

United States Army
Fort Monmouth, New Jersey

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

***Building 283C
Main Post-West Area***

**NJDEP UST Registration No. 81533-229
DICAR No. 97-08-28-1330-33**

October 2000

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

BUILDING 283C

**MAIN POST-WEST AREA
NJDEP UST REGISTRATION NO. 81533-229**

OCTOBER 2000

PREPARED FOR:

**UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY
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283C.DOC

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EXECUTIVE SUMMARY

UST Closure

On August 28, 1997, a steel underground storage tank (UST) was closed by removal in accordance with New Jersey Department of Environmental Protection (NJDEP) closure procedures at the Main Post-West Area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 0081533-229 (Fort Monmouth ID No. 283C), was located south of Building 283C. UST No. 0081533-229 was a 3,000-gallon tank containing gasoline.

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. Numerous holes were noted in the UST. Soils at the location of the holes were dark in color and appeared to be contaminated. Based on the inspection of the UST, 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. 97-08-28-1330-33. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater.

On September 3, 1997, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, L, and DUP D were collected from twelve (12) locations within the UST excavation area. Excavation floor samples A, B, C, D, and DUP D were collected at a depth of 10.0 feet bgs. Sidewall samples E, F, G, H, I, J, K, and L were collected at a depth of 6.5 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC), total solids, lead, and Volatile Organic Compounds (VOCs).

On September 9, 1997, following the removal of 84 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, and DUP D were collected from eleven (11) locations within the UST excavation. Excavation floor samples A, C, D, H, I, J, K, and DUP D were collected at a depth of 13.0 feet bgs. Sidewall samples B, E, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 15, 1997, following the removal of 60 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, and DUP B were collected from four (4) locations within the UST excavation. Excavation floor samples A, B, and DUP B were collected at a depth of 13.0 feet bgs. Sidewall samples

C and D were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 22, 1997, following the removal of 54 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, and DUP A were collected from seven (7) locations within the UST excavation area. Excavation floor samples A, B, E, and DUP A were collected at a depth of 13.0 feet bgs. Sidewall samples C, D, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 26, 1997, following the removal of 56 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, and DUP A were collected along the excavation floor at a depth of 14.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On October 3, 1997, post-excavation soil samples A, B, C, and DUP A were collected along the former piping length of the excavation. The piping samples were collected at a depth of 1.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On July 1, 1998, Geoprobe soil sample B1 was collected at a depth of 7.5 feet bgs. The sample was analyzed for TPHC, total solids, lead, and VOCs.

Site Assessment-Findings

Analytical results of post-excavation soil samples collected between September 3, 1997, and October 3, 1997, contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC).

Site Assessment-Groundwater

In response to the observation of potentially contaminated soil near the shallow water table, one (1) groundwater sample was collected at Building 283C. On July 1, 1998, Building 283C was analyzed for VOCs calibrated for xylene plus 15 tentatively identified compounds (TICs), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), and lead. Sampling and analyses were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements for Site Remediation*.

All groundwater analytical results were either below the method detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC) with the exception of benzene and toluene. Benzene was detected at a concentration of 2,238.10 ug/L, above the GWQC of 1.0 ug/L. Toluene was detected at a concentration of 1,084.57 ug/L, above the GWQC of 1,000 ug/L.

Based on the analytical results of the groundwater sample collected on July 1, 1998, one shallow overburden monitoring well (MW-2) was installed at the Building 283C area on July 28, 1999. The well was installed approximately 5 feet south of the southwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground

surface.

A second shallow overburden monitoring well (MW-1) was installed at the Building 283C area on March 28, 2000. It was installed approximately 35 feet east of the northeastern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 25.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

A third shallow overburden monitoring well (MW-3) was installed at the Building 283C area on March 28, 2000. It was installed approximately 50 feet east of the northwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below grade surface.

Monitoring well MW-2 was sampled on September 20, 1999, December 27, 1999, March 23, 1999, June 28, 2000, and August 10, 2000. Monitoring well MW-2 was analyzed for VOCs calibrated for xylene plus 15 TICs, semivolatile organic compounds (SVOCs) plus 15 TICs, pesticide/PCB, and Target Analyte List (TAL) metals.

Monitoring well MW-1 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

Monitoring well MW-3 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

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*).

Findings-Groundwater

A review of the historical groundwater analytical results indicates that concentrations of benzene, ethyl benzene, xylenes, aluminum, iron, and lead 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-2. The groundwater analytical data is summarized in Table 5.

Conclusion and Recommendations

Based on the analytical results of the post-excavation soil samples collected between September 3, 1997, and October 3, 1997, soil quality at the Building 283C UST closure site does not exceed the NJDEP NRDCSCC. Therefore, no further action is warranted.

Based on the analytical results of the groundwater samples collected from MW-1, MW-2, and MW-3, groundwater quality at the Building 283C UST closure site exceeds the New Jersey Groundwater Quality Standard for benzene, ethyl benzene, xylenes, aluminum, iron, and lead. Continued collection of groundwater samples on a quarterly basis from MW-1, MW-2, and MW-3 is recommended. The data will determine if the previously detected contaminant concentrations are declining or if further delineation and remediation activities are necessary. The need for additional actions to address groundwater contamination should be evaluated following receipt of the additional groundwater monitoring data. This may include the performance of additional remedial investigations and/or the preparation of a Remedial Action Work Plan for the site.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-229, was closed at Building 283C at the Main Post-West area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on August 28, 1997. 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 3,000-gallon tank containing gasoline.

Decommissioning activities for UST No. 81533-229 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. 81533-229 proceeded under the approval of the NJDEP Bureau of Federal Case Management (NJDEP-BFCM). The Standard Reporting Form and signed Site Assessment Summary form for UST No. 81533-229 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 283C is located in the Main Post-West area of the Fort Monmouth Army Base. UST No. 0081533-229 was located southwest of Building 283C and appurtenant steel piping ran approximately forty-three (43) feet north from the excavation to Building 283C. 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 283C. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

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

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

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

Local Geology

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

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse-grained feldspathic quartz and glauconite sand to glauconitic coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive. Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard).

Hydrogeology

The water table aquifer in the Main Post area is identified as part of the "composite confining units," or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

Based on records of wells drilled in the Main Post area, water is typically encountered at depths of 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

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

Shallow groundwater is locally influenced within the Main Post area by the following factors:

- tidal influence (based on proximity to the Atlantic Ocean, rivers, and tributaries)
- topography
- nature of the fill material within the Main Post area
- presence of clay and silt lenses in the natural overburden deposits
- local groundwater recharge areas (i.e., streams, lakes)

Due to the fluvial nature of the overburden deposits (i.e., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. This is consistent with lithologies observed in borings installed within the Main Post area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of gravel silt and/or clay.

Building 283C is located approximately 200 feet south of Parkers Creek, the nearest water body. Based on the Main Post topography, the groundwater flow in the area of Building 283C is anticipated to be to the north.

1.3 HEALTH AND SAFETY

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

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- The contractor performing the closure prior to excavation activities identified all underground obstructions (utilities, etc.).
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an 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 3,000 gallons of liquid from the UST and associated piping were transported by Lionetti Oil Recovery Co., 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. Numerous holes were observed during the inspection by the Subsurface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Soils were stained and appeared to be contaminated. Approximately 398 cubic yards of potentially contaminated soils were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area. Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length. Groundwater was encountered at 8.0 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 398 cubic yards of potentially contaminated soil were removed from the UST excavation. All potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were transported to the soil staging area. Soils that did not exhibit signs of contamination were used as backfill following the removal of the UST. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEP Certified 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: Gene Lesinski
Employer: U.S. Army, Fort Monmouth
Phone Number: (908) 532-0989
NJDEP Certification No.: 0014537
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental laboratory
Contact Person: Daniel K. Wright
Phone Number: (908) 532-4359
NJDEP Company Certification No.: 13461
- Hazardous Waste Hauler: Lorco Petroleum Services
Contact Person: Chuck Clayton
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 398 cubic yards of potentially petroleum-contaminated soils were removed from the excavation area and transported to the Fort Monmouth petroleum contaminated soil holding area. Soils were removed from the excavation until no evidence of contamination remained. Groundwater was encountered at 8.0 feet below ground surface and sheen was observed on groundwater.

2.3 SOIL SAMPLING

On September 3, 1997, following the removal of the UST and associated piping, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, L, and DUP D were collected from twelve (12) locations within the UST excavation. Excavation floor samples A, B, C, D, and DUP D were collected at a depth of 10.0 feet bgs. Sidewall samples E, F, G, H, I, J, K, and L were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 9, 1997, following the removal of 84 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, H, I, J, K, and DUP D were collected from a total of eleven (11) locations within the UST excavation. Excavation floor samples A, C, D, H, I, J, K, and DUP D were collected at a depth of 13.0 feet bgs. Sidewall samples B, E, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 15, 1997, following the removal of 60 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, and DUP B were collected from a total of four (4) locations within the UST excavation. Excavation floor samples A, B, and DUP B were collected at a depth of 13.0 feet bgs. Sidewall samples C and D were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 22, 1997, following the removal of 54 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, C, D, E, F, G, and DUP A were collected from a total of seven (7) locations within the UST excavation. Excavation floor samples A, B, E, and DUP A were collected at a depth of 13.0 feet bgs. Sidewall samples C, D, F, and G were collected at a depth of 6.5 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On September 26, 1997, following the removal of 56 cubic yards of potentially petroleum contaminated soil from the excavated area, post-excavation soil samples A, B, and DUP A were collected along the excavation floor at a depth of 14.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On October 3, 1997, post-excavation soil samples A, B, C, and DUP A were collected along the former piping length of the excavation. The piping samples were collected at a depth of 1.0 feet bgs. All samples were analyzed for TPHC, total solids, lead, and VOCs.

On July 1, 1998, geoprobe soil sample B1 was collected at a depth of 7.5 feet bgs. The sample was analyzed for TPHC, total solids, lead, and VOCs.

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

One shallow overburden monitoring well (MW-2) was installed at the Building 283C area on July 28, 1999. The well was installed approximately 5 feet south of the southwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

A second shallow overburden monitoring well (MW-1) was installed at the Building 283C area on March 28, 2000. The well was installed approximately 35 feet east of the northeastern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 25.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

A third shallow overburden monitoring well (MW-3) was installed at the Building 283C area on March 28, 2000. The well was installed approximately 50 feet east of the northwestern corner of Building 283C in the vicinity of the former excavation. It was screened in the 5.0 to 20.0 foot depth interval, across the water table, which is approximately 8 to 9 feet below ground surface.

The three 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

Monitoring well MW-2 was sampled on September 20, 1999, December 27, 1999, March 23, 1999, June 28, 2000, and August 10, 2000. Monitoring well MW-2 was analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

Monitoring well MW-1 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

Monitoring well MW-3 was sampled on June 28, 2000, and August 10, 2000, and analyzed for VOCs calibrated for xylene plus 15 TICs, SVOCs plus 15 TICs, pesticide/PCB, and TAL metals.

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, forty (40) post-excavation sample results were compared to NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) (N.J.A.C. 7:26D and revisions dated May 12, 1999). Summaries of analytical results for soils are presented in Tables 1 to 4 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 August 28, 1997, and October 3, 1997. Approximately 398 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area.

Analytical results of post-excavation soil samples collected between September 3, 1997, and October 3, 1997, contained either non-detectable concentrations of contaminants or concentrations of contaminants below the NJDEP NRDCSCC.

3.2 GROUNDWATER SAMPLING RESULTS

A review of the historical groundwater analytical results indicates that concentrations of benzene, ethyl benzene, xylenes, aluminum, iron, and lead have been detected during these sampling events above the NJDEP GWQS. The highest concentrations have historically been detected in samples collected from MW-2. The groundwater analytical data is summarized in Table 5 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 September 3, 1997, and October 3, 1997, soil quality at the Building 283C UST closure site does not exceed the NJDEP NRDCSCC. Therefore, no further action is warranted.

Based on the analytical results of the groundwater samples collected from MW-1, MW-2, and MW-3, groundwater quality at the Building 283C UST closure site exceeds the New Jersey GWQS for benzene, ethyl benzene, xylenes, aluminum, iron, and lead. Continued collection of groundwater samples on a quarterly basis from MW-1, MW-2, and MW-3 is recommended. The analysis will determine if the previously detected contaminant concentrations are declining. The need for additional actions to address groundwater quality should be evaluated following receipt of the additional groundwater monitoring data. This may include the performance of further remedial investigations and/or the preparation of a Remedial Action Work Plan for the site.

TABLES

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
**A	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**B	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**C	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
E	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
F	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
G	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
H	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**I	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**J	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
**K	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
L	9/3/97	9/4/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP D	9/3/97	9/4/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

** Sample location further remediated and resampled

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 2 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
E	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
F	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
G	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
H	9/9/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
I	9/10/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
J	9/10/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
K	9/10/97	9/11/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP D	9/10/97	9/11/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 3 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP B	9/15/97	9/17/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 4 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
E	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
F	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
G	9/15/97	9/17/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP A	9/15/97	9/17/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 5 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	9/26/97	9/29/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	9/26/97	9/29/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP A	9/26/97	9/29/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 6 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
A	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
B	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
C	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
D	10/3/97	10/6/97	Soil	Post-Excavation	TPHC,VO+15,Lead	Scoop
DUP A	10/3/97	10/6/97	Soil	Post-excavation	TPHC,VO+15,Lead	Scoop

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 7 of 7

Sample ID	Date of Collection	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Sample Method
B1	7/1/98	7/7/98	Soil	Post-Excavation	VO+15,Lead	Geoprobe

Note:

* TPHC Total Petroleum Hydrocarbons

TABLE 2
POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 283C, MAIN POST-WEST AREA
FORT MONMOUTH, NEW JERSEY

Page 1 of 8

Sample ID/ Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Parameters	Method Detection Limit (mg/kg)	Compound of Concern	Results (mg/kg) *	NJDEP Soil Cleanup Criteria ** (mg/kg)	Exceeds Cleanup Criteria
***A/10.0' =	2957.01	9/3/97	9/4/97	Total Solid	--	--	74.56 %	--	--
				TPHC	202	Yes	717.16	10,000	No
***B/10.0' =	2957.02	9/3/97	9/4/97	Total Solid	--	--	67.94 %	--	--
				TPHC	220	Yes	325.83	10,000	No
***C/10.0' =	2957.03	9/3/97	9/4/97	Total Solid	--	--	70.81 %	--	--
				TPHC	214	Yes	363.79	10,000	No
D/10.0' =	2957.04	9/3/97	9/4/97	Total Solid	--	--	71.47 %	--	--
				TPHC	214	Yes	314.25	10,000	No
E/6.5' =	2957.05	9/3/97	9/4/97	Total Solid	--	--	72.45 %	--	--
				TPHC	210	Yes	ND	10,000	No
F/6.5' =	2957.06	9/3/97	9/4/97	Total Solid	--	--	73.25 %	--	--
				TPHC	206	Yes	377.63	10,000	No
G/6.5' =	2957.07	9/3/97	9/4/97	Total Solid	--	--	73.19 %	--	--
				TPHC	213	Yes	ND	10,000	No
H/6.5' =	2957.08	9/3/97	9/4/97	Total Solid	--	--	75.98 %	--	--
				TPHC	200	Yes	272.56	10,000	No
***I/6.5' =	2957.09	9/3/97	9/4/97	Total Solid	--	--	75.28 %	--	--
				TPHC	191	Yes	1175.59	10,000	No
***J/6.5' =	2957.10	9/3/97	9/4/97	Total Solid	--	--	76.08 %	--	--
				TPHC	197	Yes	822.61	10,000	No

Note:

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

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 2 of 8

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
***K/8.5'=	2957.11	9/3/97	9/4/97	Total Solid	--	--	73.05 %	--	--
				TPHC	211	Yes	4351.68	10,000	No
L/6.5'=	2957.12	9/3/97	9/4/97	Total Solid	--	--	77.42 %	--	--
				TPHC	189	Yes	293.95	10,000	No
DUPD/6.5'=	2957.13	9/3/97	9/4/97	Total Solid	--	--	73.11 %	--	--
				TPHC	206	Yes	263.38	10,000	No

Note:

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

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 3 of 8

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/12.0' =	2980.01	9/9/97	9/11/97	Total Solid	--	--	73.63 %	--	--
				TPHC	203	Yes	206.50	10.000	No
B/6.5' =	2980.02	9/9/97	9/11/97	Total Solid	--	--	75.07 %	--	--
				TPHC	203	Yes	756.60	10.000	No
C/13.0' =	2980.03	9/9/97	9/11/97	Total Solid	--	--	76.53 %	--	--
				TPHC	194	Yes	ND	10.000	No
D/13.0' =	2980.04	9/9/97	9/11/97	Total Solid	--	--	72.38 %	--	--
				TPHC	205	Yes	ND	10.000	No
E/6.5' =	2980.05	9/9/97	9/11/97	Total Solid	--	--	73.18 %	--	--
				TPHC	209	Yes	1919.13	10.000	No
F/6.5' =	2980.06	9/9/97	9/11/97	Total Solid	--	--	74.68 %	--	--
				TPHC	195	Yes	1939.40	10.000	No
G/6.5' =	2980.07	9/9/97	9/11/97	Total Solid	--	--	75.38 %	--	--
				TPHC	200	Yes	ND	10.000	No
H/13.0' =	2980.08	9/9/97	9/11/97	Total Solid	--	--	76.13 %	--	--
				TPHC	191	Yes	ND	10.000	No
I/13.0' =	2980.09	9/10/97	9/11/97	Total Solid	--	--	75.79 %	--	--
				TPHC	203	Yes	ND	10.000	No
J/13.0' =	2980.10	9/10/97	9/11/97	Total Solid	--	--	74.93 %	--	--
				TPHC	197	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 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 4 of 8

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
K/13.0'±	2980.11	9/10/97	9/11/97	Total Solid	--	--	75.66 %	--	--
				TPHC	206	Yes	ND	10.000	No
DUPD/13.0'±	2980.12	9/10/97	9/11/97	Total Solid	--	--	76.12 %	--	--
				TPHC	201	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 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 5 of 8

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/13.0' =	2992.01	9/15/97	9/17/97	Total Solid	--	--	76.19 %	--	--
				TPHC	206	Yes	ND	10.000	No
B/13.0' =	2992.02	9/15/97	9/17/97	Total Solid	--	--	75.05 %	--	--
				TPHC	201	Yes	ND	10.000	No
C/6.5' =	2992.03	9/15/97	9/17/97	Total Solid	--	--	71.45 %	--	--
				TPHC	206	Yes	ND	10.000	No
D/6.5' =	2992.04	9/15/97	9/17/97	Total Solid	--	--	73.97 %	--	--
				TPHC	201	Yes	226.76	10.000	No
DUPB/13.0' =	2992.05	9/15/97	9/17/97	Total Solid	--	--	76.64 %	--	--
				TPHC	201	Yes	226.20	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 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 6 of 8

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/13.0' =	3008.01	9/22/97	9/24/97	Total Solid	--	--	74.50 %	--	--
				TPHC	201	Yes	ND	10,000	No
B/13.0' =	3008.02	9/22/97	9/24/97	Total Solid	--	--	73.98 %	--	--
				TPHC	204	Yes	ND	10,000	No
C/6.5' =	3008.03	9/22/97	9/24/97	Total Solid	--	--	72.11 %	--	--
				TPHC	203	Yes	ND	10,000	No
D/6.5' =	3008.04	9/22/97	9/24/97	Total Solid	--	--	71.13 %	--	--
				TPHC	220	Yes	221.18	10,000	No
E/13.0' =	3008.05	9/23/97	9/24/97	Total Solid	--	--	72.72 %	--	--
				TPHC	208	Yes	ND	10,000	No
F/6.5' =	3008.06	9/23/97	9/24/97	Total Solid	--	--	73.43 %	--	--
				TPHC	212	Yes	247.98	10,000	No
G/6.5' =	3008.07	9/23/97	9/24/97	Total Solid	--	--	73.37 %	--	--
				TPHC	199	Yes	ND	10,000	No
DUPA/13.0' =	3008.08	9/23/97	9/24/97	Total Solid	--	--	75.34 %	--	--
				TPHC	204	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 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 7 of 8

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/14.0'±	3014.01	9/26/97	9/29/97	Total Solid	--	--	75.35 %	--	--
				TPHC	197	Yes	ND	10,000	No
B/14.0'±	3014.02	9/26/97	9/29/97	Total Solid	--	--	74.34 %	--	--
				TPHC	200	Yes	ND	10,000	No
DUPA/14.0'±	3014.03	9/26/97	9/29/97	Total Solid	--	--	75.39 %	--	--
				TPHC	198	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 2

POST-EXCAVATION SOIL SAMPLING RESULTS
 BUILDING 283C, MAIN POST-WEST AREA
 FORT MONMOUTH, NEW JERSEY

Page 8 of 8

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/1.0'=	3032.01	10/3/97	10/6/97	Total Solid TPHC	-- 180	-- Yes	82.99 % ND	-- 10,000	-- No
B/1.0'=	3032.02	10/3/97	10/6/97	Total Solid TPHC	-- 185	-- Yes	84.85 % ND	-- 10,000	-- No
C/1.0'=	3032.03	10/3/97	10/6/97	Total Solid TPHC	-- 185	-- Yes	84.66 % ND	-- 10,000	-- No
D/1.0'=	3032.04	10/3/97	10/6/97	Total Solid TPHC	-- 176	-- Yes	86.26 % ND	-- 10,000	-- No
DUPA/1.0'=	3032.05	10/3/97	10/6/97	Total Solid TPHC	-- 184	-- Yes	82.50 % 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 SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
*A	2957.01	09/03/97	U	U	21	56	41	147
*B	2957.02	09/03/97	U	U	8.7	6.7	1.6	7.7
*C	2957.03	09/03/97	56	U	10	16	3.2	19
D	2957.04	09/03/97	U	U	U	U	U	U
E	2957.05	09/03/97	U	U	0.61	U	.32 J	1.48 J
F	2957.06	09/03/97	58	U	2.3	2.5	.37 J	2.19
G	2957.07	09/03/97	U	U	U	U	U	U
H	2957.08	09/03/97	U	1.6	U	U	U	U
*I	2957.09	09/03/97	U	U	5.5	6.5	35	72.2
*J	2957.10	09/03/97	U	5.9	5.8	15	24	58.5
*K	2957.11	09/03/97	U	U	5	4.7	6.1	15
L	2957.12	09/03/97	U	U	0.65	0.5	3.1	6.8
DUP D	2957.13	09/03/97	U	U	U	U	.25 J	.84 J

Abbreviations:

mg/kg: Milligrams per Kilogram.
 U: Compound searched for but not detected.
 J: Compound identified below detection limit.

