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 16094 Location: CW6 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: 1609401
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005677.D
Level: (low/med) LOW Date Received: 5/1/01
% Moisture: not dec. Date Analyzed: 5/5/01
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC005678.D**
 Operator **Skelton**
 Date Acquired **5-May-01**

Sample Name **1609402**
 Field ID **Field Blank**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

Field Blank

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16094 Location: CW6 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1609402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005678.D

Level: (low/med) LOW Date Received: 5/1/01

% Moisture: not dec. _____ Date Analyzed: 5/5/01

GC Column: RTX502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC005692.D**
 Operator **Skelton**
 Date Aquired **7-May-01**

Sample Name **1609501**
 Field ID **2067MW01**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone	8.84	7185518	129.53 ug/L	700	1.36 ug/L	E
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	15.23	495948	10.49 ug/L	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

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

Data File **VC005715.D**
 Operator **Skelton**
 Date Aquired **8-May-01**

Sample Name **1609501**
 Field ID **2067MW01**
 Multiplier **2**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	3.70 ug/L	
107131	Acrylonitrile			not detected	50	5.56 ug/L	
75650	tert-Butyl alcohol			not detected	nle	17.04 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.32 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	3.36 ug/L	
74-87-3	Chloromethane			not detected	30	2.32 ug/L	
75-01-4	Vinyl Chloride			not detected	5	2.12 ug/L	
74-83-9	Bromomethane			not detected	10	2.20 ug/L	
75-00-3	Chloroethane			not detected	nle	2.02 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.48 ug/L	
67-64-1	Acetone	8.84	3852032	145.62 ug/L	700	2.72 ug/L	D
75-15-0	Carbon Disulfide			not detected	nle	0.92 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.48 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.32 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.24 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	1.56 ug/L	
78-93-3	2-Butanone	15.24	263664	11.69 ug/L	300	1.24 ug/L	D
156594	cis-1,2-Dichloroethene			not detected	10	0.34 ug/L	
67-66-3	Chloroform			not detected	6	0.60 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.46 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.94 ug/L	
71-43-2	Benzene			not detected	1	0.46 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.36 ug/L	
79-01-6	Trichloroethene			not detected	1	0.46 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.80 ug/L	
75-27-4	Bromodichloromethane			not detected	1	1.10 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	1.30 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	1.38 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	1.18 ug/L	
108-88-3	Toluene			not detected	1000	0.74 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	1.74 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.96 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.64 ug/L	
591-78-6	2-Hexanone			not detected	nle	1.42 ug/L	
126-48-1	Dibromochloromethane			not detected	10	1.72 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.78 ug/L	
100-41-4	Ethylbenzene			not detected	700	1.30 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	2.28 ug/L	
1330-20-7	o-Xylene			not detected	nle	1.24 ug/L	
100-42-5	Styrene			not detected	100	1.12 ug/L	
75-25-2	Bromoform			not detected	4	1.40 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.94 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.10 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	1.14 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	1.28 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

2067MW01

Lab Name: FMETL NJDEP#: 13461
Project: LTM Case No.: 16095 Location: 2067 SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 1609501
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005692.D
Level: (low/med) LOW Date Received: 5/1/01
% Moisture: not dec. _____ Date Analyzed: 5/7/01
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification Number #13461

Data File **VC005693.D**
 Operator **Skelton**
 Date Acquired **7-May-01**

Sample Name **1609502**
 Field ID **2067MW02**
 Multiplier **1**

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156594	cis-1,2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C., 7:9-6 2-Sept 97

Qualifiers

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

2067MW02

Lab Name: FMETL NJDEP#: 13461

Project: LTM Case No.: 16095 Location: 2067 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1609502

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VC005693.D

Level: (low/med) LOW Date Received: 5/1/01

% Moisture: not dec. _____ Date Analyzed: 5/7/01

GC Column: RTX502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
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METALS

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

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

Lab ID #: 16095
Sample Received: NA
Analysis Start: 05/09/01
Analysis Completed: 05/09/01

Site: Ft. Monmouth
Building 2067

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3113B
Method of Digestion: NA

TEST PARAMETER: ARSENIC

Laboratory ID#	Sample Location Identification	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
Method Blank	NA	ND	8	2.0