Notes:

* Gray shading indicates exceedance of New Jersey Non-Residential Direct Contact Soil Cleanup Criteria
 Sample location further remediated and resampled.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	2980.01	09/09/97	U	U	4.2	10	3	15.3
B	2980.02	09/09/97	U	U	1.3	8.1	23	87
C	2980.03	09/09/97	U	U	1.4	4.1	0.78	2.19
D	2980.04	09/09/97	U	U	1.5	2.4	0.99	4.4
E	2980.05	09/09/97	U	U	5.4	10	44 E	153 E
F	2980.06	09/09/97	U	U	2.7	15	25	128 E
G	2980.07	09/09/97	U	U	U	U	U	U
H	2980.08	09/09/97	U	U	0.29	U	U	0.68
I	2980.09	09/10/97	U	U	7.1	15	0.67 J	1.86 J
J	2980.10	09/10/97	U	U	2.3	3	U	U
K	2980.11	09/10/97	U	U	1.5	1.1	U	U
DUP D	2980.12	09/09/97	U	U	1.6	2.6	1	4.4

Abbreviations:

mg/kg: Milligrams per Kilogram.
 U: Compound searched for but not detected.
 J: Compound identified below detection limit.
 E: Estimated value above the calibration curve.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	2992.01	09/15/00	U	U	U	U	U	U
B	2992.02	09/15/00	U	U	U	U	U	U
C	2992.03	09/15/00	U	U	U	U	U	U
D	2992.04	09/15/00	U	U	U	U	U	U
DUP B	2992.05	09/15/00	U	U	U	U	U	U

Abbreviations:

mg/kg: Milligrams per Kilogram.

U: Compound searched for but not detected.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	3008.01	09/22/00	U	U	0.64	U	U	U
B	3008.02	09/22/00	U	U	1.1	U	U	U
C	3008.03	09/22/00	U	U	0.52	U	0.51 J	2.95
D	3008.04	09/22/00	U	U	0.42	U	0.37 J	2.54
E	3008.05	09/23/00	U	U	1.2	U	U	U
F	3008.06	09/23/00	U	U	U	U	0.19 J	0.82 J
G	3008.07	09/23/00	U	U	U	U	U	U
DUP A	3008.08	09/22/00	U	U	1.2	U	U	U

Abbreviations:

mg/kg: Milligrams per Kilogram.
 U: Compound searched for but not detected.
 J: Compound identified below detection limit.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	3014.01	09/26/97	U	U	U	U	U	U
B	3014.02	09/26/97	U	U	U	U	U	U
DUP A	3014.03	09/26/97	U	U	U	U	U	U

Abbreviations:

mg/kg: Milligrams per Kilogram.

U: Compound searched for but not detected.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Sample I.D.	Laboratory I.D.	Sample Date	Acetone	Methylene Chloride	Benzene	Toulene	Ethylbenzene	Xylenes(Total)
UNITS:			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NJDEP CRITERIA:	Residential		1000	49	3	1000	1000	410
	Non-Residential		1000	210	13	1000	1000	1000
A	3032.01	10/03/97	U	U	U	U	U	U
B	3032.02	10/03/97	U	U	U	U	U	U
C	3032.03	10/03/97	U	U	U	U	U	U
D	3032.04	10/03/97	U	U	U	U	U	U
DUP A	3032.05	10/03/97	U	U	U	U	U	U
B-1	3693.04	07/01/98	U	U	0.38	2.70	7.70	39

Abbreviations:

mg/kg: Milligrams per Kilogram.
U: Compound searched for but not detected.

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY**

Site: B283-C
Lab ID #: 2957.01-.13
Matrix: Soils

Sample Received: 9/3/97
Analysis Start: 9/10/97
Analysis Completed: 9/11/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
2957.01	*283C-A	59.83	600
2957.02	*283C-B	ND	600
2957.03	*283C-C	ND	600
2957.04	283C-D	ND	600
2957.05	283C-E	ND	600
2957.06	283C-F	ND	600
2957.07	283C-G	ND	600
2957.08	283C-H	ND	600
2957.09	*283C-I	8.51	600
2957.10	*283C-J	3.34	600
2957.11	*283C-K	4.94	600
2957.12	283C-L	ND	600
2957.13	283C-DUP	ND	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

*: Sample location further remediated and resampled.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR LEAD
BUILDING 283C
FORT MONMOUTH, NEW JERSEY**

Site: B283-C
Lab ID #: 2980.01-.12
Matrix: Soils

Sample Received: 9/10/97
Analysis Start: 9/15/97
Analysis Completed: 9/15/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
2980.01	283C-A	ND	600
2980.02	283C-B	ND	600
2980.03	283C-C	ND	600
2980.04	283C-D	ND	600
2980.05	283C-E	ND	600
2980.06	283C-F	ND	600
2980.07	283C-G	ND	600
2980.08	283C-H	ND	600
2980.09	283C-I	ND	600
2980.10	283C-J	ND	600
2980.11	283C-K	ND	600
2980.12	283C-DUP	ND	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD BUILDING 283C FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 2992.01-.05
Matrix: Soils

Sample Received: 9/16/97
Analysis Start: 9/19/97
Analysis Completed: 9/19/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
2992.01	283C-A	3.35	600
2992.02	283C-B	ND	600
2992.03	283C-D	2.83	600
2992.04	283C-E	1.36	600
2992.05	283C-DUP	ND	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD BUILDING 283C FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3008.01-.08
Matrix: Soils

Sample Received: 9/23/97
Analysis Start: 9/30/97
Analysis Completed: 9/30/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3008.01	283C-A	ND	600
3008.02	283C-B	ND	600
3008.03	283C-C	ND	600
3008.04	283C-D	ND	600
3008.05	283C-E	ND	600
3008.06	283C-F	ND	600
3008.07	283C-G	ND	600
3008.08	283C-DUP	ND	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD BUILDING 283C FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3014.01-.03
Matrix: Soils

Sample Received: 9/26/97
Analysis Start: 9/30/97
Analysis Completed: 9/30/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3014.01	283C-A	ND	600
3014.02	283C-B	ND	600
3014.03	283C-DUP	ND	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD BUILDING 283C FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3032.01-.05
Matrix: Soils

Sample Received: 10/03/97
Analysis Start: 10/09/97
Analysis Completed: 10/10/97

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3032.01	283C-A	6.66	600
3032.02	283C-B	ND	600
3032.03	283C-C	12.66	600
3032.04	283C-D	1.99	600
3032.05	283C-DUP	4.50	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR LEAD BUILDING 283C FORT MONMOUTH, NEW JERSEY

Site: B283-C
Lab ID #: 3693.04
Matrix: Soils

Sample Received: 7/01/98
Analysis Start: 7/07/98
Analysis Completed: 7/08/98

LABORATORY I.D. #	SAMPLE LOCATION	RESULT (mg/Kg)	NRDCSCC (mg/Kg)
3693.04	B-1	ND	600

Note:

mg/kg: Milligrams per Kilogram.

ND: Not Detected.

NRDCSCC refers to the New Jersey Non-Residential Direct Contact Soil Cleanup Criteria

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Aluminum	Iron	Lead	Manganese	Nickel
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		200	300	5	50	100
283MW01	06/28/00	2070.00	1450.00	ND	22.20	10.40
283MW01	08/10/00	1930.00	739.00	2.38	23.80	5.91

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.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Acetone	Chloromethane	Benzene	Toulene	Ethylbenzene	Xylenes (total)	Phenols	2,4-Dimethyl phenol	Naphthalene	2-Methyl naphthalene
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		700	30	1	1000	700	40	4000	100	NLE	NLE
283MW02	09/20/99	ND	15.51	536.90	598.40	797.40	3831.40	ND	3.88	119.20	25.25
283MW02	12/27/99	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	26.28
283MW02	03/23/00	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	7.43
283MW02	06/28/00	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	25.10
283MW02	08/10/00	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	25.13

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.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Nitro-benzene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Nickel	Selenium
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		10	200	8	300	5	10	50	2	100	50
283MW02	09/20/99	ND	309.00	4.74	2330.00	22.00	8.76	14.50	ND	4.11	6.49
283MW02	12/27/99	ND	123.00	ND	2060.00	6.92	ND	44.00	0.30	3.62	4.73
283MW02	03/23/00	ND	241.00	ND	2010.00	15.30	ND	11.90	0.20	6.43	7.29
283MW02	06/28/00	ND	81.40	ND	2130.00	11.50	ND	8.31	ND	6.01	4.36
283MW02	08/10/00	1.17	812.00	3.40	2060.00	31.90	ND	5.97	ND	ND	8.40

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.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Well	Sample Date	Benzene	Aluminum	Arsenic	Manganese	Nickel
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA:		1	200	8	50	100
283MW03	06/28/00	9.25	3920.00	ND	36.90	9.39
283MW03	08/10/00	11.76	302.00	3.56	30.80	2.93

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.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING NO. 283C
FORT MONMOUTH, NEW JERSEY

Laboratory I.D.	Sample Date	Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylene
UNITS:		ug/L	ug/L	ug/L	ug/L	ug/L
NJDEP CRITERIA		1	200	700	NLE	NLE
B1	07/01/98	2238.10 D	1000.00 D	396.85 D	936.96 D	654.05 D

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.
D: Value from dilution.
NLE: No limit established.

FIGURES

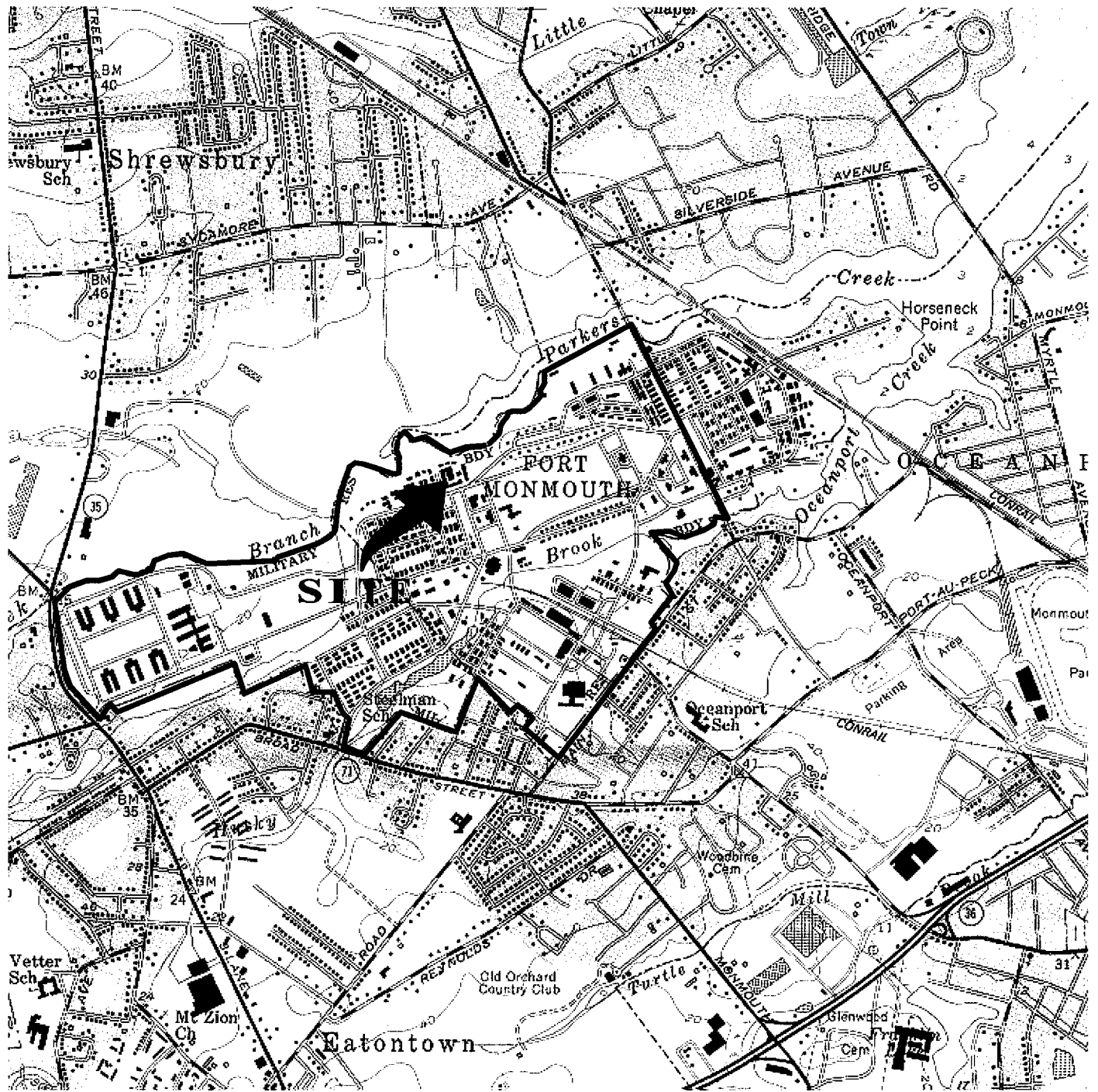


FIGURE 1

LOCATION MAP
 Building 283C
 Main-Post West
 Fort Monmouth Army Base
 Monmouth County, NJ

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

Scale: 1" = 2000'

Date: Aug. 1997

LONG BRANCH, N. J.

40073-C8-TF-024

1954

PHOTOREVISED 1981
 DMA 6164 I SE-SERIES V822



QUADRANGLE LOCATION

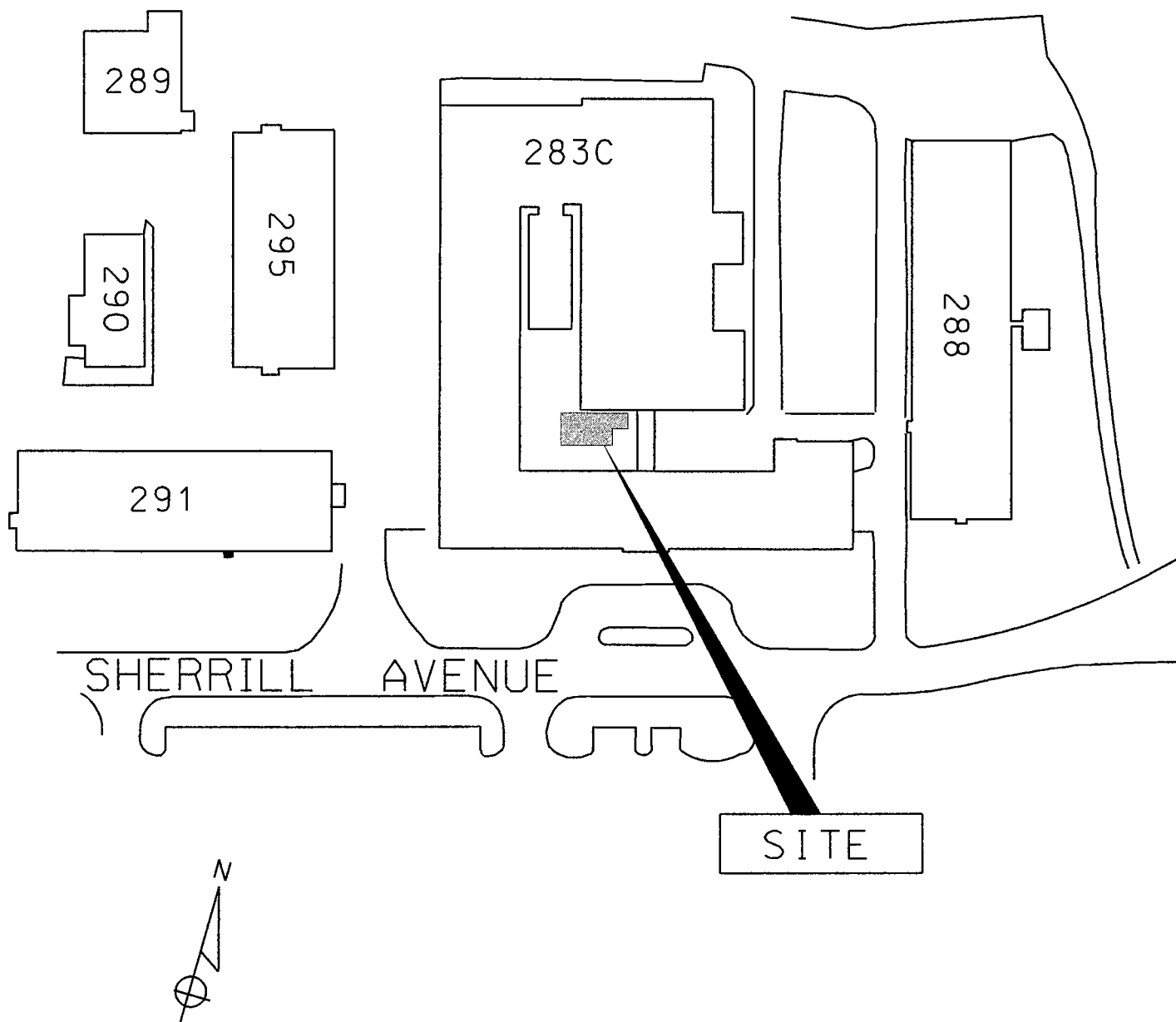
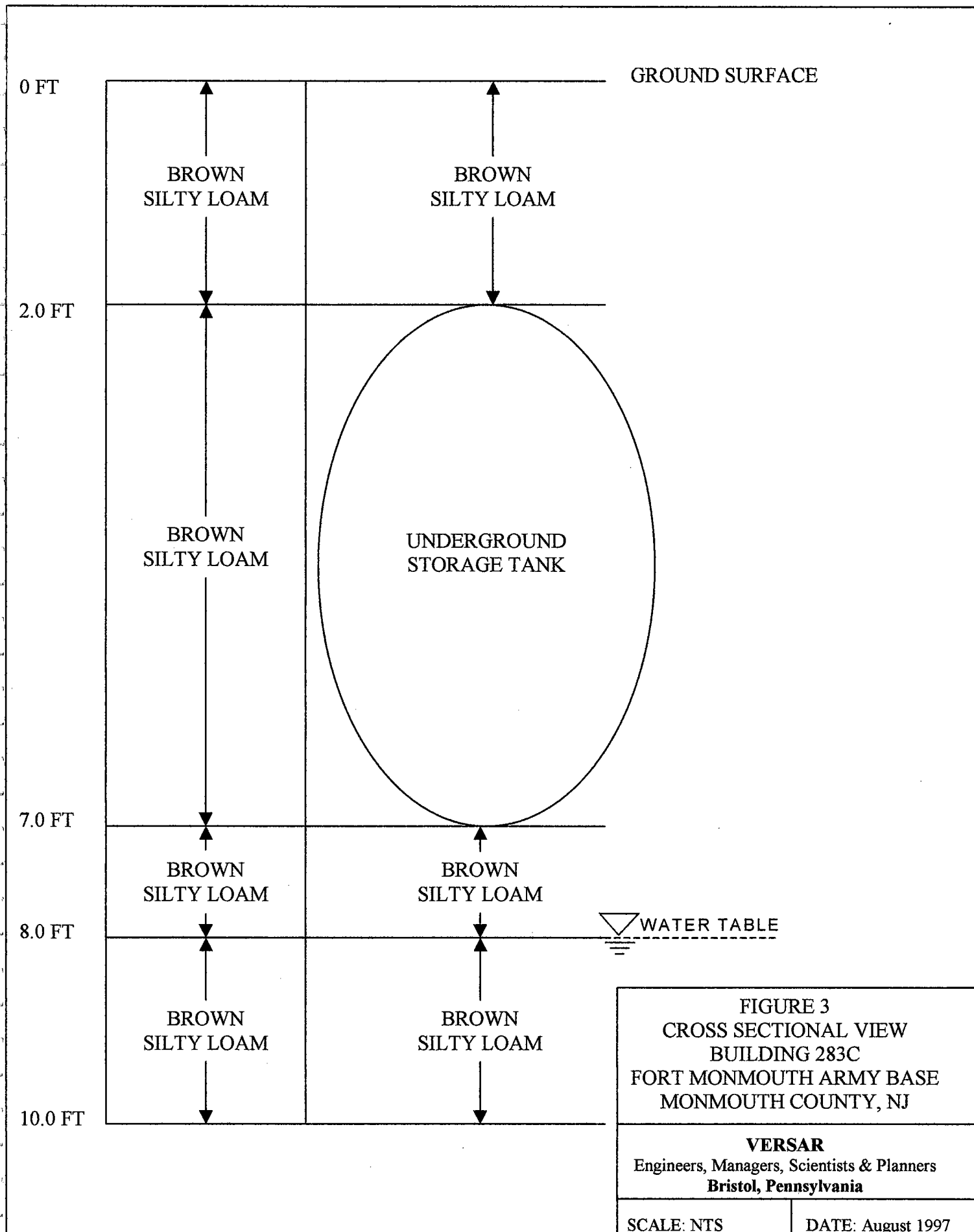


FIGURE 2
SITE MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

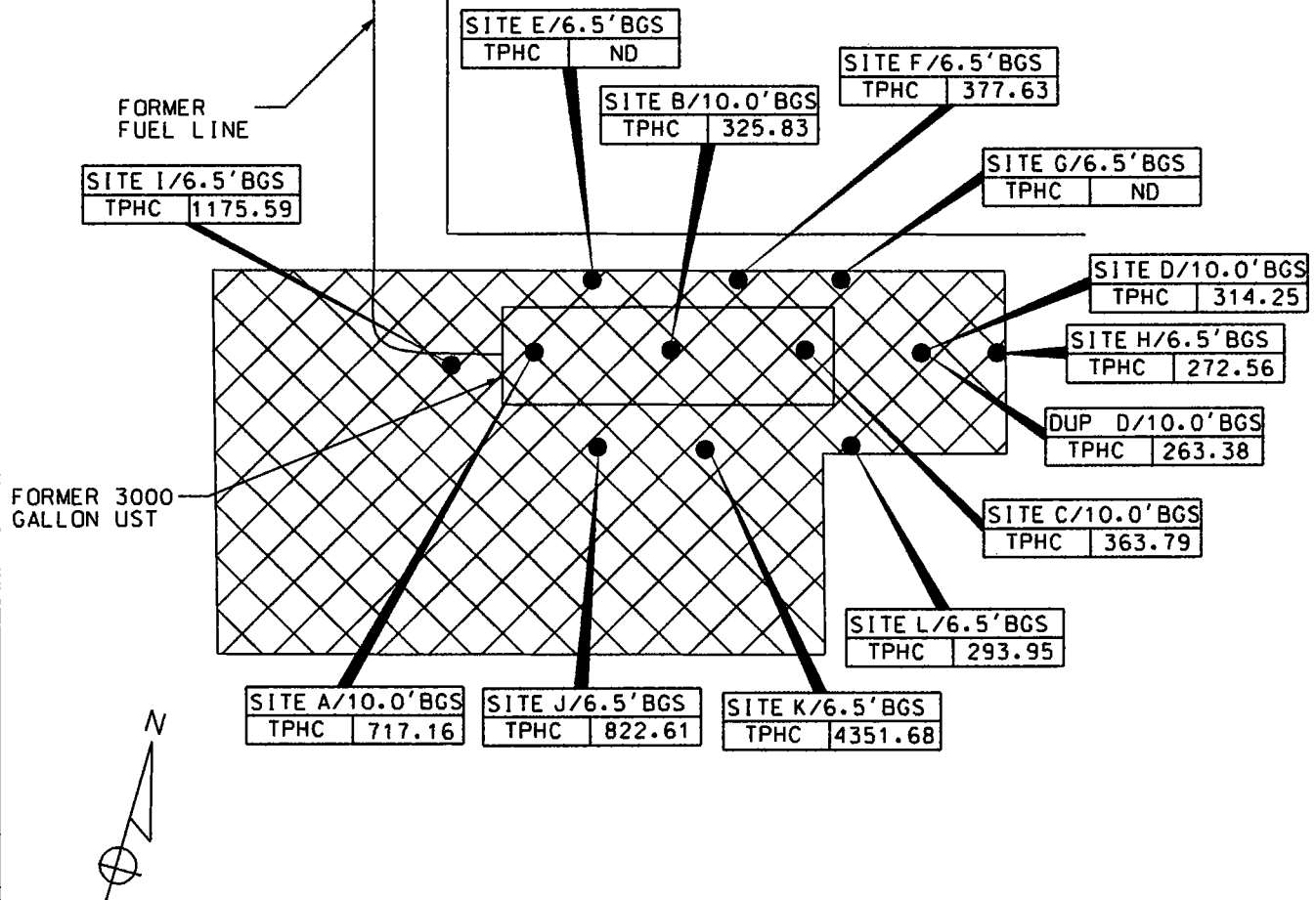
VERSAR
ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=100'

DATE: AUGUST 1997



BUILDING 283C



LEGEND



SOIL SAMPLE LOCATION
(SEPTEMBER 3, 1997)



LIMIT OF EXCAVATION
(OCTOBER 3, 1997)

NOTES:

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

FIGURE 4A
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

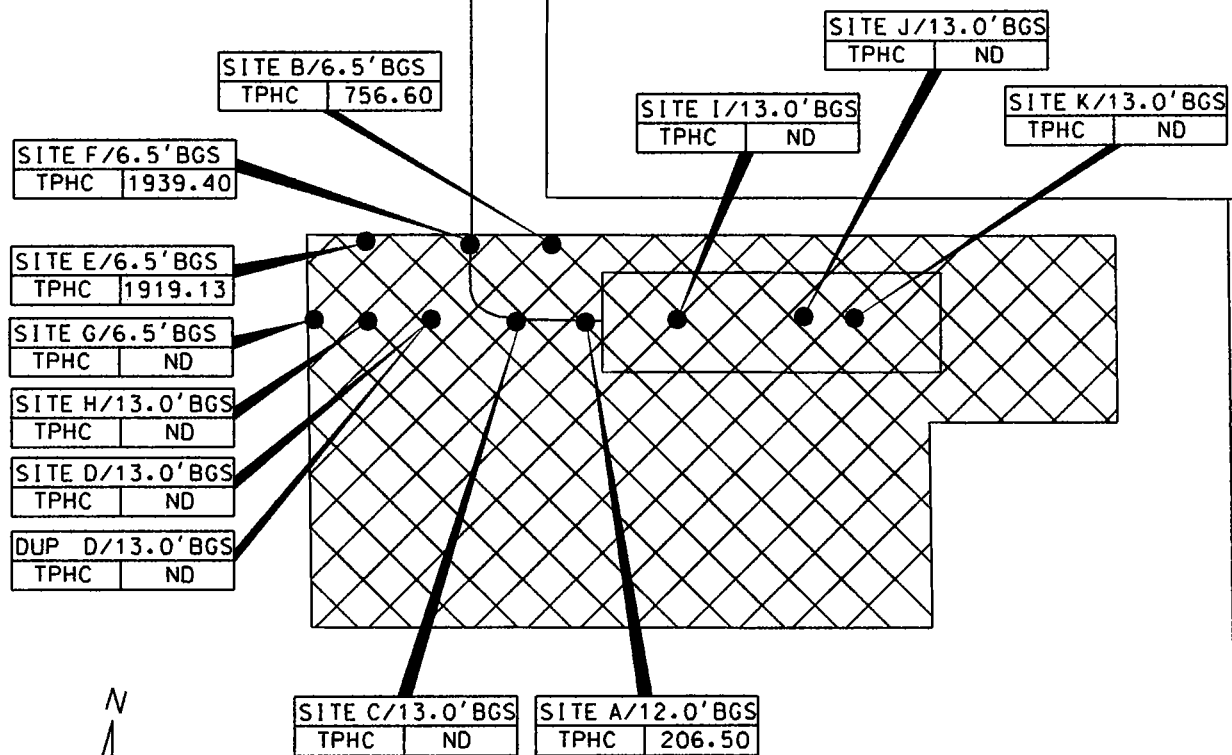
VERSAR

ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10'

DATE: AUGUST 1997

BUILDING 283C



LEGEND

● SOIL SAMPLE LOCATION
(SEPTEMBER 9, 1997)

▨ LIMIT OF EXCAVATION
(OCTOBER 3, 1997)

NOTES:

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

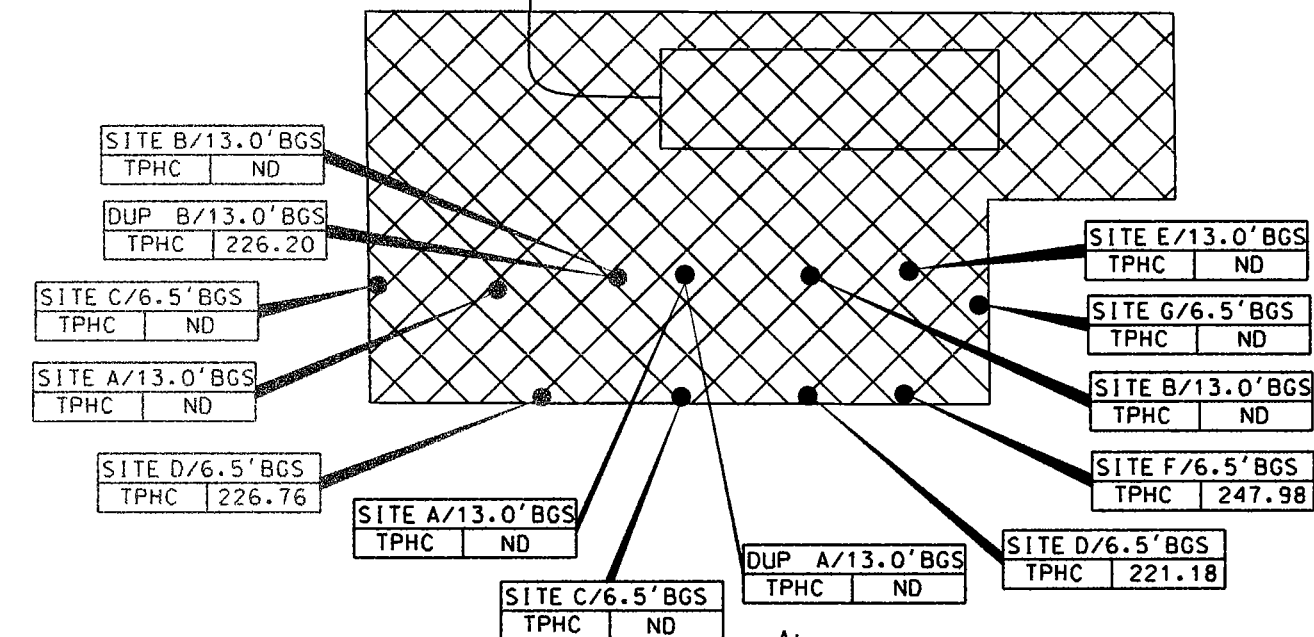
FIGURE 4B
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: AUGUST 1997

BUILDING 283C



LEGEND

- SOIL SAMPLE LOCATION (SEPTEMBER 15, 1997)
- SOIL SAMPLE LOCATION (SEPTEMBER 22, 1997)
- ▨ LIMIT OF EXCAVATION (OCTOBER 3, 1997)

NOTES:

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

FIGURE 4C
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

VERSAR

ENGINEERS, MANAGERS, SCIENTISTS & PLANNERS
BRISTOL, PA.

SCALE: 1"=10'

DATE: AUGUST 1997

SITE D/1.0' BGS
TPHC ND

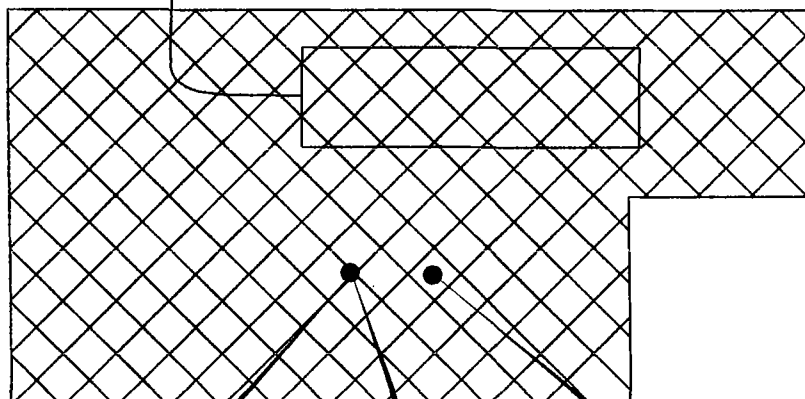
SITE C/1.0' BGS
TPHC ND

SITE B/1.0' BGS
TPHC ND

SITE A/1.0' BGS
TPHC ND

DUP A/1.0' BGS
TPHC ND

BUILDING
283C



SITE A/14.0' BGS
TPHC ND

DUP A/14.0' BGS
TPHC ND

SITE B/14.0' BGS
TPHC ND

LEGEND

- SOIL SAMPLE LOCATION (SEPTEMBER 26, 1997)
- SOIL SAMPLE LOCATION (OCTOBER 3, 1997)

▨ LIMIT OF EXCAVATION (OCTOBER 3, 1997)

NOTES:

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

FIGURE 4D
SOIL SAMPLING LOCATION MAP
BUILDING 283C
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ

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

SCALE: 1"=10'

DATE: AUGUST 1997

MW3	BENZENE	ALUMINUM
NJDEP GWQS:	1	200
6/28/00	9.25	3920
8/10/00	11.76	302

MW1	ALUMINUM	IRON
NJDEP GWQS:	200	300
6/28/00	2070	1450
8/10/00	1930	739

MW2	BENZENE	ETHYLBENZENE	XYLENES	IRON	LEAD
NJDEP GWQS:	1	700	40	300	10
9/20/99	536.9	797.4	3831.4	2330	22.0
12/27/99	720.56	422.50	2125.86	2060	6.92
3/23/00	827.72	725.71	4295.69	2010	15.3
6/28/00	908.16	1129.23	5960.70	2130	11.5
8/10/00	152.00	717.50	4009.44	2060	31.9

LEGEND

() ESTIMATED GROUNDWATER ELEVATION CONTOUR (FT)
 (7.24) GROUNDWATER ELEVATION ON AUGUST 10, 2000

NOTE:

1. ALL RESULTS IN UG/L

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

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

SCALE: 1"= 50'

DATE: AUGUST 1997

APPENDIX A

NJDEP-STANDARD REPORTING FORM



Department of Environmental Protection and Enforcement
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0029

ATTN: UST Program
(609) 984-3156

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

STANDARD REPORTING FORM
for reporting activities at an UST facility:

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

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

(More than one tank can be listed per activity)

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

Answer questions 1 through 5 and others as applicable.

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

U.S. ARMY - FORT MONMOUTH
DPW - BUILDING 173
FORT MONMOUTH NJ 07703
ATTN: EUGENE W. LESINSKI

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

3. Contact person for this activity:

GENE LESINSKI

Telephone Number: (908) 532-0989

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

BLDG 283C

229

5. Registration Number (if known):

UST - 0081533

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

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

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

(OVER)

a. ☐ Abandonment Date: / /

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

b. ☒ Removal Date: 8/28/97 Case No. 97-8-28-1330-53

Attach the necessary implementation schedule (3 copies).

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

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

Tank No. _____	Old _____	New _____
Tank No. _____	Old _____	New _____
Tank No. _____	Old _____	New _____

(Attach additional sheets if more space is needed)

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

a. New Owner (operator) _____

b. New Facility Name _____

_____ NJ _____

County _____

c. Closing Attorney _____ Tele: (____) _____

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

a. Type of Modification _____ Date: / /

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

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

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

(Specify)

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

CERTIFICATION

This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for the facility (N.J.A.C. 7:14B-23 (a) 1).

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

Signature: James Ott

Name (print or type): JAMES OTT

Title: DIRECTOR - DEPT OF PUBLIC WORKS Date: 9/10/97

APPENDIX B

SITE ASSESSMENT SUMMARY

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name : U.S. Army Fort Monmouth New JerseyFacility Street Address : Directorate of Public Works Building 173Municipality: Oceanport County : MonmouthBlock: _____ Lot(s): _____ Telephone Number : 732-532-6224**B. Owner (RP)'s Name:** _____

Street Address: _____ City : _____

State: _____ Zip: _____ Telephone Number : _____

C. (Check as appropriate)☐ Site Investigation

Report (SIR) \$500 Fee

☐ Remedial Investigation

Report (RIR) \$1000 Fee

☒ NA – Federal Agreement**D. (Complete all that apply)**• Assigned Case Manager : Ian Curtis, Federal Case Manager• UST Registration Number : 81533-229 (7 digits)• Incident Report Number 97 – 08 – 28 – 1330 – 33 (10 or 12 digits)• Tank Closure Number : Federal Case Manager**E. Certification by the Subsurface Evaluator:**

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

Name: Eugene Lesinski Signature: See signed subsurface removal log UST Cert. No.: 14537Firm: U.S. Army Fort Monmouth Firm's UST Cert. Number: NA-U.S. ArmyFirm Address: Directorate of Public Works Building 173 City: Fort MonmouthState: NJ Zip: 07703 Telephone Number : 732-532-6224

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

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

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

1. For a Corporation by a person authorized by a resolution of the board of directors to sign the document. A copy of the resolution, certified as a true copy by the secretary of the corporation, shall be submitted along with the certification; or
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, federal or other public agency by either a principal executive officer or ranking elected Official.

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

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

Signature: _____

Company Name: U.S. Army Fort Monmouth

Date: _____

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

BLDG.#: 283 C REG.#: 0081533 - 229 CLOSURE#: N/A
 DATE: 8-28-97 TOA: 1300 TOD: 1400
 GOV. SSE: LESINSKI NJDEP CERT.#: 0014537
 REMOVAL CONTRACTOR: SAI Inc. TVS
 CLOSURE SUPERVISOR: De Martinis NJDEP CERT.#: _____
 WEATHER: CLOUDY - 75°F

ACTIVITY	YES / NO
THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES	Y
THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES	Y
ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR)	Y
A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR	N/A
THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED	Y
A DISCHARGE WAS REPORTED TO THE NJDEP (609-292-7172), CASE# <u>97-8-28-1330-33</u>	Y
PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK	Y
GROUNDWATER WAS ENCOUNTERED AT <u>8</u> FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW	Y
IF OVA/Hnu WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC)	N/A
IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN)	N/A
ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992	N/A
ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/FID RECORDED SITES IAW 7:26E-3.6 et seq.	N/A
ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY	Y
THE SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER)	N/A
ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM	N
THE FOLLOWING DOCUMENTS WERE ADDED TO THE PROJECT FOLDER TODAY: (CIRCLE EACH) SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, HAZ. WASTE MANIFEST, DAILY UST CLOSURE LOG, SCALED SITE MAP (SAMPLING), SRF-CLOSURE, CHAIN OF CUSTODY, SOIL ANALYTICAL RESULTS, CLEAN FILL TICKETS (IN YDS ³), PHOTOGRAPHS (UST, EXCAVATION, SAMPLING POINTS)	A

CHECK ALL BOXES. LEAVE NO BLANKS

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

SIGNATURE: _____ DATE: 8-28-97

APPENDIX C
WASTE MANIFEST



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

NON-HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

NJ321.002059708388

Manifest
Document No.2. Page 1
of 1

NHZ 006586

3. Generator's Name and Mailing Address

U.S. Army Communications Electronics Command
MAIN Post, 100 Bldg. J73, ATTN: SELFM-PW-EV
FORT Monmouth, N.J. 07703

4. Generator's Phone

(732) 532-0898

5. Transporter 1 Company Name

LIONETTI OIL RECOVERY CO INC

6.

US EPA ID Number

NJ D084044064

A. Transporter's Phone

908 721-0900

7. Transporter 2 Company Name

8.

US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

LIONETTI OIL RECOVERY CO INC DBA LORCO PETROLEUM SVCS
RUNYON&CHEESEQUAKE RDS
OLD BRIDGE, NJ 08857

10.

US EPA ID Number

NJ D084044064

C. Facility's Phone

908 721-0900

11. Waste Shipping Name and Description

12. Containers

No.

Type

13.
Total
Quantity14.
Unit
Wt/Vola. PETROLEUM OIL (PETROLEUM OIL)
COMBUSTIBLE LIQUID UN1270 PGIII

001T 24325 G

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

T, L PETROLEUM OIL 1 %
WATER 99 %

E. Handling Codes for Wastes Listed Above

T04 FILTRATION

15. Special Handling Instructions and Additional Information

24 HR EMERGENCY RESPONSE#(908) 721-0900
DECAL/ERG#128 DEXSIL TEST KIT RESULTS N/A PPM
MANIFEST USED FOR TRACKING PURPOSES ONLY

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

EUGENE W LESINSKI

Signature

Eugene W Lesinski

Month Day Year
8 22 97

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Chuck Clayton

Signature

Chuck Clayton

Month Day Year
8 22 97

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 waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Tom Wyckoff

Signature

Tom Wyckoff

Month Day Year
8 22 97

ORIGINAL - RETURN TO GENERATOR

APPENDIX D

UST DISPOSAL CERTIFICATE

APPENDIX E

SOIL ANALYTICAL DATA PACKAGE

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
96-1262
Bldg. 283-C

Project # 2957
Date Rec. 09/03/97
Date Comp. 09/05/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OQA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

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

PHC Conformance/Non-conformance Summary Report

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

Laboratory Authentication Statement

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


Daniel K. Wright
Laboratory Manager



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>GENE LESINSKI-DPA</u>		Project No: <u>96-1262</u>		Analysis Parameters							Comments:			
Phone #: <u>20989</u>		Location: <u>B.283-C</u>		TPHC 26 SALIDS MUNSELL VOA + 10 (#24 REVERSED) LEAD VOA							* = SAMPLES KEPT BELOW 4°C.			
() DERA (X) OMA () Other: _____		(GASOLINE REMEDIATION)												
Samplers Name / Company: <u>GARY DIMARTINIS-TVS</u>				Sample #										
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles								Remarks / Preservation Method	
2957-01	283C-A	9-3-97	0928	SOIL	2	X	X	X	X	X			1000+	EXC. FLOOR @ 10.0' *
-02	283C-B		0911										300	
-03	283C-C		0902										30	
-04	283C-D		0851										10	
-05	283C-E		0943										200	SIDEWALL @ 6.5'
-06	283C-F		0956										250	
-07	283C-G		1007										200	
-08	283C-H		1142										10	
-09	283C-I		1106										1000+	
-10	283C-J		1113										1000+	
-11	283C-K		1120										1000+	
-12	283C-L		1133										500	
-13	283C-DUP													FIELD DUPLICATE
-14	283C-TRIP BLK													TRIP BLANK
Relinquished by (signature): <u>[Signature]</u>		Date/Time: <u>9/3/97 1458</u>		Received by (signature): <u>[Signature]</u>		Relinquished by (signature):		Date/Time:		Received by (signature):				
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):				
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: <u>DEDICATED SAMPLING TOOLS USED.</u>								
Turnaround time: () Standard 4 wks, () Rush Days, (X) ASAP Verbal Hrs.						NOTE: <u>VOA SAMPLES #970902.01-.14</u>								

NOTE: OVA (#A52114) CALIBRATED @ 95 ppm CH₄ + ZERO (0) AIR AT 0845 HRS. ON 9/3/97 BY ST. DIMARTINIS

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

Client : U.S. Army Lab. ID # : 2957
DPW. SELFM-PW-EV Date Rec'd: 03-Sep-97
Bldg. 173 Analysis Start: 04-Sep-97
Ft. Monmouth, NJ 07703 Analysis Complete: 05-Sep-97

Analysis: OQA-QAM-025 UST Reg. #:
Matrix: Soil Closure #:
Analyst: D.DEINHARDT DICAR #:
Ext. Meth: Shake Location #: B.283-C

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2957.01	283C-A	1.00	15.63	74.56	202	717.16
2957.02	283C-B	1.00	15.71	67.94	220	325.83
2957.03	283C-C	1.00	15.52	70.81	214	363.79
2957.04	283C-D	1.00	15.36	71.47	214	314.25
2957.05	283C-E	1.00	15.48	72.45	210	ND
2957.06	283C-F	1.00	15.54	73.25	206	377.63
2957.07	283C-G	1.00	15.10	73.19	213	ND
2957.08	283C-H	1.00	15.47	75.98	200	272.56
2957.09	283C-I	1.00	16.33	75.28	191	1175.59
2957.10	283C-J	1.00	15.64	76.08	197	822.61
2957.11	283C-K	1.00	15.26	73.05	211	4351.68
2957.12	283C-L	1.00	16.04	77.42	189	293.95
2957.13	283C-DUP	1.00	15.64	73.11	206	263.38
METHOD BLANK	4-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit


Daniel K. Wright
Laboratory Director

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

Laboratory Manager or Environmental Consultant's Signature _____

Date 1/22/94

Laboratory Certification #13461

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

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260
96-1262
B.283-C
Gasoline Remediation

Project # 2957
Date Rec. 09/03/97
Date Compl. 09/16/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

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

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

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms Labeled/Compounds Identified
(Field Samples and Method Blanks)
2. Retention times for chromatograms provided
3. GC/MS Tune Specifications
 - a. BFB Meet Criteria
 - b. DFTPP Meet Criteria
4. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series
5. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series
6. GC/MS Calibration Requirements
 - a. Calibration Check Compounds Meet Criteria
 - b. System Performance Check Compounds Meet Criteria
7. Blank Contamination - If yes, List compounds and concentrations in each blank:
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____
8. Surrogate Recoveries Meet Criteria

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

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

If not met, were the calculations checked and the results qualified as "estimated"?
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
(If not met, list those compounds and their recoveries which fall outside the acceptable range)
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____

Y

Y

Y

Y

Y

Y

Y

X

Y

GC/MS Analysis Conformance/Non-Conformance Summary (cont.)