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

Report of Analysis

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification # 13461

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

Lab ID #: 16094
 Sample Prepared: 06/04/01

Site: CW-6
 Ft. Monmouth, New Jersey

Field ID#: Method Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	07/06/01	14.6	200	10.0
Antimony	07/06/01	ND	20	2.0
Arsenic	07/06/01	ND	8	2.0
Barium	07/06/01	5.40	2000	0.5
Beryllium	07/06/01	ND	20	0.5
Cadmium	07/06/01	ND	4	0.5
Calcium	07/06/01	91.7	NLE	20.0
Chromium	07/06/01	ND	100	0.5
Cobalt	07/06/01	ND	NLE	0.5
Copper	07/06/01	13.5	1000	2.0
Iron	07/06/01	71.2	300	10.0
Lead	07/06/01	3.52	10	1.0
Magnesium	07/06/01	ND	NLE	10.0
Manganese	07/06/01	ND	50	0.5
Mercury	05/08/01	ND	2	0.1
Nickel	07/06/01	ND	100	1.0
Potassium	07/06/01	ND	NLE	40.0
Selenium	07/06/01	6.35	50	3.0
Silver	07/06/01	1.58	20	1.0
Sodium	07/06/01	720	50000	20.0
Thallium	07/06/01	ND	10	2.0
Vanadium	07/06/01	ND	NLE	0.5
Zinc	07/06/01	13.1	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

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

Report of Analysis

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification # 13461

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

Lab ID #: 1609402
 Sample Received: 05/01/01
 Sample Matrix: Aqueous

Site: CW-6
 Ft. Monmouth, New Jersey

Field ID#: Field Blank

TAL-METALS RESULTS SUMMARY (ug/L)

Element	Date of Analysis	Result (ug/L)	Regulatory Level (ug/L)*	MDL (ug/L)
Aluminum	07/06/01	ND	200	10.0
Antimony	07/06/01	ND	20	2.0
Arsenic	07/06/01	4.49	8	2.0
Barium	07/06/01	ND	2000	0.5
Beryllium	07/06/01	ND	20	0.5
Cadmium	07/06/01	0.816	4	0.5
Calcium	07/06/01	58.3	NLE	20.0
Chromium	07/06/01	ND	100	0.5
Cobalt	07/06/01	ND	NLE	0.5
Copper	07/06/01	ND	1000	2.0
Iron	07/06/01	63.9	300	10.0
Lead	07/06/01	ND	10	1.0
Magnesium	07/06/01	17.3	NLE	10.0
Manganese	07/06/01	1.12	50	0.5
Mercury	05/08/01	ND	2	0.1
Nickel	07/06/01	ND	100	1.0
Potassium	07/06/01	197	NLE	40.0
Selenium	07/06/01	ND	50	3.0
Silver	07/06/01	1.26	20	1.0
Sodium	07/06/01	843	50000	20.0
Thallium	07/06/01	ND	10	2.0
Vanadium	07/06/01	ND	NLE	0.5
Zinc	07/06/01	6.31	5000	5.0

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

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

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

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

Lab ID #: 16095
Sample Received: 05/01/01
Analysis Start: 05/09/01
Analysis Completed: 05/09/01

Site: Ft. Monmouth
Building 2067

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3120B
Method of Digestion: NA

TEST PARAMETER: ARSENIC

Laboratory ID#	Sample Location Identification	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
1609501	2067MW01	6.0	8	2.0
1609502	2067MW02	ND	8	2.0

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

LTM

	Laboratory	Acetone	Methylene Chloride	Toluene	2-Butanone	2-Hexanone	4-Methyl-2-Pentanone	Dimethyl sulfide	Arsenic	Depth to Water	Notes
Units:	-	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	Feet	-
NJDEP Criteria:		700	2	1000	300	NLE	400	NLE	8.0	-	-
05/22/1995	EMSL	ND	ND	ND	ND	ND	ND	ND	-	8.63	V, S
06/14/1995	EMSL	ND	ND	ND	ND	ND	ND	ND	-	9.30	V
11/05/1996	FMETL	-	-	-	-	-	-	-	39.1	5.44	As
02/20/1997	FMETL	960	ND	1.58	91	15	ND	ND	13.2	4.57	V, As
04/15/1997	FMETL	590	ND	ND	59	13	ND	24	16.0	4.75	V, As
09/03/1997	FMETL	73	15.2	ND	ND	ND	ND	9	31.8	5.90	V, As
12/04/1997	FMETL	1700	ND	ND	272	24	8.74	4	18.0	5.10	V, As
03/06/1998	FMETL	1400	ND	ND	149	17	ND	12	13.0	5.48	V, As
05/21/1998	FMETL	1100	ND	4.5	127	20	5.67	6	12.5	3.54	V, As
08/26/1998	FMETL	121.08	ND	1.70	11.78	ND	ND	ND	4.8	6.40	V, As
12/09/1998	FMETL	ND	ND	ND	ND	ND	ND	ND	13.9	8.15	V, As
02/17/1999	FMETL	ND	ND	ND	ND	ND	ND	ND	4.7	5.05	V, As
06/18/1999	FMETL	ND	ND	ND	ND	ND	ND	ND	18.5	6.28	V, As
08/10/1999	FMETL	7.54	ND	ND	ND	ND	ND	ND	36.8	7.91	V, As
11/15/1999	FMETL	678.1	ND	ND	30.29	ND	4.18	ND	11.8	5.83	V, As
03/27/2000	FMETL	252.05	ND	ND	ND	ND	ND	ND	4.3	5.04	V, As
06/15/2000	FMETL	169.34	ND	ND	16.76	ND	ND	ND	14.0	5.30	V, As
08/31/2000	FMETL	466.83	ND	ND	10.45	ND	ND	ND	11.5	5.21	V, As
11/09/2000	FMETL	111.81	ND	ND	ND	ND	ND	ND	5.7	5.89	V, As
02/02/2001	FMETL	163.91	ND	ND	8.91	ND	ND	ND	3.1	4.08	V, As
05/01/2001	FMETL	145.62	ND	ND	10.49	ND	ND	ND	6.0	4.87	V, As