Indicate
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria

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

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

Y

11. Extraction Holding Time Met

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

Y

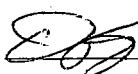
12. Analysis Holding Time Met

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

Y

Additional Comments:

Laboratory Manager :



Date:

1-20-94



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>GENE LESINSKI-DPW</u>		Project No: <u>96-1262</u>		Analysis Parameters							Comments:	
Phone #: <u>20989</u>		Location: <u>B. 283-C</u>		TPHC	26 Solids	Manganese	UOA+10 (#24 LINES)	LEAD			OVA	* = SAMPLES KEPT BELOW 4°C.
() DERA (X) OMA () Other: _____		(GASOLINE REMEDIATION)										
Samplers Name / Company: <u>GARY DIMARTINIS-TVS</u>				Sample #								Remarks / Preservation Method
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles							
2957-01	283C-A	9-3-97	0928	SOIL	2	X	X	X	X	X	1000+	EXC. FLOOR @ 10.0' *
.02	283C-B		0911								300	
.03	283C-C		0902								30	
.04	283C-D		0851								10	
.05	283C-E		0943								200	SIDEWALL @ 6.5'
.06	283C-F		0956								250	
.07	283C-G		1007								200	
.08	283C-H		1142								10	
.09	283C-I		1106								1000+	
.10	283C-J		1113								1000+	
.11	283C-K		1120								1000+	
.12	283C-L		1133								500	
.13	283C-DUP											FIELD Duplicate
.14	283C-TRIP BLK											TRIP BLANK

Relinquished by (signature): <u>[Signature]</u>	Date/Time: <u>9/3/97 1458</u>	Received by (signature): <u>[Signature]</u>	Relinquished by (signature):	Date/Time:	Received by (signature):
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified	Remarks: <u>DEDICATED SAMPLING TOOLS USED.</u>
Turnaround time: () Standard 4 wks, () Rush Days, (X) ASAP Verbal Hrs.	<u>NOTE: UOA SAMPLES #970902.01-14</u>
<u>NOTE: OVA (#152114) CALIBRATED BY P5 ppm CH4 + ZERO (0) AIR AT 0845 HRS. on 9/3/97 by LT DiMichele</u>	

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit

J : Compound identified below detection limit

B : Compound in both sample and blank

D : Results from dilution of sample

U : Compound searched for but not detected

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01833.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 0 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01833.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 0 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
 Project: 961262 Case No.: 2957 Location: 283C SDG No.:
 Matrix: (soil/water) SOIL Lab Sample ID: DAILY BLANK
 Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01937.D
 Level: (low/med) MED Date Received: 09/03/97
 % Moisture: not dec. 0 Date Analyzed: 09/16/97
 GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: DAILY BLANK

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01937.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 0 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.01

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01835.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 25.44 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

107028	Acrolein	4500	U
107131	Acrylonitrile	4500	U
75650	tert-Butyl alcohol	8300	U
1634044	Methyl-tert-Butyl ether	1900	U
108203	Di-isopropyl ether	1300	U
	Dichlorodifluoromethane	2600	U
74-87-3	Chloromethane	640	U
75-01-4	Vinyl Chloride	1900	U
74-83-9	Bromomethane	1300	U
75-00-3	Chloroethane	1900	U
75-69-4	Trichlorofluoromethane	1300	U
75-35-4	1,1-Dichloroethene	640	U
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	640	U
75-09-2	Methylene Chloride	1300	U
156-60-5	trans-1,2-Dichloroethene	1300	U
75-35-3	1,1-Dichloroethane	640	U
108-05-4	Vinyl Acetate	1900	U
78-93-3	2-Butanone	1900	U
	cis-1,2-Dichloroethene	640	U
67-66-3	Chloroform	640	U
75-55-6	1,1,1-Trichloroethane	640	U
56-23-5	Carbon Tetrachloride	1300	U
71-43-2	Benzene	21000	
107-06-2	1,2-Dichloroethane	1300	U
79-01-6	Trichloroethene	640	U
78-87-5	1,2-Dichloropropane	640	U
75-27-4	Bromodichloromethane	640	U
110-75-8	2-Chloroethyl vinyl ether	1300	U
10061-01-5	cis-1,3-Dichloropropene	640	U
108-10-1	4-Methyl-2-Pentanone	1300	U
108-88-3	Toluene	76000	E
10061-02-6	trans-1,3-Dichloropropene	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
127-18-4	Tetrachloroethene	640	U
591-78-6	2-Hexanone	1300	U
126-48-1	Dibromochloromethane	1300	U
108-90-7	Chlorobenzene	640	U
100-41-4	Ethylbenzene	41000	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.01

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01835.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 25.44 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	140000	E
1330-20-7	o-Xylene	46000	
100-42-5	Styrene	1300	U
75-25-2	Bromoform	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 2957.01

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01945.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 25.44 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 12.5 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		9000	U
107131	Acrylonitrile		9000	U
75650	tert-Butyl alcohol		17000	U
1634044	Methyl-tert-Butyl ether		3900	U
108203	Di-isopropyl ether		2600	U
	Dichlorodifluoromethane		5100	U
74-87-3	Chloromethane		1300	U
75-01-4	Vinyl Chloride		3900	U
74-83-9	Bromomethane		2600	U
75-00-3	Chloroethane		3900	U
75-69-4	Trichlorofluoromethane		2600	U
75-35-4	1,1-Dichloroethene		1300	U
67-64-1	Acetone		2600	U
75-15-0	Carbon Disulfide		1300	U
75-09-2	Methylene Chloride		2600	U
156-60-5	trans-1,2-Dichloroethene		2600	U
75-35-3	1,1-Dichloroethane		1300	U
108-05-4	Vinyl Acetate		3900	U
78-93-3	2-Butanone		3900	U
	cis-1,2-Dichloroethene		1300	U
67-66-3	Chloroform		1300	U
75-55-6	1,1,1-Trichloroethane		1300	U
56-23-5	Carbon Tetrachloride		2600	U
71-43-2	Benzene		19000	
107-06-2	1,2-Dichloroethane		2600	U
79-01-6	Trichloroethene		1300	U
78-87-5	1,2-Dichloropropane		1300	U
75-27-4	Bromodichloromethane		1300	U
110-75-8	2-Chloroethyl vinyl ether		2600	U
10061-01-5	cis-1,3-Dichloropropene		1300	U
108-10-1	4-Methyl-2-Pentanone		2600	U
108-88-3	Toluene		56000	
10061-02-6	trans-1,3-Dichloropropene		2600	U
79-00-5	1,1,2-Trichloroethane		2600	U
127-18-4	Tetrachloroethene		1300	U
591-78-6	2-Hexanone		2600	U
126-48-1	Dibromochloromethane		2600	U
108-90-7	Chlorobenzene		1300	U
100-41-4	Ethylbenzene		33000	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.01

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01945.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 25.44 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 12.5 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	110000	
1330-20-7	o-Xylene	37000	
100-42-5	Styrene	2600	U
75-25-2	Bromoform	2600	U
79-34-5	1,1,2,2-Tetrachloroethane	2600	U
541-73-1	1,3-Dichlorobenzene	3900	U
106-46-7	1,4-Dichlorobenzene	3900	U
95-50-1	1,2-Dichlorobenzene	3900	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.02

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01836.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 32.06 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2400	U
107131	Acrylonitrile		2400	U
75650	tert-Butyl alcohol		4500	U
1634044	Methyl-tert-Butyl ether		1000	U
108203	Di-isopropyl ether		700	U
	Dichlorodifluoromethane		1400	U
74-87-3	Chloromethane		350	U
75-01-4	Vinyl Chloride		1000	U
74-83-9	Bromomethane		700	U
75-00-3	Chloroethane		1000	U
75-69-4	Trichlorofluoromethane		700	U
75-35-4	1,1-Dichloroethene		350	U
67-64-1	Acetone		700	U
75-15-0	Carbon Disulfide		350	U
75-09-2	Methylene Chloride		700	U
156-60-5	trans-1,2-Dichloroethene		700	U
75-35-3	1,1-Dichloroethane		350	U
108-05-4	Vinyl Acetate		1000	U
78-93-3	2-Butanone		1000	U
	cis-1,2-Dichloroethene		350	U
67-66-3	Chloroform		350	U
75-55-6	1,1,1-Trichloroethane		350	U
56-23-5	Carbon Tetrachloride		700	U
71-43-2	Benzene		8700	
107-06-2	1,2-Dichloroethane		700	U
79-01-6	Trichloroethene		350	U
78-87-5	1,2-Dichloropropane		350	U
75-27-4	Bromodichloromethane		350	U
110-75-8	2-Chloroethyl vinyl ether		700	U
10061-01-5	cis-1,3-Dichloropropene		350	U
108-10-1	4-Methyl-2-Pentanone		700	U
108-88-3	Toluene		6700	
10061-02-6	trans-1,3-Dichloropropene		700	U
79-00-5	1,1,2-Trichloroethane		700	U
127-18-4	Tetrachloroethene		350	U
591-78-6	2-Hexanone		700	U
126-48-1	Dibromochloromethane		700	U
108-90-7	Chlorobenzene		350	U
100-41-4	Ethylbenzene		1600	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.02

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01836.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 32.06 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	5300	
1330-20-7	o-Xylene	2400	
100-42-5	Styrene	700	U
75-25-2	Bromoform	700	U
79-34-5	1,1,2,2-Tetrachloroethane	700	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.03

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01837.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 29.19 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2500	U	
107131	Acrylonitrile	2500	U	
75650	tert-Butyl alcohol	4700	U	
1634044	Methyl-tert-Butyl ether	1100	U	
108203	Di-isopropyl ether	720	U	
	Dichlorodifluoromethane	1400	U	
74-87-3	Chloromethane	360	U	
75-01-4	Vinyl Chloride	1100	U	
74-83-9	Bromomethane	720	U	
75-00-3	Chloroethane	1100	U	
75-69-4	Trichlorofluoromethane	720	U	
75-35-4	1,1-Dichloroethene	360	U	
67-64-1	Acetone	62000	E	
75-15-0	Carbon Disulfide	360	U	
75-09-2	Methylene Chloride	720	U	
156-60-5	trans-1,2-Dichloroethene	720	U	
75-35-3	1,1-Dichloroethane	360	U	
108-05-4	Vinyl Acetate	1100	U	
78-93-3	2-Butanone	1100	U	
	cis-1,2-Dichloroethene	360	U	
67-66-3	Chloroform	360	U	
75-55-6	1,1,1-Trichloroethane	360	U	
56-23-5	Carbon Tetrachloride	720	U	
71-43-2	Benzene	10000		
107-06-2	1,2-Dichloroethane	720	U	
79-01-6	Trichloroethene	360	U	
78-87-5	1,2-Dichloropropane	360	U	
75-27-4	Bromodichloromethane	360	U	
110-75-8	2-Chloroethyl vinyl ether	720	U	
10061-01-5	cis-1,3-Dichloropropene	360	U	
108-10-1	4-Methyl-2-Pentanone	720	U	
108-88-3	Toluene	16000		
10061-02-6	trans-1,3-Dichloropropene	720	U	
79-00-5	1,1,2-Trichloroethane	720	U	
127-18-4	Tetrachloroethene	360	U	
591-78-6	2-Hexanone	720	U	
126-48-1	Dibromochloromethane	720	U	
108-90-7	Chlorobenzene	360	U	
100-41-4	Ethylbenzene	3200		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.03

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01837.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 29.19 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	13000	
1330-20-7	o-Xylene	6000	
100-42-5	Styrene	720	U
75-25-2	Bromoform	720	U
79-34-5	1,1,2,2-Tetrachloroethane	720	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.03

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01946.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 29.19 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	5000		U
107131	Acrylonitrile	5000		U
75650	tert-Butyl alcohol	9300		U
1634044	Methyl-tert-Butyl ether	2200		U
108203	Di-isopropyl ether	1400		U
	Dichlorodifluoromethane	2900		U
74-87-3	Chloromethane	720		U
75-01-4	Vinyl Chloride	2200		U
74-83-9	Bromomethane	1400		U
75-00-3	Chloroethane	2200		U
75-69-4	Trichlorofluoromethane	1400		U
75-35-4	1,1-Dichloroethene	720		U
67-64-1	Acetone	56000		
75-15-0	Carbon Disulfide	720		U
75-09-2	Methylene Chloride	1400		U
156-60-5	trans-1,2-Dichloroethene	1400		U
75-35-3	1,1-Dichloroethane	720		U
108-05-4	Vinyl Acetate	2200		U
78-93-3	2-Butanone	2200		U
	cis-1,2-Dichloroethene	720		U
67-66-3	Chloroform	720		U
75-55-6	1,1,1-Trichloroethane	720		U
56-23-5	Carbon Tetrachloride	1400		U
71-43-2	Benzene	10000		
107-06-2	1,2-Dichloroethane	1400		U
79-01-6	Trichloroethene	720		U
78-87-5	1,2-Dichloropropane	720		U
75-27-4	Bromodichloromethane	720		U
110-75-8	2-Chloroethyl vinyl ether	1400		U
10061-01-5	cis-1,3-Dichloropropene	720		U
108-10-1	4-Methyl-2-Pentanone	1400		U
108-88-3	Toluene	16000		
10061-02-6	trans-1,3-Dichloropropene	1400		U
79-00-5	1,1,2-Trichloroethane	1400		U
127-18-4	Tetrachloroethene	720		U
591-78-6	2-Hexanone	1400		U
126-48-1	Dibromochloromethane	1400		U
108-90-7	Chlorobenzene	720		U
100-41-4	Ethylbenzene	3100		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.03

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01946.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 29.19 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	13000	
1330-20-7	o-Xylene	5600	
100-42-5	Styrene	1400	U
75-25-2	Bromoform	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
541-73-1	1,3-Dichlorobenzene	2200	U
106-46-7	1,4-Dichlorobenzene	2200	U
95-50-1	1,2-Dichlorobenzene	2200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.04

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01838.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 28.53 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2300	U
107131	Acrylonitrile	2300	U
75650	tert-Butyl alcohol	4300	U
1634044	Methyl-tert-Butyl ether	990	U
108203	Di-isopropyl ether	660	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	330	U
75-01-4	Vinyl Chloride	990	U
74-83-9	Bromomethane	660	U
75-00-3	Chloroethane	990	U
75-69-4	Trichlorofluoromethane	660	U
75-35-4	1,1-Dichloroethene	330	U
67-64-1	Acetone	660	U
75-15-0	Carbon Disulfide	330	U
75-09-2	Methylene Chloride	660	U
156-60-5	trans-1,2-Dichloroethene	660	U
75-35-3	1,1-Dichloroethane	330	U
108-05-4	Vinyl Acetate	990	U
78-93-3	2-Butanone	990	U
	cis-1,2-Dichloroethene	330	U
67-66-3	Chloroform	330	U
75-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	660	U
71-43-2	Benzene	330	U
107-06-2	1,2-Dichloroethane	660	U
79-01-6	Trichloroethene	330	U
78-87-5	1,2-Dichloropropane	330	U
75-27-4	Bromodichloromethane	330	U
110-75-8	2-Chloroethyl vinyl ether	660	U
10061-01-5	cis-1,3-Dichloropropene	330	U
108-10-1	4-Methyl-2-Pentanone	660	U
108-88-3	Toluene	330	U
10061-02-6	trans-1,3-Dichloropropene	660	U
79-00-5	1,1,2-Trichloroethane	660	U
127-18-4	Tetrachloroethene	330	U
591-78-6	2-Hexanone	660	U
126-48-1	Dibromochloromethane	660	U
108-90-7	Chlorobenzene	330	U
100-41-4	Ethylbenzene	660	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.04

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01838.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 28.53 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		990	U
1330-20-7	o-Xylene		660	U
100-42-5	Styrene		660	U
75-25-2	Bromoform		660	U
79-34-5	1,1,2,2-Tetrachloroethane		660	U
541-73-1	1,3-Dichlorobenzene		990	U
106-46-7	1,4-Dichlorobenzene		990	U
95-50-1	1,2-Dichlorobenzene		990	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.05

Sample wt/vol: 8.8 (g/ml) G Lab File ID: V01839.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 27.55 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2700	U
107131	Acrylonitrile		2700	U
75650	tert-Butyl alcohol		5100	U
1634044	Methyl-tert-Butyl ether		1200	U
108203	Di-isopropyl ether		780	U
	Dichlorodifluoromethane		1600	U
74-87-3	Chloromethane		390	U
75-01-4	Vinyl Chloride		1200	U
74-83-9	Bromomethane		780	U
75-00-3	Chloroethane		1200	U
75-69-4	Trichlorofluoromethane		780	U
75-35-4	1,1-Dichloroethene		390	U
67-64-1	Acetone		780	U
75-15-0	Carbon Disulfide		390	U
75-09-2	Methylene Chloride		780	U
156-60-5	trans-1,2-Dichloroethene		780	U
75-35-3	1,1-Dichloroethane		390	U
108-05-4	Vinyl Acetate		1200	U
78-93-3	2-Butanone		1200	U
	cis-1,2-Dichloroethene		390	U
67-66-3	Chloroform		390	U
75-55-6	1,1,1-Trichloroethane		390	U
56-23-5	Carbon Tetrachloride		780	U
71-43-2	Benzene		610	
107-06-2	1,2-Dichloroethane		780	U
79-01-6	Trichloroethene		390	U
78-87-5	1,2-Dichloropropane		390	U
75-27-4	Bromodichloromethane		390	U
110-75-8	2-Chloroethyl vinyl ether		780	U
10061-01-5	cis-1,3-Dichloropropene		390	U
108-10-1	4-Methyl-2-Pentanone		780	U
108-88-3	Toluene		390	U
10061-02-6	trans-1,3-Dichloropropene		780	U
79-00-5	1,1,2-Trichloroethane		780	U
127-18-4	Tetrachloroethene		390	U
591-78-6	2-Hexanone		780	U
126-48-1	Dibromochloromethane		780	U
108-90-7	Chlorobenzene		390	U
100-41-4	Ethylbenzene		320	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.05

Sample wt/vol: 8.8 (g/ml) G Lab File ID: V01839.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 27.55 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	950	J
1330-20-7	o-Xylene	530	J
100-42-5	Styrene	780	U
75-25-2	Bromoform	780	U
79-34-5	1,1,2,2-Tetrachloroethane	780	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.06

Sample wt/vol: 10.1 (g/ml) G Lab File ID: V01840.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.75 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2400		U
107131	Acrylonitrile	2400		U
75650	tert-Butyl alcohol	4400		U
1634044	Methyl-tert-Butyl ether	1000		U
108203	Di-isopropyl ether	680		U
	Dichlorodifluoromethane	1400		U
74-87-3	Chloromethane	340		U
75-01-4	Vinyl Chloride	1000		U
74-83-9	Bromomethane	680		U
75-00-3	Chloroethane	1000		U
75-69-4	Trichlorofluoromethane	680		U
75-35-4	1,1-Dichloroethene	340		U
67-64-1	Acetone	64000		E
75-15-0	Carbon Disulfide	340		U
75-09-2	Methylene Chloride	680		U
156-60-5	trans-1,2-Dichloroethene	680		U
75-35-3	1,1-Dichloroethane	340		U
108-05-4	Vinyl Acetate	1000		U
78-93-3	2-Butanone	1000		U
	cis-1,2-Dichloroethene	340		U
67-66-3	Chloroform	340		U
75-55-6	1,1,1-Trichloroethane	340		U
56-23-5	Carbon Tetrachloride	680		U
71-43-2	Benzene	2300		
107-06-2	1,2-Dichloroethane	680		U
79-01-6	Trichloroethene	340		U
78-87-5	1,2-Dichloropropane	340		U
75-27-4	Bromodichloromethane	340		U
110-75-8	2-Chloroethyl vinyl ether	680		U
10061-01-5	cis-1,3-Dichloropropene	340		U
108-10-1	4-Methyl-2-Pentanone	680		U
108-88-3	Toluene	2500		
10061-02-6	trans-1,3-Dichloropropene	680		U
79-00-5	1,1,2-Trichloroethane	680		U
127-18-4	Tetrachloroethene	340		U
591-78-6	2-Hexanone	680		U
126-48-1	Dibromochloromethane	680		U
108-90-7	Chlorobenzene	340		U
100-41-4	Ethylbenzene	370		J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.06

Sample wt/vol: 10.1 (g/ml) G Lab File ID: V01840.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.75 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1400	
1330-20-7	o-Xylene	790	
100-42-5	Styrene	680	U
75-25-2	Bromoform	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.06

Sample wt/vol: 10.1 (g/ml) G Lab File ID: V01947.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.75 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	4700		U
107131	Acrylonitrile	4700		U
75650	tert-Butyl alcohol	8800		U
1634044	Methyl-tert-Butyl ether	2000		U
108203	Di-isopropyl ether	1400		U
	Dichlorodifluoromethane	2700		U
74-87-3	Chloromethane	680		U
75-01-4	Vinyl Chloride	2000		U
74-83-9	Bromomethane	1400		U
75-00-3	Chloroethane	2000		U
75-69-4	Trichlorofluoromethane	1400		U
75-35-4	1,1-Dichloroethene	680		U
67-64-1	Acetone	58000		
75-15-0	Carbon Disulfide	680		U
75-09-2	Methylene Chloride	1400		U
156-60-5	trans-1,2-Dichloroethene	1400		U
75-35-3	1,1-Dichloroethane	680		U
108-05-4	Vinyl Acetate	2000		U
78-93-3	2-Butanone	2000		U
	cis-1,2-Dichloroethene	680		U
67-66-3	Chloroform	680		U
75-55-6	1,1,1-Trichloroethane	680		U
56-23-5	Carbon Tetrachloride	1400		U
71-43-2	Benzene	2600		
107-06-2	1,2-Dichloroethane	1400		U
79-01-6	Trichloroethene	680		U
78-87-5	1,2-Dichloropropane	680		U
75-27-4	Bromodichloromethane	680		U
110-75-8	2-Chloroethyl vinyl ether	1400		U
10061-01-5	cis-1,3-Dichloropropene	680		U
108-10-1	4-Methyl-2-Pentanone	1400		U
108-88-3	Toluene	3200		
10061-02-6	trans-1,3-Dichloropropene	1400		U
79-00-5	1,1,2-Trichloroethane	1400		U
127-18-4	Tetrachloroethene	680		U
591-78-6	2-Hexanone	1400		U
126-48-1	Dibromochloromethane	1400		U
108-90-7	Chlorobenzene	680		U
100-41-4	Ethylbenzene	560		J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.06

Sample wt/vol: 10.1 (g/ml) G Lab File ID: V01947.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.75 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	2200	
1330-20-7	o-Xylene	1100	J
100-42-5	Styrene	1400	U
75-25-2	Bromoform	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.07

Sample wt/vol: 11.1 (g/ml) G Lab File ID: V01841.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.81 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2200	U
107131	Acrylonitrile	2200	U
75650	tert-Butyl alcohol	4000	U
1634044	Methyl-tert-Butyl ether	920	U
108203	Di-isopropyl ether	620	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	920	U
74-83-9	Bromomethane	620	U
75-00-3	Chloroethane	920	U
75-69-4	Trichlorofluoromethane	620	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	620	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	620	U
156-60-5	trans-1,2-Dichloroethene	620	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	920	U
78-93-3	2-Butanone	920	U
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	310	U
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	620	U
71-43-2	Benzene	310	U
107-06-2	1,2-Dichloroethane	620	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	620	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	620	U
108-88-3	Toluene	310	U
10061-02-6	trans-1,3-Dichloropropene	620	U
79-00-5	1,1,2-Trichloroethane	620	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	620	U
126-48-1	Dibromochloromethane	620	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	620	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.07

Sample wt/vol: 11.1 (g/ml) G Lab File ID: V01841.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.81 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	920	U
1330-20-7	o-Xylene	620	U
100-42-5	Styrene	620	U
75-25-2	Bromoform	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
541-73-1	1,3-Dichlorobenzene	920	U
106-46-7	1,4-Dichlorobenzene	920	U
95-50-1	1,2-Dichlorobenzene	920	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-H

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.08

Sample wt/vol: 10.3 (g/ml) G Lab File ID: V01948.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.02 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2200	U
107131	Acrylonitrile		2200	U
75650	tert-Butyl alcohol		4200	U
1634044	Methyl-tert-Butyl ether		960	U
108203	Di-isopropyl ether		640	U
	Dichlorodifluoromethane		1300	U
74-87-3	Chloromethane		320	U
75-01-4	Vinyl Chloride		960	U
74-83-9	Bromomethane		640	U
75-00-3	Chloroethane		960	U
75-69-4	Trichlorofluoromethane		640	U
75-35-4	1,1-Dichloroethene		320	U
67-64-1	Acetone		640	U
75-15-0	Carbon Disulfide		320	U
75-09-2	Methylene Chloride		1600	
156-60-5	trans-1,2-Dichloroethene		640	U
75-35-3	1,1-Dichloroethane		320	U
108-05-4	Vinyl Acetate		960	U
78-93-3	2-Butanone		960	U
	cis-1,2-Dichloroethene		320	U
67-66-3	Chloroform		320	U
75-55-6	1,1,1-Trichloroethane		320	U
56-23-5	Carbon Tetrachloride		640	U
71-43-2	Benzene		320	U
107-06-2	1,2-Dichloroethane		640	U
79-01-6	Trichloroethene		320	U
78-87-5	1,2-Dichloropropane		320	U
75-27-4	Bromodichloromethane		320	U
110-75-8	2-Chloroethyl vinyl ether		640	U
10061-01-5	cis-1,3-Dichloropropene		320	U
108-10-1	4-Methyl-2-Pentanone		640	U
108-88-3	Toluene		320	U
10061-02-6	trans-1,3-Dichloropropene		640	U
79-00-5	1,1,2-Trichloroethane		640	U
127-18-4	Tetrachloroethene		320	U
591-78-6	2-Hexanone		640	U
126-48-1	Dibromochloromethane		640	U
108-90-7	Chlorobenzene		320	U
100-41-4	Ethylbenzene		640	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-H

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.08

Sample wt/vol: 10.3 (g/ml) G Lab File ID: V01948.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.02 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	960	U
1330-20-7	o-Xylene	640	U
100-42-5	Styrene	640	U
75-25-2	Bromoform	640	U
79-34-5	1,1,2,2-Tetrachloroethane	600	J
541-73-1	1,3-Dichlorobenzene	960	U
106-46-7	1,4-Dichlorobenzene	960	U
95-50-1	1,2-Dichlorobenzene	960	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.09

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01843.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.72 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2400		U
107131	Acrylonitrile	2400		U
75650	tert-Butyl alcohol	4400		U
1634044	Methyl-tert-Butyl ether	1000		U
108203	Di-isopropyl ether	680		U
	Dichlorodifluoromethane	1400		U
74-87-3	Chloromethane	340		U
75-01-4	Vinyl Chloride	1000		U
74-83-9	Bromomethane	680		U
75-00-3	Chloroethane	1000		U
75-69-4	Trichlorofluoromethane	680		U
75-35-4	1,1-Dichloroethene	340		U
67-64-1	Acetone	680		U
75-15-0	Carbon Disulfide	340		U
75-09-2	Methylene Chloride	680		U
156-60-5	trans-1,2-Dichloroethene	680		U
75-35-3	1,1-Dichloroethane	340		U
108-05-4	Vinyl Acetate	1000		U
78-93-3	2-Butanone	1000		U
	cis-1,2-Dichloroethene	340		U
67-66-3	Chloroform	340		U
75-55-6	1,1,1-Trichloroethane	340		U
56-23-5	Carbon Tetrachloride	680		U
71-43-2	Benzene	5500		
107-06-2	1,2-Dichloroethane	680		U
79-01-6	Trichloroethene	340		U
78-87-5	1,2-Dichloropropane	340		U
75-27-4	Bromodichloromethane	340		U
110-75-8	2-Chloroethyl vinyl ether	680		U
10061-01-5	cis-1,3-Dichloropropene	340		U
108-10-1	4-Methyl-2-Pentanone	680		U
108-88-3	Toluene	6500		
10061-02-6	trans-1,3-Dichloropropene	680		U
79-00-5	1,1,2-Trichloroethane	680		U
127-18-4	Tetrachloroethene	340		U
591-78-6	2-Hexanone	680		U
126-48-1	Dibromochloromethane	680		U
108-90-7	Chlorobenzene	340		U
100-41-4	Ethylbenzene	46000		E

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.09

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01843.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.72 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	67000	
1330-20-7	o-Xylene	5200	
100-42-5	Styrene	680	U
75-25-2	Bromoform	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.09

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01949.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.72 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	6400		
107131	Acrylonitrile	2600		J
75650	tert-Butyl alcohol	8800		U
1634044	Methyl-tert-Butyl ether	2000		U
108203	Di-isopropyl ether	1400		U
	Dichlorodifluoromethane	2700		U
74-87-3	Chloromethane	680		U
75-01-4	Vinyl Chloride	2000		U
74-83-9	Bromomethane	1400		U
75-00-3	Chloroethane	2000		U
75-69-4	Trichlorofluoromethane	1400		U
75-35-4	1,1-Dichloroethene	680		U
67-64-1	Acetone	1400		U
75-15-0	Carbon Disulfide	680		U
75-09-2	Methylene Chloride	1400		U
156-60-5	trans-1,2-Dichloroethene	1400		U
75-35-3	1,1-Dichloroethane	680		U
108-05-4	Vinyl Acetate	2000		U
78-93-3	2-Butanone	2000		U
	cis-1,2-Dichloroethene	680		U
67-66-3	Chloroform	680		U
75-55-6	1,1,1-Trichloroethane	680		U
56-23-5	Carbon Tetrachloride	1400		U
71-43-2	Benzene	4200		
107-06-2	1,2-Dichloroethane	1400		U
79-01-6	Trichloroethene	680		U
78-87-5	1,2-Dichloropropane	680		U
75-27-4	Bromodichloromethane	680		U
110-75-8	2-Chloroethyl vinyl ether	1400		U
10061-01-5	cis-1,3-Dichloropropene	680		U
108-10-1	4-Methyl-2-Pentanone	1400		U
108-88-3	Toluene	4100		
10061-02-6	trans-1,3-Dichloropropene	1400		U
79-00-5	1,1,2-Trichloroethane	1400		U
127-18-4	Tetrachloroethene	680		U
591-78-6	2-Hexanone	1400		U
126-48-1	Dibromochloromethane	1400		U
108-90-7	Chlorobenzene	680		U
100-41-4	Ethylbenzene	35000		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.09

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01949.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.72 Date Analyzed: 09/16/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	51000	
1330-20-7	o-Xylene	4000	
100-42-5	Styrene	1400	U
75-25-2	Bromoform	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-J

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.10

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01844.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 23.92 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	4300	U	
107131	Acrylonitrile	4300	U	
75650	tert-Butyl alcohol	8100	U	
1634044	Methyl-tert-Butyl ether	1900	U	
108203	Di-isopropyl ether	1200	U	
	Dichlorodifluoromethane	2500	U	
74-87-3	Chloromethane	620	U	
75-01-4	Vinyl Chloride	1900	U	
74-83-9	Bromomethane	1200	U	
75-00-3	Chloroethane	1900	U	
75-69-4	Trichlorofluoromethane	1200	U	
75-35-4	1,1-Dichloroethene	620	U	
67-64-1	Acetone	1200	U	
75-15-0	Carbon Disulfide	620	U	
75-09-2	Methylene Chloride	5900		
156-60-5	trans-1,2-Dichloroethene	1200	U	
75-35-3	1,1-Dichloroethane	620	U	
108-05-4	Vinyl Acetate	1900	U	
78-93-3	2-Butanone	1900	U	
	cis-1,2-Dichloroethene	620	U	
67-66-3	Chloroform	620	U	
75-55-6	1,1,1-Trichloroethane	620	U	
56-23-5	Carbon Tetrachloride	1200	U	
71-43-2	Benzene	5800		
107-06-2	1,2-Dichloroethane	1200	U	
79-01-6	Trichloroethene	620	U	
78-87-5	1,2-Dichloropropane	620	U	
75-27-4	Bromodichloromethane	620	U	
110-75-8	2-Chloroethyl vinyl ether	1200	U	
10061-01-5	cis-1,3-Dichloropropene	620	U	
108-10-1	4-Methyl-2-Pentanone	1200	U	
108-88-3	Toluene	15000		
10061-02-6	trans-1,3-Dichloropropene	1200	U	
79-00-5	1,1,2-Trichloroethane	1200	U	
127-18-4	Tetrachloroethene	620	U	
591-78-6	2-Hexanone	1200	U	
126-48-1	Dibromochloromethane	1200	U	
108-90-7	Chlorobenzene	620	U	
100-41-4	Ethylbenzene	24000		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-J

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.10

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01844.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 23.92 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	49000	
1330-20-7	o-Xylene	9500	
100-42-5	Styrene	1200	U
75-25-2	Bromoform	1200	U
79-34-5	1,1,2,2-Tetrachloroethane	1200	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
95-50-1	1,2-Dichlorobenzene	620	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-K

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.11

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01845.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.95 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 12.5 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		9000	U
107131	Acrylonitrile		9000	U
75650	tert-Butyl alcohol		17000	U
1634044	Methyl-tert-Butyl ether		3900	U
108203	Di-isopropyl ether		2600	U
	Dichlorodifluoromethane		5100	U
74-87-3	Chloromethane		1300	U
75-01-4	Vinyl Chloride		3900	U
74-83-9	Bromomethane		2600	U
75-00-3	Chloroethane		3900	U
75-69-4	Trichlorofluoromethane		2600	U
75-35-4	1,1-Dichloroethene		1300	U
67-64-1	Acetone		2600	U
75-15-0	Carbon Disulfide		1300	U
75-09-2	Methylene Chloride		2600	U
156-60-5	trans-1,2-Dichloroethene		2600	U
75-35-3	1,1-Dichloroethane		1300	U
108-05-4	Vinyl Acetate		3900	U
78-93-3	2-Butanone		3900	U
	cis-1,2-Dichloroethene		1300	U
67-66-3	Chloroform		1300	U
75-55-6	1,1,1-Trichloroethane		1300	U
56-23-5	Carbon Tetrachloride		2600	U
71-43-2	Benzene		5000	
107-06-2	1,2-Dichloroethane		2600	U
79-01-6	Trichloroethene		1300	U
78-87-5	1,2-Dichloropropane		1300	U
75-27-4	Bromodichloromethane		1300	U
110-75-8	2-Chloroethyl vinyl ether		2600	U
10061-01-5	cis-1,3-Dichloropropene		1300	U
108-10-1	4-Methyl-2-Pentanone		2600	U
108-88-3	Toluene		4700	
10061-02-6	trans-1,3-Dichloropropene		2600	U
79-00-5	1,1,2-Trichloroethane		2600	U
127-18-4	Tetrachloroethene		1300	U
591-78-6	2-Hexanone		2600	U
126-48-1	Dibromochloromethane		2600	U
108-90-7	Chlorobenzene		1300	U
100-41-4	Ethylbenzene		6100	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-K

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.11

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01845.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.95 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 12.5 (uL)

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	11000	
1330-20-7	o-Xylene	4000	
100-42-5	Styrene	2600	U
75-25-2	Bromoform	2600	U
79-34-5	1,1,2,2-Tetrachloroethane	2600	U
541-73-1	1,3-Dichlorobenzene	3900	U
106-46-7	1,4-Dichlorobenzene	3900	U
95-50-1	1,2-Dichlorobenzene	3900	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-L

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.12

Sample wt/vol: 11.3 (g/ml) G Lab File ID: V01846.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 22.58 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2000	U
107131	Acrylonitrile	2000	U
75650	tert-Butyl alcohol	3700	U
1634044	Methyl-tert-Butyl ether	860	U
108203	Di-isopropyl ether	570	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	290	U
75-01-4	Vinyl Chloride	860	U
74-83-9	Bromomethane	570	U
75-00-3	Chloroethane	860	U
75-69-4	Trichlorofluoromethane	570	U
75-35-4	1,1-Dichloroethene	290	U
67-64-1	Acetone	570	U
75-15-0	Carbon Disulfide	290	U
75-09-2	Methylene Chloride	570	U
156-60-5	trans-1,2-Dichloroethene	570	U
75-35-3	1,1-Dichloroethane	290	U
108-05-4	Vinyl Acetate	860	U
78-93-3	2-Butanone	860	U
	cis-1,2-Dichloroethene	290	U
67-66-3	Chloroform	290	U
75-55-6	1,1,1-Trichloroethane	290	U
56-23-5	Carbon Tetrachloride	570	U
71-43-2	Benzene	650	
107-06-2	1,2-Dichloroethane	570	U
79-01-6	Trichloroethene	290	U
78-87-5	1,2-Dichloropropane	290	U
75-27-4	Bromodichloromethane	290	U
110-75-8	2-Chloroethyl vinyl ether	570	U
10061-01-5	cis-1,3-Dichloropropene	290	U
108-10-1	4-Methyl-2-Pentanone	570	U
108-88-3	Toluene	500	
10061-02-6	trans-1,3-Dichloropropene	570	U
79-00-5	1,1,2-Trichloroethane	570	U
127-18-4	Tetrachloroethene	290	U
591-78-6	2-Hexanone	570	U
126-48-1	Dibromochloromethane	570	U
108-90-7	Chlorobenzene	290	U
100-41-4	Ethylbenzene	3100	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-L

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.12

Sample wt/vol: 11.3 (g/ml) G Lab File ID: V01846.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 22.58 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	3500	
1330-20-7	o-Xylene	3300	
100-42-5	Styrene	570	U
75-25-2	Bromoform	570	U
79-34-5	1,1,2,2-Tetrachloroethane	570	U
541-73-1	1,3-Dichlorobenzene	860	U
106-46-7	1,4-Dichlorobenzene	860	U
95-50-1	1,2-Dichlorobenzene	860	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.13

Sample wt/vol: 10.9 (g/ml) G Lab File ID: V01950.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.89 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2200	U
107131	Acrylonitrile	2200	U
75650	tert-Butyl alcohol	4100	U
1634044	Methyl-tert-Butyl ether	940	U
108203	Di-isopropyl ether	630	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	940	U
74-83-9	Bromomethane	630	U
75-00-3	Chloroethane	940	U
75-69-4	Trichlorofluoromethane	630	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	630	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	630	U
156-60-5	trans-1,2-Dichloroethene	630	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	940	U
78-93-3	2-Butanone	940	U
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	310	U
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	630	U
71-43-2	Benzene	310	U
107-06-2	1,2-Dichloroethane	630	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	630	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	630	U
108-88-3	Toluene	310	U
10061-02-6	trans-1,3-Dichloropropene	630	U
79-00-5	1,1,2-Trichloroethane	630	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	630	U
126-48-1	Dibromochloromethane	630	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	250	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.13

Sample wt/vol: 10.9 (g/ml) G Lab File ID: V01950.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.89 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	570	J
1330-20-7	o-Xylene	270	J
100-42-5	Styrene	630	U
75-25-2	Bromoform	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
541-73-1	1,3-Dichlorobenzene	940	U
106-46-7	1,4-Dichlorobenzene	940	U
95-50-1	1,2-Dichlorobenzene	940	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.14

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01951.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 0 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.14

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01951.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 0 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01833.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 0 Date Analyzed: 09/04/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: DAILY BLANK
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01937.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 0 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.01

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01835.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 25.44 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.95	32000	J
2. 000107-83-5	Pentane, 2-methyl-	12.78	140000	JN
3.	unknown hydrocarbon	13.77	75000	J
4. 000110-54-3	Hexane	14.75	110000	JN
5. 000096-37-7	Cyclopentane, methyl-	17.30	90000	JN
6. 000591-76-4	Hexane, 2-methyl-	18.54	62000	JN
7. 000589-34-4	Hexane, 3-methyl-	19.10	66000	JN
8. 000110-82-7	Cyclohexane	19.52	62000	JN
9. 000108-87-2	Cyclohexane, methyl-	22.46	140000	JN
10.	unknown hydrocarbon	23.39	72000	J
11.	unknown hydrocarbon	23.83	33000	J
12. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.79	56000	JN
13. 000111-65-9	Octane	24.94	72000	JN
14. 000111-84-2	Nonane	28.77	36000	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	33.94	31000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2957.01
Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01945.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 25.44 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 12.5 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2957.02
Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01836.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 32.06 Date Analyzed: 09/04/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	17.29	3400	J
2.	unknown hydrocarbon	19.51	2900	J
3.	column bleed	22.45	1700	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.03

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01837.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 29.19 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

Number TICs found: 8

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	12.70	1400	J
2.	unknown hydrocarbon	13.74	2900	J
3.	unknown hydrocarbon	14.74	3600	J
4.	unknown hydrocarbon	17.29	9500	J
5.	unknown hydrocarbon	18.52	2600	J
6.	unknown hydrocarbon	19.08	1500	J
7.	unknown hydrocarbon	19.50	3400	J
8. 000108-87-2	Cyclohexane, methyl-	22.45	5300	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2957.03
Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01946.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 29.19 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2957.04
Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01838.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 28.53 Date Analyzed: 09/04/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.05

Sample wt/vol: 8.8 (g/ml) G Lab File ID: V01839.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 27.55 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

Number TICs found: 14

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	13.73	1300	J
2. 000110-54-3	Hexane	14.74	3500	JN
3.	unknown hydrocarbon	17.29	2800	J
4.	unknown hydrocarbon	18.52	4900	J
5.	unknown hydrocarbon	19.09	5700	J
6.	unknown hydrocarbon	19.51	2000	J
7.	unknown hydrocarbon	19.62	3900	J
8. 000108-87-2	Cyclohexane, methyl-	22.45	5800	JN
9.	unknown hydrocarbon	23.39	3500	J
10.	unknown hydrocarbon	23.83	1300	J
11. 000589-90-2	Cyclohexane, 1,4-dimethyl-	24.79	2100	JN
12.	unknown hydrocarbon	24.94	2600	J
13.	unknown hydrocarbon	28.77	1700	J
14.	unknown hydrocarbon	32.11	1600	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2957.06
Sample wt/vol: 10.1 (g/ml) G Lab File ID: V01840.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 26.75 Date Analyzed: 09/04/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	17.31	2000	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2957.06
Sample wt/vol: 10.1 (g/ml) G Lab File ID: V01947.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 26.75 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2957.07
Sample wt/vol: 11.1 (g/ml) G Lab File ID: V01841.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 26.81 Date Analyzed: 09/04/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-H

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.08

Sample wt/vol: 10.3 (g/ml) G Lab File ID: V01948.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.02 Date Analyzed: 09/16/97

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

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

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000540-84-1	Pentane, 2,2,4-trimethyl-	19.61	11000	JN
2.	unknown hydrocarbon	21.72	2900	J
3.	unknown hydrocarbon	21.90	4200	J
4. 000617-78-7	Pentane, 3-ethyl-	23.00	5700	JN
5.	unknown hydrocarbon	23.38	10000	J
6.	unknown hydrocarbon	23.51	2700	J
7. 000589-81-1	Heptane, 3-methyl-	23.82	4700	JN
8. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.79	9000	JN
9. 006876-23-9	Cyclohexane, 1,2-dimethyl-, trans	25.80	3400	JN
10. 001072-05-5	Heptane, 2,6-dimethyl-	25.97	2800	JN
11.	unknown	27.27	5600	J
12.	unknown hydrocarbon	27.45	3700	J
13.	unknown hydrocarbon	27.79	5800	J
14.	unknown hydrocarbon	30.13	3200	J
15.	unknown hydrocarbon	30.87	3500	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.09

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01843.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 24.72 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.78	41000	JN
2. 000096-14-0	Pentane, 3-methyl-	13.79	20000	JN
3. 000110-54-3	Hexane	14.75	34000	JN
4. 000096-37-7	Cyclopentane, methyl-	17.31	30000	JN
5. 000591-76-4	Hexane, 2-methyl-	18.53	23000	JN
6. 000589-34-4	Hexane, 3-methyl-	19.10	24000	JN
7.	unknown hydrocarbon	20.09	26000	J
8.	unknown hydrocarbon	21.91	28000	J
9. 000108-87-2	Cyclohexane, methyl-	22.47	140000	JN
10.	unknown hydrocarbon	23.39	85000	J
11.	unknown hydrocarbon	23.83	39000	J
12. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.80	66000	JN
13. 000111-65-9	Octane	24.95	77000	JN
14. 000111-84-2	Nonane	28.78	21000	JN
15. 000526-73-8	Benzene, 1,2,3-trimethyl-	33.95	24000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2957.09
Sample wt/vol: 9.8 (g/ml) G Lab File ID: V01949.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 24.72 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-J

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.10

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01844.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 23.92 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.79	37000	JN
2. 000110-54-3	Hexane	14.77	37000	JN
3. 000096-37-7	Cyclopentane, methyl-	17.31	32000	JN
4. 000591-76-4	Hexane, 2-methyl-	18.54	28000	JN
5. 000589-34-4	Hexane, 3-methyl-	19.10	30000	JN
6. 000110-82-7	Cyclohexane	19.52	24000	JN
7. 000108-87-2	Cyclohexane, methyl-	22.46	120000	JN
8.	unknown hydrocarbon	23.39	62000	J
9. 000589-81-1	Heptane, 3-methyl-	23.83	28000	JN
10. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.80	44000	JN
11. 000111-65-9	Octane	24.94	56000	JN
12. 000111-84-2	Nonane	28.78	33000	JN
13.	unknown hydrocarbon	30.88	23000	J
14. 000124-18-5	Decane	32.11	26000	JN
15. 000108-67-8	Benzene, 1,3,5-trimethyl-	33.94	30000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-K

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.11

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01845.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 26.95 Date Analyzed: 09/04/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 12.5 (uL)

CONCENTRATION UNITS:

Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	12.78	17000	J
2.	unknown hydrocarbon	13.76	10000	J
3. 000110-54-3	Hexane	14.76	37000	JN
4.	unknown hydrocarbon	17.29	16000	J
5. 000591-76-4	Hexane, 2-methyl-	18.53	25000	JN
6. 000589-34-4	Hexane, 3-methyl-	19.09	29000	JN
7.	unknown hydrocarbon	19.51	14000	J
8. 000108-87-2	Cyclohexane, methyl-	22.46	40000	JN
9.	unknown hydrocarbon	23.39	23000	J
10. 000589-90-2	Cyclohexane, 1,4-dimethyl-	24.79	15000	JN
11. 000111-65-9	Octane	24.94	18000	JN
12.	unknown hydrocarbon	27.28	9000	J
13. 000111-84-2	Nonane	28.77	14000	JN
14. 001120-21-4	Undecane	32.11	12000	JN
15. 000611-14-3	Benzene, 1-ethyl-2-methyl-	33.94	12000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-L

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2957 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2957.12

Sample wt/vol: 11.3 (g/ml) G Lab File ID: V01846.D

Level: (low/med) MED Date Received: 09/03/97

% Moisture: not dec. 22.58 Date Analyzed: 09/04/97

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

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

CONCENTRATION UNITS:

Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.79	18000	JN
2. 000096-14-0	Pentane, 3-methyl-	13.79	9700	JN
3. 000110-54-3	Hexane	14.77	10000	JN
4. 000096-37-7	Cyclopentane, methyl-	17.30	12000	JN
5. 000591-76-4	Hexane, 2-methyl-	18.55	16000	JN
6. 000589-34-4	Hexane, 3-methyl-	19.11	18000	JN
7. 002532-58-3	Cyclopentane, 1,3-dimethyl-, cis-	20.09	13000	JN
8.	unknown hydrocarbon	21.91	15000	J
9. 000108-87-2	Cyclohexane, methyl-	22.46	83000	JN
10.	unknown hydrocarbon	23.00	9900	J
11.	unknown hydrocarbon	23.39	46000	J
12.	unknown hydrocarbon	23.83	20000	J
13. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.80	36000	JN
14. 000111-65-9	Octane	24.94	13000	JN
15.	unknown hydrocarbon	27.27	8800	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2957.13
Sample wt/vol: 10.9 (g/ml) G Lab File ID: V01950.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 26.89 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 3

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000108-87-2	Cyclohexane, methyl-	22.45	1500	JN
2. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	24.45	2900	JN
3. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	26.83	3100	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2957 Location: 283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2957.14
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01951.D
Level: (low/med) MED Date Received: 09/03/97
% Moisture: not dec. 0 Date Analyzed: 09/16/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

Laboratory Manager of Environmental Consultant's Signature

Date 1/24/96

Laboratory Certification # 13461

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



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>GENE LESINSKI-DPW</u>		Project No: <u>96-1262</u>		Analysis Parameters								Comments: *=SAMPLES KEPT BELOW 4°C.	
Phone #: <u>20989</u>		Location: <u>B.283-C</u> (GASOLINE REMEDIATION)		TPHC	PC SOLIDS	MUNSELL	VOA+10 4-RENEES	LEAD			VOA		
DERA XOMA () Other: _____		Samplers Name / Company: <u>GARY DiMARTINIS-TVS</u>		Sample #									Remarks / Preservation Method
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles								
2957-01	283C-A	9-3-97	0928	SOIL	2	X	X	X	X	X		1000+	EXC. FLOOR @ 10.0' *
.02	283C-B		0911									300	
.03	283C-C		0902									30	
.04	283C-D		0851									10	
.05	283C-E		0943									200	SIDEWALL @ 6.5'
.06	283C-F		0956									250	
.07	283C-G		1007									200	
.08	283C-H		1142									10	
.09	283C-I		1106									1000+	
.10	283C-J		1113									1000+	
.11	283C-K		1120									1000+	
.12	283C-L		1133									500	
.13	283C-DUP												FIELD DUPLICATE
.14	283C-TRIP BLK												TRIP BLANK

Relinquished by (signature):

Date/Time:

Received by (signature):

Relinquished by (signature):

Date/Time:

Received by (signature):

Relinquished by (signature):

Date/Time:

Received by (signature):

Relinquished by (signature):

Date/Time:

Received by (signature):

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

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

Remarks: DEDICATED SAMPLING TOOLS USED.