SOURCE: 2067MW01

Sampling Dates:
05/22/1995 - 05/01/2001

NOTES:

FORT MONMOUTH

GW MONITORING
Bldg.2067

Source 3 of 4



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FORT MONMOUTH
SELF-M-PW-EV

SOURCE: 2067MW01

Sampling Dates:
05/22/1995 - 05/01/2001

LEGEND:

PARAMETER

o = Date
Sampled

◇ NJDEP Criteria

FORT MONMOUTH

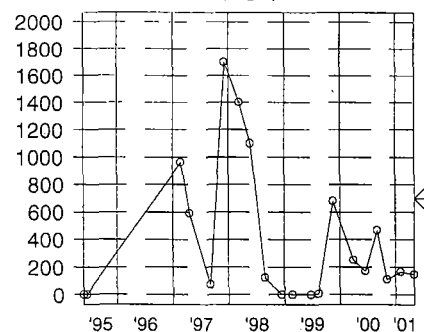
GW MONITORING
Bldg.2067

Source 3 of 4, Graph

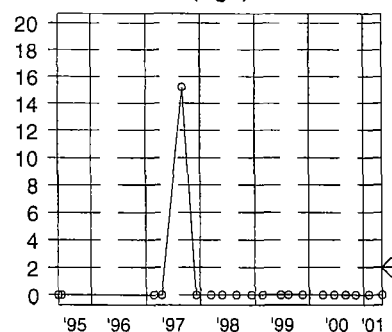


U.S. ARMY
FORT MONMOUTH
SELF-M-PW-EV

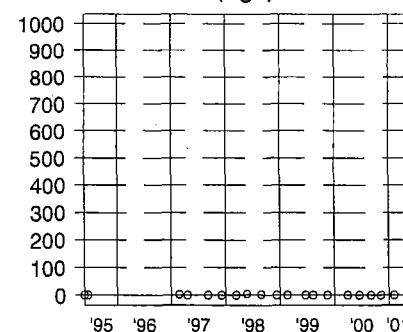
Acetone
(ug/l)



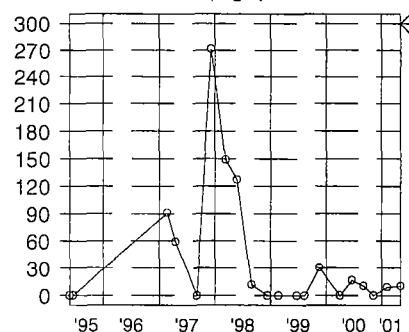
Methylene Chloride
(ug/l)



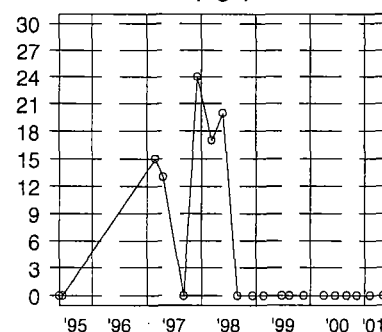
Toluene
(ug/l)



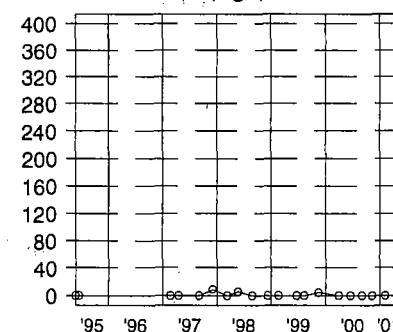
2-Butanone
(ug/l)



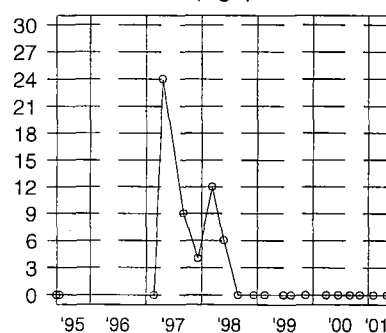
2-Hexanone
(ug/l)