NOTE: VOA SAMPLES #970902.01-.14

NOTE: OVA (#A52114) CALIBRATED BY PS ppm CH4 + ZERO (0) AIR AT 0845 HRS. ON 9/3/97 BY G. DiMARTINIS

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 #: 2957.01-13
Sample Received: 9/3/97
Analysis Start: 9/10/97
Analysis Completed: 9/11/97

Site: Ft. Monmouth
B283-C

Matrix: Soils

Method of Analysis: Std. Methods 18th, Method 3111B
Method of Digestion: E.P.A. SW-846, Method 3051

TEST PARAMETER: Lead

Laboratory I.D.	Sample Location	Percent Solids	RESULT (mg/Kg)	MDL (mg/Kg)
2957.01	283C-A	74.56	59.83	1.31
2957.02	283C-B	67.94	ND	1.49
2957.03	283C-C	70.81	ND	1.43
2957.04	283C-D	71.47	ND	1.38
2957.05	283C-E	72.45	ND	1.42
2957.06	283C-F	73.25	ND	1.34
2957.07	283C-G	73.19	ND	1.40
2957.08	283C-H	75.98	ND	1.28
2957.09	283C-I	75.28	8.51	1.31
2957.10	283C-J	76.08	3.34	1.33
2957.11	283C-K	73.05	4.94	1.41
2957.12	283C-L	77.42	ND	1.31
2957.13	283C-DUP	73.11	ND	1.38

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



Daniel K. Wright
Laboratory Director

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
96-1262
Bldg. 283-C

Project # 2980
Date Rec. 09/10/97
Date Comp. 09/12/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OQA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

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

PHC Conformance/Non-conformance Summary Report

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

Laboratory Authentication Statement

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


Daniel K. Wright
Laboratory Manager



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: GENE LESINSKI-DPW		Project No: 96-1262		Analysis Parameters								Comments:	
Phone #: 20989		Location: B. 283C		VOC+10 (Excludes)	TPHC	B. Solids	LEAD	Manganese	VOC Bottle #	OUA	* SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:		GASOLINE REMEDIATION											
Samplers Name / Company: GARY DIMARTINIS-TVS				Sample #									
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles						Remarks / Preservation Method		
79-2980.01	283C-A	9/9/97	1326	SOIL	2	X	X	X	X	X	970905.04	90	EXC. FLOOR @ 12.0' *
43-02	283C-B	↓	1339								970905.05	500	SIDE WALL @ 6.5'
80-03	283C-C		1654								970909.02	40	EXC. FLOOR @ 13.0'
81-04	283C-D		1702								970909.01	20	↓
34-05	283C-E		1718								970909.04	1000+	SIDE WALL @ 6.5'
12-06	283C-F		1726								970909.05	1000+	↓
56-07	283C-G		1737								970909.06	ND	↓
7-08	283C-H	↓	1638								970909.03	100	EXC. FLOOR @ 13.0'
25-09	283C-I	9/10/97	1426								970909.07	40	↓
16-10	283C-J	↓	1433								970909.08	10	↓
17-11	283C-K	↓	1443								970909.09	30	↓
14-12	283C-DUP	9/9/97		SOIL	1	X	X	X	X	X	970909.10		FIELD DUPLICATE
14-13	283C-TB	9/9/97		METHANOL	1	X	X	X	X	X	970905.06		TRIP BLANK
NOTE: OUA (#A52114) CALIBRATED w/ 95ppm CH ₄ + ZERO (0) AIR @ 1300 HRS. ON 9/9/97				G. DIMARTINIS									
CALIBRATION CHECKED AT 1400 HRS. ON 9/10/97													
Relinquished by (signature):		Date/Time: 9/10/97 1535		Received by (signature):		Date/Time:		Received by (signature):					
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):					
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified													
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.													
Remarks: DEDICATED SAMPLING TOOLS USED.													

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

Client : U.S. Army **Lab. ID # :** 2980
DPW. SELFM-PW-EV **Date Rec'd:** 10-Sep-97
Bldg. 173 **Analysis Start:** 11-Sep-97
Ft. Monmouth, NJ 07703 **Analysis Complete:** 12-Sep-97

Analysis: OQA-QAM-025 **UST Reg. #:**
Matrix: Soil **Closure #:**
Analyst: D.DEINHARDT **DICAR #:**
Ext. Meth: Shake **Location #:** B.283C

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2980.01	283C-A	1.00	15.74	73.63	203	206.50
2980.02	283C-B	1.00	15.43	75.07	203	756.60
2980.03	283C-C	1.00	15.80	76.53	194	ND
2980.04	283C-D	1.00	15.81	72.38	205	ND
2980.05	283C-E	1.00	15.39	73.18	209	1919.13
2980.06	283C-F	1.00	16.12	74.68	195	1939.40
2980.07	283C-G	1.00	15.56	75.38	200	ND
2980.08	283C-H	1.00	16.17	76.13	191	ND
2980.09	283C-I	1.00	15.25	75.79	203	ND
2980.10	283C-J	1.00	15.96	74.93	197	ND
2980.11	283C-K	1.00	15.07	75.66	206	ND
2980.12	283C-DUP	1.00	15.34	76.12	201	ND
METHOD BLANK	11-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit


Daniel K. Wright
Laboratory Director

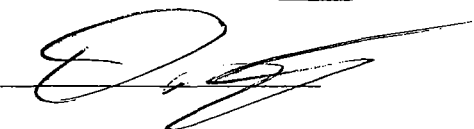
LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

Laboratory Manager or Environmental Consultant's Signature 

Date 8/20/95

Laboratory Certification #13461

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

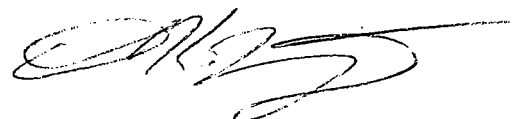
US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8240
B.283C
Gasoline Remediation

Project # 2980
Date Rec. 09/10/97
Date Compl. 09/11/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

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

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

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms Labeled/Compounds Identified
(Field Samples and Method Blanks)
2. Retention times for chromatograms provided
3. GC/MS Tune Specifications
 - a. BFB Meet Criteria
 - b. DFTPP Meet Criteria
4. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series
5. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series
6. GC/MS Calibration Requirements
 - a. Calibration Check Compounds Meet Criteria
 - b. System Performance Check Compounds Meet Criteria
7. Blank Contamination - If yes, List compounds and concentrations in each blank:
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____
8. Surrogate Recoveries Meet Criteria

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

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

If not met, were the calculations checked and the results qualified as "estimated"?
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
(If not met, list those compounds and their recoveries which fall outside the acceptable range)
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____

Y

Y

Y

Y

Y

Y

Y

X

Y

GC/MS Analysis Conformance/Non-Conformance Summary (cont.)

Indicate
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria

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

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

Y

11. Extraction Holding Time Met

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

Y

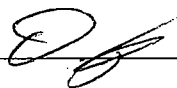
12. Analysis Holding Time Met

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

Y

Additional Comments:

Laboratory Manager :



Date:

1-20-94



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: GENE LESINSKI - DRW		Project No: 96-1262		Analysis Parameters						Comments:															
Phone #: 20989		Location: B 283C		<table border="1"><tr><td>VOA+10</td><td>TPHC</td><td>Q SOLIDS</td><td>LEAD</td><td>MUNSELL</td><td>VOA Bottle #</td><td>VOA</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>						VOA+10	TPHC	Q SOLIDS	LEAD	MUNSELL	VOA Bottle #	VOA								* SAMPLES KEPT BELOW 4°C.	
VOA+10	TPHC	Q SOLIDS	LEAD							MUNSELL	VOA Bottle #	VOA													
() DERA (X) OMA () Other:		GASOLINE REMEDIATION																							
Samplers Name / Company: GARY DIMARTINIS - TVS				Sample #																					
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	Remarks / Preservation Method																			
2980.01	283C-A	9/9/97	1326	SOIL	2	EXC. FLOOR @ 12.0' *																			
02	283C-B	↓	1339			SIDE WALL @ 6.5'																			
03	283C-C		1654			EXC. FLOOR @ 13.0'																			
04	283C-D		1702			↓																			
05	283C-E		1718			SIDE WALL @ 6.5'																			
06	283C-F		1726			↓																			
07	283C-G		1737			EXC. FLOOR @ 13.0'																			
08	283C-H	9/10/97	1638			↓																			
09	283C-I		1426			EXC. FLOOR @ 13.0'																			
10	283C-J		1433			↓																			
11	283C-K		1443			FIELD DUPLICATE																			
12	283C-DUP	9/9/97		SOIL	1	TRIP BLANK																			
13	283C-TB			METHANOL	1	G. DIMARTINIS																			
NOTE: OVA (#A52114) CALIBRATED 1/195ppm CH ₄ + ZERO (0) AIR @ 1300 HRS. ON 9/9/97						CALIBRATION CHECKED AT 1400 HRS. ON 9/10/97																			
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):																	
<i>[Signature]</i>		9/10/97 1535		<i>[Signature]</i>																					
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):																	
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:																			
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.																			

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit

J : Compound identified below detection limit

B : Compound in both sample and blank

D : Results from dilution of sample

U : Compound searched for but not detected

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 25.0 (g/ml) G Lab File ID: V01914.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 0 Date Analyzed: 09/11/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 5000 (uL)

CONCENTRATION UNITS:

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

107028	Acrolein	7	U
107131	Acrylonitrile	7	U
75650	tert-Butyl alcohol	13	U
1634044	Methyl-tert-Butyl ether	3	U
108203	Di-isopropyl ether	2	U
	Dichlorodifluoromethane	4	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	2	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	2	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	2	U
156-60-5	trans-1,2-Dichloroethene	2	U
75-35-3	1,1-Dichloroethane	1	U
108-05-4	Vinyl Acetate	3	U
78-93-3	2-Butanone	3	U
	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
75-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	2	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	2	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl vinyl ether	2	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-Pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	2	U
79-00-5	1,1,2-Trichloroethane	2	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
126-48-1	Dibromochloromethane	2	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 25.0 (g/ml) G Lab File ID: V01914.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 0 Date Analyzed: 09/11/97

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 5000 (uL)

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.01

Sample wt/vol: 11.2 (g/ml) G Lab File ID: V01916.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 26.37 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2100		U
107131	Acrylonitrile	2100		U
75650	tert-Butyl alcohol	3900		U
1634044	Methyl-tert-Butyl ether	910		U
108203	Di-isopropyl ether	600		U
	Dichlorodifluoromethane	1200		U
74-87-3	Chloromethane	300		U
75-01-4	Vinyl Chloride	910		U
74-83-9	Bromomethane	600		U
75-00-3	Chloroethane	910		U
75-69-4	Trichlorofluoromethane	600		U
75-35-4	1,1-Dichloroethene	300		U
67-64-1	Acetone	600		U
75-15-0	Carbon Disulfide	300		U
75-09-2	Methylene Chloride	600		U
156-60-5	trans-1,2-Dichloroethene	600		U
75-35-3	1,1-Dichloroethane	300		U
108-05-4	Vinyl Acetate	910		U
78-93-3	2-Butanone	910		U
	cis-1,2-Dichloroethene	300		U
67-66-3	Chloroform	300		U
75-55-6	1,1,1-Trichloroethane	300		U
56-23-5	Carbon Tetrachloride	600		U
71-43-2	Benzene	4200		
107-06-2	1,2-Dichloroethane	600		U
79-01-6	Trichloroethene	300		U
78-87-5	1,2-Dichloropropane	300		U
75-27-4	Bromodichloromethane	300		U
110-75-8	2-Chloroethyl vinyl ether	600		U
10061-01-5	cis-1,3-Dichloropropene	300		U
108-10-1	4-Methyl-2-Pentanone	600		U
108-88-3	Toluene	10000		
10061-02-6	trans-1,3-Dichloropropene	600		U
79-00-5	1,1,2-Trichloroethane	600		U
127-18-4	Tetrachloroethene	300		U
591-78-6	2-Hexanone	600		U
126-48-1	Dibromochloromethane	600		U
108-90-7	Chlorobenzene	300		U
100-41-4	Ethylbenzene	3000		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.01

Sample wt/vol: 11.2 (g/ml) G Lab File ID: V01916.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 26.37 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	9600	
1330-20-7	o-Xylene	5700	
100-42-5	Styrene	600	U
75-25-2	Bromoform	600	U
79-34-5	1,1,2,2-Tetrachloroethane	600	U
541-73-1	1,3-Dichlorobenzene	910	U
106-46-7	1,4-Dichlorobenzene	910	U
95-50-1	1,2-Dichlorobenzene	910	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.02

Sample wt/vol: 10.2 (g/ml) G Lab File ID: V01917.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.93 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2300		U
107131	Acrylonitrile	2300		U
75650	tert-Butyl alcohol	4200		U
1634044	Methyl-tert-Butyl ether	980		U
108203	Di-isopropyl ether	650		U
	Dichlorodifluoromethane	1300		U
74-87-3	Chloromethane	330		U
75-01-4	Vinyl Chloride	980		U
74-83-9	Bromomethane	650		U
75-00-3	Chloroethane	980		U
75-69-4	Trichlorofluoromethane	650		U
75-35-4	1,1-Dichloroethene	330		U
67-64-1	Acetone	650		U
75-15-0	Carbon Disulfide	330		U
75-09-2	Methylene Chloride	650		U
156-60-5	trans-1,2-Dichloroethene	650		U
75-35-3	1,1-Dichloroethane	330		U
108-05-4	Vinyl Acetate	980		U
78-93-3	2-Butanone	980		U
	cis-1,2-Dichloroethene	330		U
67-66-3	Chloroform	330		U
75-55-6	1,1,1-Trichloroethane	330		U
56-23-5	Carbon Tetrachloride	650		U
71-43-2	Benzene	1300		
107-06-2	1,2-Dichloroethane	650		U
79-01-6	Trichloroethene	330		U
78-87-5	1,2-Dichloropropane	330		U
75-27-4	Bromodichloromethane	330		U
110-75-8	2-Chloroethyl vinyl ether	650		U
10061-01-5	cis-1,3-Dichloropropene	330		U
108-10-1	4-Methyl-2-Pentanone	650		U
108-88-3	Toluene	8100		
10061-02-6	trans-1,3-Dichloropropene	650		U
79-00-5	1,1,2-Trichloroethane	650		U
127-18-4	Tetrachloroethene	330		U
591-78-6	2-Hexanone	650		U
126-48-1	Dibromochloromethane	650		U
108-90-7	Chlorobenzene	330		U
100-41-4	Ethylbenzene	23000		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.02

Sample wt/vol: 10.2 (g/ml) G Lab File ID: V01917.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.93 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	55000	
1330-20-7	o-Xylene	32000	
100-42-5	Styrene	650	U
75-25-2	Bromoform	650	U
79-34-5	1,1,2,2-Tetrachloroethane	650	U
541-73-1	1,3-Dichlorobenzene	980	U
106-46-7	1,4-Dichlorobenzene	980	U
95-50-1	1,2-Dichlorobenzene	980	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.03

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01918.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 23.47 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2200		U
107131	Acrylonitrile	2200		U
75650	tert-Butyl alcohol	4000		U
1634044	Methyl-tert-Butyl ether	930		U
108203	Di-isopropyl ether	620		U
	Dichlorodifluoromethane	1200		U
74-87-3	Chloromethane	310		U
75-01-4	Vinyl Chloride	930		U
74-83-9	Bromomethane	620		U
75-00-3	Chloroethane	930		U
75-69-4	Trichlorofluoromethane	620		U
75-35-4	1,1-Dichloroethene	310		U
67-64-1	Acetone	620		U
75-15-0	Carbon Disulfide	310		U
75-09-2	Methylene Chloride	620		U
156-60-5	trans-1,2-Dichloroethene	620		U
75-35-3	1,1-Dichloroethane	310		U
108-05-4	Vinyl Acetate	930		U
78-93-3	2-Butanone	930		U
	cis-1,2-Dichloroethene	310		U
67-66-3	Chloroform	310		U
75-55-6	1,1,1-Trichloroethane	310		U
56-23-5	Carbon Tetrachloride	620		U
71-43-2	Benzene	1400		
107-06-2	1,2-Dichloroethane	620		U
79-01-6	Trichloroethene	310		U
78-87-5	1,2-Dichloropropane	310		U
75-27-4	Bromodichloromethane	310		U
110-75-8	2-Chloroethyl vinyl ether	620		U
10061-01-5	cis-1,3-Dichloropropene	310		U
108-10-1	4-Methyl-2-Pentanone	620		U
108-88-3	Toluene	4100		
10061-02-6	trans-1,3-Dichloropropene	620		U
79-00-5	1,1,2-Trichloroethane	620		U
127-18-4	Tetrachloroethene	310		U
591-78-6	2-Hexanone	620		U
126-48-1	Dibromochloromethane	620		U
108-90-7	Chlorobenzene	310		U
100-41-4	Ethylbenzene	780		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.03

Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01918.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 23.47 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		690	J
1330-20-7	o-Xylene		1500	
100-42-5	Styrene		620	U
75-25-2	Bromoform		620	U
79-34-5	1,1,2,2-Tetrachloroethane		620	U
541-73-1	1,3-Dichlorobenzene		930	U
106-46-7	1,4-Dichlorobenzene		930	U
95-50-1	1,2-Dichlorobenzene		930	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.04

Sample wt/vol: 11.0 (g/ml) G Lab File ID: V01919.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 27.62 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2200	U
107131	Acrylonitrile	2200	U
75650	tert-Butyl alcohol	4100	U
1634044	Methyl-tert-Butyl ether	940	U
108203	Di-isopropyl ether	630	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	940	U
74-83-9	Bromomethane	630	U
75-00-3	Chloroethane	940	U
75-69-4	Trichlorofluoromethane	630	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	630	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	630	U
156-60-5	trans-1,2-Dichloroethene	630	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	940	U
78-93-3	2-Butanone	940	U
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	310	U
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	630	U
71-43-2	Benzene	1500	
107-06-2	1,2-Dichloroethane	630	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	630	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	630	U
108-88-3	Toluene	2400	
10061-02-6	trans-1,3-Dichloropropene	630	U
79-00-5	1,1,2-Trichloroethane	630	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	630	U
126-48-1	Dibromochloromethane	630	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	990	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.04

Sample wt/vol: 11.0 (g/ml) G Lab File ID: V01919.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 27.62 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1700	
1330-20-7	o-Xylene	2700	
100-42-5	Styrene	630	U
75-25-2	Bromoform	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
541-73-1	1,3-Dichlorobenzene	940	U
106-46-7	1,4-Dichlorobenzene	940	U
95-50-1	1,2-Dichlorobenzene	940	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.05

Sample wt/vol: 12.1 (g/ml) G Lab File ID: V01920.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 26.82 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2000	U	
107131	Acrylonitrile	2000	U	
75650	tert-Butyl alcohol	3700	U	
1634044	Methyl-tert-Butyl ether	850	U	
108203	Di-isopropyl ether	570	U	
	Dichlorodifluoromethane	1100	U	
74-87-3	Chloromethane	280	U	
75-01-4	Vinyl Chloride	850	U	
74-83-9	Bromomethane	570	U	
75-00-3	Chloroethane	850	U	
75-69-4	Trichlorofluoromethane	570	U	
75-35-4	1,1-Dichloroethene	280	U	
67-64-1	Acetone	570	U	
75-15-0	Carbon Disulfide	280	U	
75-09-2	Methylene Chloride	570	U	
156-60-5	trans-1,2-Dichloroethene	570	U	
75-35-3	1,1-Dichloroethane	280	U	
108-05-4	Vinyl Acetate	850	U	
78-93-3	2-Butanone	850	U	
	cis-1,2-Dichloroethene	280	U	
67-66-3	Chloroform	280	U	
75-55-6	1,1,1-Trichloroethane	280	U	
56-23-5	Carbon Tetrachloride	570	U	
71-43-2	Benzene	5400		
107-06-2	1,2-Dichloroethane	570	U	
79-01-6	Trichloroethene	280	U	
78-87-5	1,2-Dichloropropane	280	U	
75-27-4	Bromodichloromethane	280	U	
110-75-8	2-Chloroethyl vinyl ether	570	U	
10061-01-5	cis-1,3-Dichloropropene	280	U	
108-10-1	4-Methyl-2-Pentanone	570	U	
108-88-3	Toluene	10000		
10061-02-6	trans-1,3-Dichloropropene	570	U	
79-00-5	1,1,2-Trichloroethane	570	U	
127-18-4	Tetrachloroethene	280	U	
591-78-6	2-Hexanone	570	U	
126-48-1	Dibromochloromethane	570	U	
108-90-7	Chlorobenzene	280	U	
100-41-4	Ethylbenzene	44000	E	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.05

Sample wt/vol: 12.1 (g/ml) G Lab File ID: V01920.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 26.82 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	86000	E
1330-20-7	o-Xylene	67000	E
100-42-5	Styrene	570	U
75-25-2	Bromoform	570	U
79-34-5	1,1,2,2-Tetrachloroethane	570	U
541-73-1	1,3-Dichlorobenzene	850	U
106-46-7	1,4-Dichlorobenzene	850	U
95-50-1	1,2-Dichlorobenzene	850	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.06

Sample wt/vol: 10.9 (g/ml) G Lab File ID: V01921.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 25.32 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2200	U
107131	Acrylonitrile	2200	U
75650	tert-Butyl alcohol	4000	U
1634044	Methyl-tert-Butyl ether	920	U
108203	Di-isopropyl ether	620	U
	Dichlorodifluoromethane	1200	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl Chloride	920	U
74-83-9	Bromomethane	620	U
75-00-3	Chloroethane	920	U
75-69-4	Trichlorofluoromethane	620	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	620	U
75-15-0	Carbon Disulfide	310	U
75-09-2	Methylene Chloride	620	U
156-60-5	trans-1,2-Dichloroethene	620	U
75-35-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl Acetate	920	U
78-93-3	2-Butanone	920	U
	cis-1,2-Dichloroethene	310	U
67-66-3	Chloroform	310	U
75-55-6	1,1,1-Trichloroethane	310	U
56-23-5	Carbon Tetrachloride	620	U
71-43-2	Benzene	2700	
107-06-2	1,2-Dichloroethane	620	U
79-01-6	Trichloroethene	310	U
78-87-5	1,2-Dichloropropane	310	U
75-27-4	Bromodichloromethane	310	U
110-75-8	2-Chloroethyl vinyl ether	620	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-Pentanone	620	U
108-88-3	Toluene	15000	
10061-02-6	trans-1,3-Dichloropropene	620	U
79-00-5	1,1,2-Trichloroethane	620	U
127-18-4	Tetrachloroethene	310	U
591-78-6	2-Hexanone	620	U
126-48-1	Dibromochloromethane	620	U
108-90-7	Chlorobenzene	310	U
100-41-4	Ethylbenzene	25000	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.06

Sample wt/vol: 10.9 (g/ml) G Lab File ID: V01921.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 25.32 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	90000	E
1330-20-7	o-Xylene	38000	E
100-42-5	Styrene	620	U
75-25-2	Bromoform	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
541-73-1	1,3-Dichlorobenzene	920	U
106-46-7	1,4-Dichlorobenzene	920	U
95-50-1	1,2-Dichlorobenzene	920	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.07

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01922.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.62 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2200	U
107131	Acrylonitrile		2200	U
75650	tert-Butyl alcohol		4100	U
1634044	Methyl-tert-Butyl ether		940	U
108203	Di-isopropyl ether		620	U
	Dichlorodifluoromethane		1200	U
74-87-3	Chloromethane		310	U
75-01-4	Vinyl Chloride		940	U
74-83-9	Bromomethane		620	U
75-00-3	Chloroethane		940	U
75-69-4	Trichlorofluoromethane		620	U
75-35-4	1,1-Dichloroethene		310	U
67-64-1	Acetone		620	U
75-15-0	Carbon Disulfide		310	U
75-09-2	Methylene Chloride		620	U
156-60-5	trans-1,2-Dichloroethene		620	U
75-35-3	1,1-Dichloroethane		310	U
108-05-4	Vinyl Acetate		940	U
78-93-3	2-Butanone		940	U
	cis-1,2-Dichloroethene		310	U
67-66-3	Chloroform		310	U
75-55-6	1,1,1-Trichloroethane		310	U
56-23-5	Carbon Tetrachloride		620	U
71-43-2	Benzene		310	U
107-06-2	1,2-Dichloroethane		620	U
79-01-6	Trichloroethene		310	U
78-87-5	1,2-Dichloropropane		310	U
75-27-4	Bromodichloromethane		310	U
110-75-8	2-Chloroethyl vinyl ether		620	U
10061-01-5	cis-1,3-Dichloropropene		310	U
108-10-1	4-Methyl-2-Pentanone		620	U
108-88-3	Toluene		310	U
10061-02-6	trans-1,3-Dichloropropene		620	U
79-00-5	1,1,2-Trichloroethane		620	U
127-18-4	Tetrachloroethene		310	U
591-78-6	2-Hexanone		620	U
126-48-1	Dibromochloromethane		620	U
108-90-7	Chlorobenzene		310	U
100-41-4	Ethylbenzene		620	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.07

Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01922.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.62 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		940	U
1330-20-7	o-Xylene		620	U
100-42-5	Styrene		620	U
75-25-2	Bromoform		620	U
79-34-5	1,1,2,2-Tetrachloroethane		620	U
541-73-1	1,3-Dichlorobenzene		940	U
106-46-7	1,4-Dichlorobenzene		940	U
95-50-1	1,2-Dichlorobenzene		940	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-H

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.08

Sample wt/vol: 11.9 (g/ml) G Lab File ID: V01923.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 23.87 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		1900	U
107131	Acrylonitrile		1900	U
75650	tert-Butyl alcohol		3600	U
1634044	Methyl-tert-Butyl ether		830	U
108203	Di-isopropyl ether		550	U
	Dichlorodifluoromethane		1100	U
74-87-3	Chloromethane		280	U
75-01-4	Vinyl Chloride		830	U
74-83-9	Bromomethane		550	U
75-00-3	Chloroethane		830	U
75-69-4	Trichlorofluoromethane		550	U
75-35-4	1,1-Dichloroethene		280	U
67-64-1	Acetone		550	U
75-15-0	Carbon Disulfide		280	U
75-09-2	Methylene Chloride		550	U
156-60-5	trans-1,2-Dichloroethene		550	U
75-35-3	1,1-Dichloroethane		280	U
108-05-4	Vinyl Acetate		830	U
78-93-3	2-Butanone		830	U
	cis-1,2-Dichloroethene		280	U
67-66-3	Chloroform		280	U
75-55-6	1,1,1-Trichloroethane		280	U
56-23-5	Carbon Tetrachloride		550	U
71-43-2	Benzene		290	
107-06-2	1,2-Dichloroethane		550	U
79-01-6	Trichloroethene		280	U
78-87-5	1,2-Dichloropropane		280	U
75-27-4	Bromodichloromethane		280	U
110-75-8	2-Chloroethyl vinyl ether		550	U
10061-01-5	cis-1,3-Dichloropropene		280	U
108-10-1	4-Methyl-2-Pentanone		550	U
108-88-3	Toluene		280	U
10061-02-6	trans-1,3-Dichloropropene		550	U
79-00-5	1,1,2-Trichloroethane		550	U
127-18-4	Tetrachloroethene		280	U
591-78-6	2-Hexanone		550	U
126-48-1	Dibromochloromethane		550	U
108-90-7	Chlorobenzene		280	U
100-41-4	Ethylbenzene		550	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-H

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.08

Sample wt/vol: 11.9 (g/ml) G Lab File ID: V01923.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 23.87 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		830	U
1330-20-7	o-Xylene		680	
100-42-5	Styrene		550	U
75-25-2	Bromoform		550	U
79-34-5	1,1,2,2-Tetrachloroethane		550	U
541-73-1	1,3-Dichlorobenzene		830	U
106-46-7	1,4-Dichlorobenzene		830	U
95-50-1	1,2-Dichlorobenzene		830	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.09

Sample wt/vol: 8.6 (g/ml) G Lab File ID: V01924.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.21 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2700		U
107131	Acrylonitrile	2700		U
75650	tert-Butyl alcohol	5000		U
1634044	Methyl-tert-Butyl ether	1200		U
108203	Di-isopropyl ether	770		U
	Dichlorodifluoromethane	1500		U
74-87-3	Chloromethane	380		U
75-01-4	Vinyl Chloride	1200		U
74-83-9	Bromomethane	770		U
75-00-3	Chloroethane	1200		U
75-69-4	Trichlorofluoromethane	770		U
75-35-4	1,1-Dichloroethene	380		U
67-64-1	Acetone	770		U
75-15-0	Carbon Disulfide	380		U
75-09-2	Methylene Chloride	770		U
156-60-5	trans-1,2-Dichloroethene	770		U
75-35-3	1,1-Dichloroethane	380		U
108-05-4	Vinyl Acetate	1200		U
78-93-3	2-Butanone	1200		U
	cis-1,2-Dichloroethene	380		U
67-66-3	Chloroform	380		U
75-55-6	1,1,1-Trichloroethane	380		U
56-23-5	Carbon Tetrachloride	770		U
71-43-2	Benzene	7100		
107-06-2	1,2-Dichloroethane	770		U
79-01-6	Trichloroethene	380		U
78-87-5	1,2-Dichloropropane	380		U
75-27-4	Bromodichloromethane	380		U
110-75-8	2-Chloroethyl vinyl ether	770		U
10061-01-5	cis-1,3-Dichloropropene	380		U
108-10-1	4-Methyl-2-Pentanone	770		U
108-88-3	Toluene	15000		
10061-02-6	trans-1,3-Dichloropropene	770		U
79-00-5	1,1,2-Trichloroethane	770		U
127-18-4	Tetrachloroethene	380		U
591-78-6	2-Hexanone	770		U
126-48-1	Dibromochloromethane	770		U
108-90-7	Chlorobenzene	380		U
100-41-4	Ethylbenzene	670		J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.09

Sample wt/vol: 8.6 (g/ml) G Lab File ID: V01924.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.21 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes	560	J	
1330-20-7	o-Xylene	1300		
100-42-5	Styrene	770	U	
75-25-2	Bromoform	770	U	
79-34-5	1,1,2,2-Tetrachloroethane	770	U	
541-73-1	1,3-Dichlorobenzene	1200	U	
106-46-7	1,4-Dichlorobenzene	1200	U	
95-50-1	1,2-Dichlorobenzene	1200	U	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-J

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.10

Sample wt/vol: 12.4 (g/ml) G Lab File ID: V01925.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 25.07 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	1900	U	
107131	Acrylonitrile	1900	U	
75650	tert-Butyl alcohol	3500	U	
1634044	Methyl-tert-Butyl ether	810	U	
108203	Di-isopropyl ether	540	U	
	Dichlorodifluoromethane	1100	U	
74-87-3	Chloromethane	270	U	
75-01-4	Vinyl Chloride	810	U	
74-83-9	Bromomethane	540	U	
75-00-3	Chloroethane	810	U	
75-69-4	Trichlorofluoromethane	540	U	
75-35-4	1,1-Dichloroethene	270	U	
67-64-1	Acetone	540	U	
75-15-0	Carbon Disulfide	270	U	
75-09-2	Methylene Chloride	430	J	
156-60-5	trans-1,2-Dichloroethene	540	U	
75-35-3	1,1-Dichloroethane	270	U	
108-05-4	Vinyl Acetate	810	U	
78-93-3	2-Butanone	810	U	
	cis-1,2-Dichloroethene	270	U	
67-66-3	Chloroform	270	U	
75-55-6	1,1,1-Trichloroethane	270	U	
56-23-5	Carbon Tetrachloride	540	U	
71-43-2	Benzene	2300		
107-06-2	1,2-Dichloroethane	540	U	
79-01-6	Trichloroethene	270	U	
78-87-5	1,2-Dichloropropane	270	U	
75-27-4	Bromodichloromethane	270	U	
110-75-8	2-Chloroethyl vinyl ether	540	U	
10061-01-5	cis-1,3-Dichloropropene	270	U	
108-10-1	4-Methyl-2-Pentanone	540	U	
108-88-3	Toluene	3000		
10061-02-6	trans-1,3-Dichloropropene	540	U	
79-00-5	1,1,2-Trichloroethane	540	U	
127-18-4	Tetrachloroethene	270	U	
591-78-6	2-Hexanone	540	U	
126-48-1	Dibromochloromethane	540	U	
108-90-7	Chlorobenzene	270	U	
100-41-4	Ethylbenzene	540	U	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-J

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.10

Sample wt/vol: 12.4 (g/ml) G Lab File ID: V01925.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 25.07 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

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

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-K

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.11

Sample wt/vol: 11.1 (g/ml) G Lab File ID: V01926.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.34 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2100	U
107131	Acrylonitrile		2100	U
75650	tert-Butyl alcohol		3900	U
1634044	Methyl-tert-Butyl ether		900	U
108203	Di-isopropyl ether		600	U
	Dichlorodifluoromethane		1200	U
74-87-3	Chloromethane		300	U
75-01-4	Vinyl Chloride		900	U
74-83-9	Bromomethane		600	U
75-00-3	Chloroethane		900	U
75-69-4	Trichlorofluoromethane		600	U
75-35-4	1,1-Dichloroethene		300	U
67-64-1	Acetone		600	U
75-15-0	Carbon Disulfide		300	U
75-09-2	Methylene Chloride		600	U
156-60-5	trans-1,2-Dichloroethene		600	U
75-35-3	1,1-Dichloroethane		300	U
108-05-4	Vinyl Acetate		900	U
78-93-3	2-Butanone		900	U
	cis-1,2-Dichloroethene		300	U
67-66-3	Chloroform		300	U
75-55-6	1,1,1-Trichloroethane		300	U
56-23-5	Carbon Tetrachloride		600	U
71-43-2	Benzene		1500	
107-06-2	1,2-Dichloroethane		600	U
79-01-6	Trichloroethene		300	U
78-87-5	1,2-Dichloropropane		300	U
75-27-4	Bromodichloromethane		300	U
110-75-8	2-Chloroethyl vinyl ether		600	U
10061-01-5	cis-1,3-Dichloropropene		300	U
108-10-1	4-Methyl-2-Pentanone		600	U
108-88-3	Toluene		1100	
10061-02-6	trans-1,3-Dichloropropene		600	U
79-00-5	1,1,2-Trichloroethane		600	U
127-18-4	Tetrachloroethene		300	U
591-78-6	2-Hexanone		600	U
126-48-1	Dibromochloromethane		600	U
108-90-7	Chlorobenzene		300	U
100-41-4	Ethylbenzene		600	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-K

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.11

Sample wt/vol: 11.1 (g/ml) G Lab File ID: V01926.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 24.34 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		900	U
1330-20-7	o-Xylene		600	U
100-42-5	Styrene		600	U
75-25-2	Bromoform		600	U
79-34-5	1,1,2,2-Tetrachloroethane		600	U
541-73-1	1,3-Dichlorobenzene		900	U
106-46-7	1,4-Dichlorobenzene		900	U
95-50-1	1,2-Dichlorobenzene		900	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.12

Sample wt/vol: 9.7 (g/ml) G Lab File ID: V01927.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 23.88 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2400	U
107131	Acrylonitrile		2400	U
75650	tert-Butyl alcohol		4400	U
1634044	Methyl-tert-Butyl ether		1000	U
108203	Di-isopropyl ether		680	U
	Dichlorodifluoromethane		1400	U
74-87-3	Chloromethane		340	U
75-01-4	Vinyl Chloride		1000	U
74-83-9	Bromomethane		680	U
75-00-3	Chloroethane		1000	U
75-69-4	Trichlorofluoromethane		680	U
75-35-4	1,1-Dichloroethene		340	U
67-64-1	Acetone		680	U
75-15-0	Carbon Disulfide		340	U
75-09-2	Methylene Chloride		680	U
156-60-5	trans-1,2-Dichloroethene		680	U
75-35-3	1,1-Dichloroethane		340	U
108-05-4	Vinyl Acetate		1000	U
78-93-3	2-Butanone		1000	U
	cis-1,2-Dichloroethene		340	U
67-66-3	Chloroform		340	U
75-55-6	1,1,1-Trichloroethane		340	U
56-23-5	Carbon Tetrachloride		680	U
71-43-2	Benzene		1600	
107-06-2	1,2-Dichloroethane		680	U
79-01-6	Trichloroethene		340	U
78-87-5	1,2-Dichloropropane		340	U
75-27-4	Bromodichloromethane		340	U
110-75-8	2-Chloroethyl vinyl ether		680	U
10061-01-5	cis-1,3-Dichloropropene		340	U
108-10-1	4-Methyl-2-Pentanone		680	U
108-88-3	Toluene		2600	
10061-02-6	trans-1,3-Dichloropropene		680	U
79-00-5	1,1,2-Trichloroethane		680	U
127-18-4	Tetrachloroethene		340	U
591-78-6	2-Hexanone		680	U
126-48-1	Dibromochloromethane		680	U
108-90-7	Chlorobenzene		340	U
100-41-4	Ethylbenzene		1000	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.12

Sample wt/vol: 9.7 (g/ml) G Lab File ID: V01927.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 23.88 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1700	
1330-20-7	o-Xylene	2700	
100-42-5	Styrene	680	U
75-25-2	Bromoform	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.13

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01915.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 0 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 2980.13

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01915.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 0 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank
Sample wt/vol: 25.0 (g/ml) G Lab File ID: V01914.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 0 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 5000 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.01
Sample wt/vol: 11.2 (g/ml) G Lab File ID: V01916.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 26.37 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 4

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.87	2500	J
2.	unknown hydrocarbon	13.72	1500	J
3. 000096-37-7	Cyclopentane, methyl-	17.27	6000	JN
4.	unknown hydrocarbon	19.49	5100	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461
 Project: 961262 Case No.: 2980 Location: B.283C SDG No.:
 Matrix: (soil/water) SOIL Lab Sample ID: 2980.02
 Sample wt/vol: 10.2 (g/ml) G Lab File ID: V01917.D
 Level: (low/med) MED Date Received: 09/10/97
 % Moisture: not dec. 24.93 Date Analyzed: 09/11/97
 GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.74	33000	JN
2. 000110-54-3	Hexane	14.72	25000	JN
3. 000096-37-7	Cyclopentane, methyl-	17.28	21000	JN
4. 000591-76-4	Hexane, 2-methyl-	18.52	16000	JN
5. 000589-34-4	Hexane, 3-methyl-	19.08	18000	JN
6. 000589-43-5	Hexane, 2,4-dimethyl-	21.90	22000	JN
7. 000108-87-2	Cyclohexane, methyl-	22.46	100000	JN
8. 000565-75-3	Pentane, 2,3,4-trimethyl-	23.00	21000	JN
9.	unknown hydrocarbon	23.39	73000	J
10. 000589-53-7	Heptane, 4-methyl-	23.52	18000	JN
11. 000589-81-1	Heptane, 3-methyl-	23.83	34000	JN
12. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.80	57000	JN
13. 000111-65-9	Octane	24.95	66000	JN
14. 000111-84-2	Nonane	28.79	22000	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	33.95	18000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.03
Sample wt/vol: 10.5 (g/ml) G Lab File ID: V01918.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 23.47 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 6

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.86	1100	J
2. 000096-37-7	Cyclopentane, methyl-	17.27	3000	JN
3.	unknown hydrocarbon	19.49	3300	J
4. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	26.75	4000	JN
5.	unknown	30.86	1500	J
6. 004175-53-5	1H-Indene, 2,3-dihydro-1,3-dimet	31.06	1100	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.04
Sample wt/vol: 11.0 (g/ml) G Lab File ID: V01919.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 27.62 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 3

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.88	1200	J
2.	unknown hydrocarbon	17.27	1800	J
3.	unknown hydrocarbon	19.50	3300	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.05

Sample wt/vol: 12.1 (g/ml) G Lab File ID: V01920.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 26.82 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.75	30000	JN
2. 000110-54-3	Hexane	14.73	22000	JN
3. 000096-37-7	Cyclopentane, methyl-	17.31	20000	JN
4.	unknown	19.61	28000	J
5. 000592-13-2	Hexane, 2,5-dimethyl-	21.72	19000	JN
6. 000589-43-5	Hexane, 2,4-dimethyl-	21.91	31000	JN
7. 000108-87-2	Cyclohexane, methyl-	22.46	130000	JN
8. 000565-75-3	Pentane, 2,3,4-trimethyl-	23.00	29000	JN
9.	unknown	23.39	91000	J
10.	unknown	23.52	24000	J
11. 000589-81-1	Heptane, 3-methyl-	23.83	44000	JN
12. 016491-15-9	Cyclopentene, 1,5-dimethyl-	23.97	19000	JN
13. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.80	80000	JN
14. 000111-65-9	Octane	24.95	65000	JN
15. 000095-36-3	1,2,4-Trimethylbenzene	33.96	18000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2980.06

Sample wt/vol: 10.9 (g/ml) G Lab File ID: V01921.D

Level: (low/med) MED Date Received: 09/10/97

% Moisture: not dec. 25.32 Date Analyzed: 09/11/97

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

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

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.73	30000	JN
2. 000096-14-0	Pentane, 3-methyl-	13.74	16000	JN
3. 000110-54-3	Hexane	14.72	24000	JN
4. 000096-37-7	Cyclopentane, methyl-	17.28	20000	JN
5. 000589-34-4	Hexane, 3-methyl-	19.08	17000	JN
6. 000589-43-5	Hexane, 2,4-dimethyl-	21.90	19000	JN
7. 000108-87-2	Cyclohexane, methyl-	22.46	95000	JN
8. 000565-75-3	Pentane, 2,3,4-trimethyl-	23.00	16000	JN
9.	unknown hydrocarbon	23.39	60000	J
10. 000589-81-1	Heptane, 3-methyl-	23.83	29000	JN
11. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.80	47000	JN
12. 000111-65-9	Octane	24.95	58000	JN
13. 000111-84-2	Nonane	28.79	25000	JN
14. 000611-14-3	Benzene, 1-ethyl-2-methyl-	32.79	17000	JN
15. 000095-63-6	Benzene, 1,2,4-trimethyl-	33.95	21000	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2980.07
Sample wt/vol: 10.6 (g/ml) G Lab File ID: V01922.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 24.62 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	26.78	11000	JN
2.	unknown hydrocarbon	30.88	1900	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-H

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 2980.08
Sample wt/vol: 11.9 (g/ml) G Lab File ID: V01923.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 23.87 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	17.28	2100	J
2.	unknown hydrocarbon	19.50	1800	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-I

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.09
Sample wt/vol: 8.6 (g/ml) G Lab File ID: V01924.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 24.21 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-J

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.10
Sample wt/vol: 12.4 (g/ml) G Lab File ID: V01925.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 25.07 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.88	1500	J
2.	unknown hydrocarbon	19.50	1400	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-K

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.11
Sample wt/vol: 11.1 (g/ml) G Lab File ID: V01926.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 24.34 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	17.27	1200	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.12
Sample wt/vol: 9.7 (g/ml) G Lab File ID: V01927.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 23.88 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.87	1100	J
2.	unknown hydrocarbon	17.27	4300	J
3.	unknown hydrocarbon	19.49	4000	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2980 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2980.13
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01915.D
Level: (low/med) MED Date Received: 09/10/97
% Moisture: not dec. 0 Date Analyzed: 09/11/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

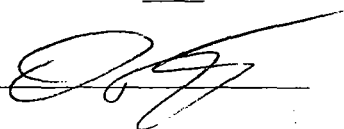
CAS NO.	COMPOUND	RT	EST. CONC.	Q

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

Laboratory Manager of Environmental Consultant's Signature

Date 1/24/14



Laboratory Certification # 13461

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



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: GENE LESINSKI - DPW		Project No: 96-1262		Analysis Parameters							Comments:		
Phone #: 20989		Location: B. 283C		VOA+10 (Synthesis) TPHC B. SOLIDS LEAD MUNSELL VOA Bottle # OVA							* SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:		GASOLINE REMEDIATION											
Sample Name / Company: GARY DIMARTINIS - TUS				Sample #									
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles								Remarks / Preservation Method
74- 2980.01	283C-A	9/9/97	1326	SOIL	2	X	X	X	X	X	970905.04	90	EXC. FLOOR @ 12.0' *
43- 02	283C-B	↓	1339								970905.05	500	SIDE WALL @ 6.5'
80- 03	283C-C		1654								970909.02	40	EXC. FLOOR @ 13.0'
81- 04	283C-D		1702								970909.01	20	↓
34- 05	283C-E		1718								970909.04	1000+	SIDE WALL @ 6.5'
2- 06	283C-F		1726								970909.05	1000+	↓
56- 07	283C-G		1737								970909.06	N/D	↓
1- 08	283C-H	↓	1638								970909.03	100	EXC. FLOOR @ 13.0'
5- 09	283C-I	9/10/97	1426								970909.07	40	↓
6- 10	283C-J	↓	1433								970909.08	10	↓
7- 11	283C-K	↓	1443								970909.09	30	↓
4- 12	283C-DUP			SOIL	↓						970909.10		FIELD DUPLICATE
4- 13	283C-TB	9/9/97		METHANOL	1	X					970905.06		TRIP BLANK
NOTE: OVA (#A52114) CALIBRATED w/ 95ppm CH ₄ + ZERO (w) AIR @ 1300 HRS. ON 9/9/97						G. DIMARTINIS							
CALIBRATION CHECKED AT 1400 HRS. ON 9/10/97													
Relinquished by (signature):		Date/Time: 9/10/97 1535		Received by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):	
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):	
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: DEDICATED SAMPLING TOOLS USED.							
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.													