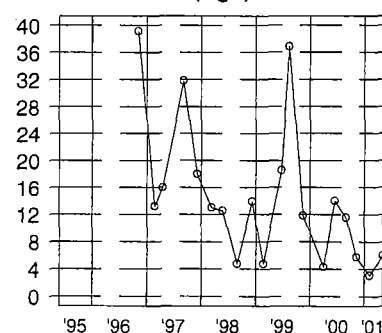
4-Methyl-2-Pentanone
(ug/l)



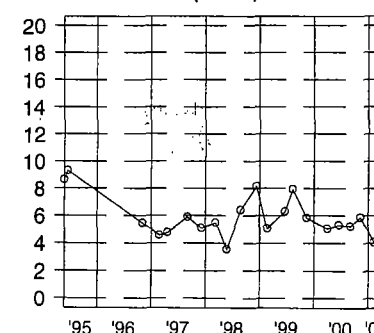
Dimethyl Sulfide
(ug/l)



Arsenic
(ug/l)



Depth to Water
(Feet)



	Laboratory	Acetone	Arsenic	Depth to Water							Notes
Units:	-	ug/l	ug/l	Feet							-
NJDEP Criteria:		700	8.0	-							-
05/22/1995	EMSL	ND	-	8.96							V, S
06/14/1995	EMSL	ND	-	9.53							V
08/21/1996	FMETL	-	ND	7.0							As
11/06/1996	FMETL	ND	ND	7.30							V, As
02/20/1997	FMETL	ND	ND	6.32							V, As
04/15/1997	FMETL	ND	4.0	6.35							V, As
09/03/1997	FMETL	ND	ND	7.00							V, As
12/04/1997	FMETL	ND	0.1	6.6							V, As
03/06/1998	FMETL	ND	1.0	6.21							V, As
05/21/1998	FMETL	ND	ND	6.01							V, As
08/26/1998	FMETL	5.73	2.6	6.40							V, As
12/09/1998	FMETL	ND	2.5	8.44							V, As
02/17/1999	FMETL	ND	1.0	6.62							V, As
06/18/1999	FMETL	ND	ND	8.01							V, As
08/10/1999	FMETL	ND	1.5	9.17							V, As
11/15/1999	FMETL	ND	1.1	7.30							V, As
03/27/2000	FMETL	ND	ND	6.34							V, As
06/15/2000	FMETL	ND	5.6	6.79							V, As
08/31/2000	FMETL	ND	ND	6.69							V, As
11/09/2000	FMETL	ND	ND	7.40							V, As
02/02/2001	FMETL	ND	1.7	4.30							V, As
05/01/2001	FMETL	ND	ND	6.47							V, As

SOURCE: 2067MW02

Sampling Dates:
05/22/1995 - 05/01/2001

NOTES:

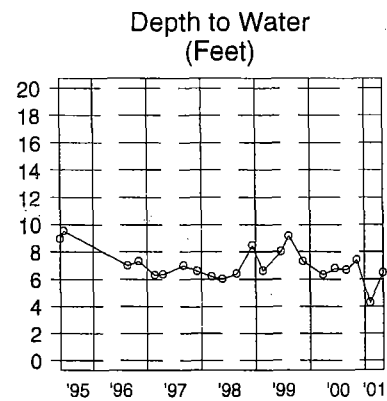
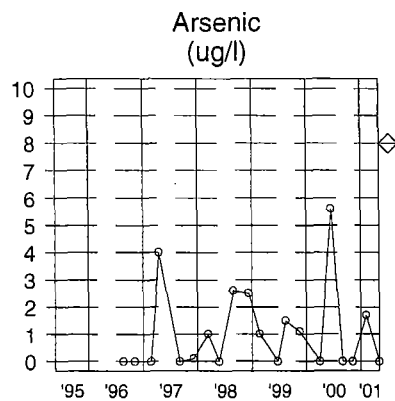
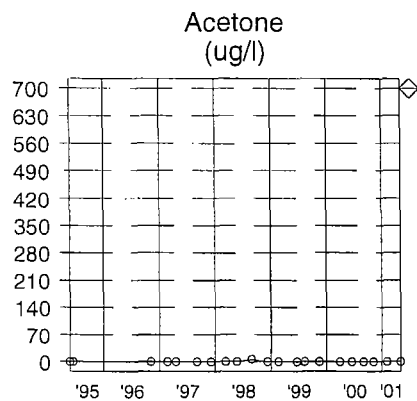
FORT MONMOUTH

GW MONITORING
Bldg.2067

Source 4 of 4



U.S.ARMY
FORT MONMOUTH
SELF-M-PW-EV



SOURCE: 2067MW02

Sampling Dates:
05/22/1995 - 05/01/2001

LEGEND:

PARAMETER

o = Date
Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
Bldg.2067

Source 4 of 4, Graph



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SELF-M-PW-EV

APPENDIX G

WELL PERMITS