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 #: 2980.01-.12
Sample Received: 9/10/97
Analysis Start: 9/15/97
Analysis Completed: 9/15/97

Site: Fort Monmouth
Bldg. 283

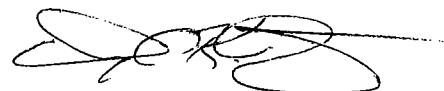
Matrix: Soil

Method of Analysis: Std. Methods 18th, Method 3111B
Method of Digestion: EPA SW-846, Method 3051

TEST PARAMETER: Lead

Laboratory I.D. #	Sample Location	RESULT (mg/Kg)	MDL (mg/Kg)
2980.01	283C-A	ND	2.28
2980.02	283C-B	ND	2.22
2980.03	283C-C	ND	2.61
2980.04	283C-D	ND	1.50
2980.05	283C-E	ND	1.69
2980.06	283C-F	ND	2.48
2980.07	283C-G	ND	2.14
2980.08	283C-H	ND	2.10
2980.09	283C-I	ND	2.64
2980.10	283C-J	ND	2.45
2980.11	283C-K	ND	2.54
2980.12	283C-DUP	ND	2.58

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



Daniel K. Wright

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
96-1262
Bldg. 283-C

Project # 2992
Date Rec. 09/16/97
Date Comp. 09/17/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OQA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

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

PHC Conformance/Non-conformance Summary Report

No Yes

1. Method Detection Limits provided.

— ☒

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

☒ —

3. Matrix Spike Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

— ☒

4. Duplicate Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

☒

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

— NA —

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

— ☒

7. Analysis holding time met.

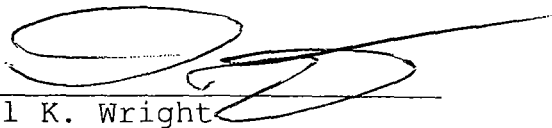
— ☒

(If not met, list number of days exceeded for each sample)

Additional Comments: _____

Laboratory Authentication Statement

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



Daniel K. Wright
Laboratory Manager



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: DRW-ENV		Project No: 96-1262		Analysis Parameters								Comments: * = SAMPLES KEPT BELOW 4°C.		
Phone #:		Location: B.283-C		CO ₂	TPHC	SOLIDS	LEAD	MUNICI	VIA	SID	#			OVA
() DERA (X) OMA () Other:														
Samplers Name / Company: GARY DiMARTINIS - TUS				Sample #									Remarks / Preservation Method	
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles									
1 - 2992.01	283C-A	9-15-97	1301	SOIL	2	X	X	X	X	X	970902.11	ND	EXC. FLOOR @ 13.0' *	
17 - 02	283C-B		1308								" .12	2	↓	
0 - 03	283C-C		1325								" .13	ND	SIDE WALL @ 6.5'	
5 - 04	283C-D		1317								" .14	8	↓	
8 - 05	283C-DUP		—	↓	↓		↓	↓	↓	↓	" .19	—	FIELD DUPLICATE	
— 06	283C-TB	↓	—	METHANOL	1	↓					" .20	—	TRIP BLANK	
05 MS / MSO 15.64 15.41														
NOTE: OVA (#AS2114) CALIBRATED w/ 95 ppm CH ₄ + ZERO (C) AIR @ 1250 HRS. ON 9-15-97 by G. DiMARTINIS.														
Relinquished by (signature): <i>[Signature]</i>		Date/Time: 9-16-97 1410		Received by (signature): <i>[Signature]</i>		Date/Time: 9/14/97		Relinquished by (signature):		Date/Time:		Received by (signature):		
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Relinquished by (signature):		Date/Time:		Received by (signature):		
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: DEDICATED SAMPLING TOOLS USED.								
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.														

Client :	U.S. Army	Lab. ID # :	2980
	DPW. SELFM-PW-EV	Date Rec'd:	16-Sep-97
	Bldg. 173	Analysis Start:	17-Sep-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	17-Sep-97

Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	B.283-C

ND = Not Detected
MDL = Method Detection Limit

Daniel K. Wright

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

Laboratory Manager or Environmental Consultant's Signature

Date 1/20/96

Laboratory Certification #13461

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

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260
96-1262
B.283C

Project # 2992
Date Rec. 09/16/97
Date Compl. 09/18/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

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

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

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	<u>Y</u>
2. Retention times for chromatograms provided	<u>Y</u>
3. GC/MS Tune Specifications	
a. BFB Meet Criteria	<u>Y</u>
b. DFTPP Meet Criteria	<u>Y</u>
4. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series	<u>Y</u>
5. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	<u>Y</u>
6. GC/MS Calibration Requirements	
a. Calibration Check Compounds Meet Criteria	<u>Y</u>
b. System Performance Check Compounds Meet Criteria	<u>Y</u>
7. Blank Contamination - If yes, List compounds and concentrations in each blank:	<u>N</u>
a. VOA Fraction _____	
b. B/N Fraction _____	
c. Acid Fraction _____	
8. Surrogate Recoveries Meet Criteria	<u>Y</u>
If not met, list those compounds and their recoveries which fall outside the acceptable range:	
a. VOA Fraction _____	
b. B/N Fraction _____	
c. Acid Fraction _____	
If not met, were the calculations checked and the results qualified as "estimated"?	
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	<u>Y</u>
a. VOA Fraction _____	
b. B/N Fraction _____	
c. Acid Fraction _____	

GC/MS Analysis Conformance/Non-Conformance Summary (cont.)

Indicate
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria

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

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

11. Extraction Holding Time Met

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

12. Analysis Holding Time Met

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

Additional Comments:

Laboratory Manager :

 Date: 1-20-24



Fort Monmouth Environmental Testing Laboratory

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DRW-ENV</u>				Project No: <u>96-1262</u>		Analysis Parameters								Comments:		
Phone #:				Location: <u>B.283-C</u>										* = SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:																
Samplers Name / Company: <u>GARY DIMARTINIS - TUS</u>						Sample #										
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	COBATIO	TPHC	SO SOLIDS	LEAD	MUNSELL	UOA	SLD	#	OVA	Remarks / Preservation Method	
2992.01	283C-A	9-15-97	1301	SOIL	2	X	X	X	X	X	970902.11	ND	11	ND	EXC. FLOOR @ 13.0' *	
02	283C-B	↓	1308	↓	↓						"	.12	2		↓	
03	283C-C	↓	1325	↓	↓						"	.13	ND	ND	SIDEWALL @ 6.5'	
04	283C-D	↓	1317	↓	↓						"	.14	8		↓	
05	283C-DUP	↓	—	↓	↓						"	.19	—	—	FIELD DUPLICATE	
06	283C-TB	↓	—	METHANOL	1	↓					"	.20	—	—	TRIP BLANK	
NOTE: OVA (#AS2114) CALIBRATED w/95ppm CH₄ + ZERO (0) AIR @ 1250 HRS. ON 9-15-97 by G. DIMARTINIS.																
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):				
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):		Date/Time:		Received by (signature):				
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:										
Turnaround time: () Standard 4 wks. (X) Rush Days, (X) ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.										

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit

J : Compound identified below detection limit

B : Compound in both sample and blank

D : Results from dilution of sample

U : Compound searched for but not detected

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01954.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 0 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01954.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 0 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.01

Sample wt/vol: 8.3 (g/ml) G Lab File ID: V01956.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 23.81 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2800	U
107131	Acrylonitrile		2800	U
75650	tert-Butyl alcohol		5200	U
1634044	Methyl-tert-Butyl ether		1200	U
108203	Di-isopropyl ether		790	U
	Dichlorodifluoromethane		1600	U
74-87-3	Chloromethane		400	U
75-01-4	Vinyl Chloride		1200	U
74-83-9	Bromomethane		790	U
75-00-3	Chloroethane		1200	U
75-69-4	Trichlorofluoromethane		790	U
75-35-4	1,1-Dichloroethene		400	U
67-64-1	Acetone		790	U
75-15-0	Carbon Disulfide		400	U
75-09-2	Methylene Chloride		790	U
156-60-5	trans-1,2-Dichloroethene		790	U
75-35-3	1,1-Dichloroethane		400	U
108-05-4	Vinyl Acetate		1200	U
78-93-3	2-Butanone		1200	U
	cis-1,2-Dichloroethene		400	U
67-66-3	Chloroform		400	U
75-55-6	1,1,1-Trichloroethane		400	U
56-23-5	Carbon Tetrachloride		790	U
71-43-2	Benzene		400	U
107-06-2	1,2-Dichloroethane		790	U
79-01-6	Trichloroethene		400	U
78-87-5	1,2-Dichloropropane		400	U
75-27-4	Bromodichloromethane		400	U
110-75-8	2-Chloroethyl vinyl ether		790	U
10061-01-5	cis-1,3-Dichloropropene		400	U
108-10-1	4-Methyl-2-Pentanone		790	U
108-88-3	Toluene		400	U
10061-02-6	trans-1,3-Dichloropropene		790	U
79-00-5	1,1,2-Trichloroethane		790	U
127-18-4	Tetrachloroethene		400	U
591-78-6	2-Hexanone		790	U
126-48-1	Dibromochloromethane		790	U
108-90-7	Chlorobenzene		400	U
100-41-4	Ethylbenzene		790	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.01

Sample wt/vol: 8.3 (g/ml) G Lab File ID: V01956.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 23.81 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1200	U
1330-20-7	o-Xylene	790	U
100-42-5	Styrene	790	U
75-25-2	Bromoform	790	U
79-34-5	1,1,2,2-Tetrachloroethane	790	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.02

Sample wt/vol: 9.2 (g/ml) G Lab File ID: V01957.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 24.95 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2500	U
107131	Acrylonitrile		2500	U
75650	tert-Butyl alcohol		4700	U
1634044	Methyl-tert-Butyl ether		1100	U
108203	Di-isopropyl ether		730	U
	Dichlorodifluoromethane		1500	U
74-87-3	Chloromethane		360	U
75-01-4	Vinyl Chloride		1100	U
74-83-9	Bromomethane		730	U
75-00-3	Chloroethane		1100	U
75-69-4	Trichlorofluoromethane		730	U
75-35-4	1,1-Dichloroethene		360	U
67-64-1	Acetone		730	U
75-15-0	Carbon Disulfide		360	U
75-09-2	Methylene Chloride		730	U
156-60-5	trans-1,2-Dichloroethene		730	U
75-35-3	1,1-Dichloroethane		360	U
108-05-4	Vinyl Acetate		1100	U
78-93-3	2-Butanone		1100	U
	cis-1,2-Dichloroethene		360	U
67-66-3	Chloroform		360	U
75-55-6	1,1,1-Trichloroethane		360	U
56-23-5	Carbon Tetrachloride		730	U
71-43-2	Benzene		360	U
107-06-2	1,2-Dichloroethane		730	U
79-01-6	Trichloroethene		360	U
78-87-5	1,2-Dichloropropane		360	U
75-27-4	Bromodichloromethane		360	U
110-75-8	2-Chloroethyl vinyl ether		730	U
10061-01-5	cis-1,3-Dichloropropene		360	U
108-10-1	4-Methyl-2-Pentanone		730	U
108-88-3	Toluene		360	U
10061-02-6	trans-1,3-Dichloropropene		730	U
79-00-5	1,1,2-Trichloroethane		730	U
127-18-4	Tetrachloroethene		360	U
591-78-6	2-Hexanone		730	U
126-48-1	Dibromochloromethane		730	U
108-90-7	Chlorobenzene		360	U
100-41-4	Ethylbenzene		730	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.02

Sample wt/vol: 9.2 (g/ml) G Lab File ID: V01957.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 24.95 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1100	U
1330-20-7	o-Xylene	730	U
100-42-5	Styrene	730	U
75-25-2	Bromoform	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.03

Sample wt/vol: 9.1 (g/ml) G Lab File ID: V01958.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 28.55 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		2700	U
107131	Acrylonitrile		2700	U
75650	tert-Butyl alcohol		5000	U
1634044	Methyl-tert-Butyl ether		1200	U
108203	Di-isopropyl ether		770	U
	Dichlorodifluoromethane		1500	U
74-87-3	Chloromethane		380	U
75-01-4	Vinyl Chloride		1200	U
74-83-9	Bromomethane		770	U
75-00-3	Chloroethane		1200	U
75-69-4	Trichlorofluoromethane		770	U
75-35-4	1,1-Dichloroethene		380	U
67-64-1	Acetone		770	U
75-15-0	Carbon Disulfide		380	U
75-09-2	Methylene Chloride		770	U
156-60-5	trans-1,2-Dichloroethene		770	U
75-35-3	1,1-Dichloroethane		380	U
108-05-4	Vinyl Acetate		1200	U
78-93-3	2-Butanone		1200	U
	cis-1,2-Dichloroethene		380	U
67-66-3	Chloroform		380	U
75-55-6	1,1,1-Trichloroethane		380	U
56-23-5	Carbon Tetrachloride		770	U
71-43-2	Benzene		380	U
107-06-2	1,2-Dichloroethane		770	U
79-01-6	Trichloroethene		380	U
78-87-5	1,2-Dichloropropane		380	U
75-27-4	Bromodichloromethane		380	U
110-75-8	2-Chloroethyl vinyl ether		770	U
10061-01-5	cis-1,3-Dichloropropene		380	U
108-10-1	4-Methyl-2-Pentanone		770	U
108-88-3	Toluene		380	U
10061-02-6	trans-1,3-Dichloropropene		770	U
79-00-5	1,1,2-Trichloroethane		770	U
127-18-4	Tetrachloroethene		380	U
591-78-6	2-Hexanone		770	U
126-48-1	Dibromochloromethane		770	U
108-90-7	Chlorobenzene		380	U
100-41-4	Ethylbenzene		770	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.03

Sample wt/vol: 9.1 (g/ml) G Lab File ID: V01958.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 28.55 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1200	U
1330-20-7	o-Xylene	770	U
100-42-5	Styrene	770	U
75-25-2	Bromoform	770	U
79-34-5	1,1,2,2-Tetrachloroethane	770	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.04

Sample wt/vol: 9.1 (g/ml) G Lab File ID: V01959.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 26.03 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2600	U	
107131	Acrylonitrile	2600	U	
75650	tert-Butyl alcohol	4800	U	
1634044	Methyl-tert-Butyl ether	1100	U	
108203	Di-isopropyl ether	740	U	
	Dichlorodifluoromethane	1500	U	
74-87-3	Chloromethane	370	U	
75-01-4	Vinyl Chloride	1100	U	
74-83-9	Bromomethane	740	U	
75-00-3	Chloroethane	1100	U	
75-69-4	Trichlorofluoromethane	740	U	
75-35-4	1,1-Dichloroethene	370	U	
67-64-1	Acetone	740	U	
75-15-0	Carbon Disulfide	370	U	
75-09-2	Methylene Chloride	740	U	
156-60-5	trans-1,2-Dichloroethene	740	U	
75-35-3	1,1-Dichloroethane	370	U	
108-05-4	Vinyl Acetate	1100	U	
78-93-3	2-Butanone	1100	U	
	cis-1,2-Dichloroethene	370	U	
67-66-3	Chloroform	370	U	
75-55-6	1,1,1-Trichloroethane	370	U	
56-23-5	Carbon Tetrachloride	740	U	
71-43-2	Benzene	370	U	
107-06-2	1,2-Dichloroethane	740	U	
79-01-6	Trichloroethene	370	U	
78-87-5	1,2-Dichloropropane	370	U	
75-27-4	Bromodichloromethane	370	U	
110-75-8	2-Chloroethyl vinyl ether	740	U	
10061-01-5	cis-1,3-Dichloropropene	370	U	
108-10-1	4-Methyl-2-Pentanone	740	U	
108-88-3	Toluene	370	U	
10061-02-6	trans-1,3-Dichloropropene	740	U	
79-00-5	1,1,2-Trichloroethane	740	U	
127-18-4	Tetrachloroethene	370	U	
591-78-6	2-Hexanone	740	U	
126-48-1	Dibromochloromethane	740	U	
108-90-7	Chlorobenzene	370	U	
100-41-4	Ethylbenzene	740	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.04

Sample wt/vol: 9.1 (g/ml) G Lab File ID: V01959.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 26.03 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		1100	U
1330-20-7	o-Xylene		740	U
100-42-5	Styrene		740	U
75-25-2	Bromoform		740	U
79-34-5	1,1,2,2-Tetrachloroethane		740	U
541-73-1	1,3-Dichlorobenzene		1100	U
106-46-7	1,4-Dichlorobenzene		1100	U
95-50-1	1,2-Dichlorobenzene		1100	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.05

Sample wt/vol: 9.2 (g/ml) G Lab File ID: V01960.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 23.36 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2500	U
107131	Acrylonitrile	2500	U
75650	tert-Butyl alcohol	4600	U
1634044	Methyl-tert-Butyl ether	1100	U
108203	Di-isopropyl ether	710	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	360	U
75-01-4	Vinyl Chloride	1100	U
74-83-9	Bromomethane	710	U
75-00-3	Chloroethane	1100	U
75-69-4	Trichlorofluoromethane	710	U
75-35-4	1,1-Dichloroethene	360	U
67-64-1	Acetone	710	U
75-15-0	Carbon Disulfide	360	U
75-09-2	Methylene Chloride	710	U
156-60-5	trans-1,2-Dichloroethene	710	U
75-35-3	1,1-Dichloroethane	360	U
108-05-4	Vinyl Acetate	1100	U
78-93-3	2-Butanone	1100	U
	cis-1,2-Dichloroethene	360	U
67-66-3	Chloroform	360	U
75-55-6	1,1,1-Trichloroethane	360	U
56-23-5	Carbon Tetrachloride	710	U
71-43-2	Benzene	360	U
107-06-2	1,2-Dichloroethane	710	U
79-01-6	Trichloroethene	360	U
78-87-5	1,2-Dichloropropane	360	U
75-27-4	Bromodichloromethane	360	U
110-75-8	2-Chloroethyl vinyl ether	710	U
10061-01-5	cis-1,3-Dichloropropene	360	U
108-10-1	4-Methyl-2-Pentanone	710	U
108-88-3	Toluene	360	U
10061-02-6	trans-1,3-Dichloropropene	710	U
79-00-5	1,1,2-Trichloroethane	710	U
127-18-4	Tetrachloroethene	360	U
591-78-6	2-Hexanone	710	U
126-48-1	Dibromochloromethane	710	U
108-90-7	Chlorobenzene	360	U
100-41-4	Ethylbenzene	710	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.05

Sample wt/vol: 9.2 (g/ml) G Lab File ID: V01960.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 23.36 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1100	U
1330-20-7	o-Xylene	710	U
100-42-5	Styrene	710	U
75-25-2	Bromoform	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.06

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01955.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 0 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2992.06

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01955.D

Level: (low/med) MED Date Received: 09/16/97

% Moisture: not dec. 0 Date Analyzed: 09/18/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2992 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01954.D
Level: (low/med) MED Date Received: 09/16/97
% Moisture: not dec. 0 Date Analyzed: 09/18/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2992.01
Sample wt/vol: 8.3 (g/ml) G Lab File ID: V01956.D
Level: (low/med) MED Date Received: 09/16/97
% Moisture: not dec. 23.81 Date Analyzed: 09/18/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2992.02
Sample wt/vol: 9.2 (g/ml) G Lab File ID: V01957.D
Level: (low/med) MED Date Received: 09/16/97
% Moisture: not dec. 24.95 Date Analyzed: 09/18/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2992.03
Sample wt/vol: 9.1 (g/ml) G Lab File ID: V01958.D
Level: (low/med) MED Date Received: 09/16/97
% Moisture: not dec. 28.55 Date Analyzed: 09/18/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2992.04
Sample wt/vol: 9.1 (g/ml) G Lab File ID: V01959.D
Level: (low/med) MED Date Received: 09/16/97
% Moisture: not dec. 26.03 Date Analyzed: 09/18/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 2992 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 2992.05
Sample wt/vol: 9.2 (g/ml) G Lab File ID: V01960.D
Level: (low/med) MED Date Received: 09/16/97
% Moisture: not dec. 23.36 Date Analyzed: 09/18/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461
 Project: 961262 Case No.: 2992 Location: B.283C SDG No.:
 Matrix: (soil/water) SOIL Lab Sample ID: 2992.06
 Sample wt/vol: 10.0 (g/ml) G Lab File ID: V01955.D
 Level: (low/med) MED Date Received: 09/16/97
 % Moisture: not dec. 0 Date Analyzed: 09/18/97
 GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

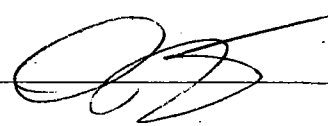
Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

Laboratory Manager of Environmental Consultant's Signature
Date 1/12/16



Laboratory Certification # 13461

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



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: DAW-ENV		Project No: 96-1262		Analysis Parameters								Comments: *=SAMPLES KEPT BELOW 4°C.	
Phone #:		Location: B283-C		VOCs	TPHC	PB SOLIDS	LEAD	MUNSEN	VOC STD	#	OVA		
() DERA () OMA () Other:													
Samplers Name / Company: GARY DIMARTINIS - TLIS				Sample #								Remarks / Preservation Method	
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles								
11 - 2992.01	283C-A	9-15-97	1301	SOIL	2	X	X	X	X	X	970908.41	ND	EXC. FLOOR @ 13.0' *
47 - 02	283C-B	↓	1308	↓	↓						" .12	2	↓
10 - 03	283C-C	↓	1325	↓	↓						" .13	ND	SIDE WALL @ 6.5'
15 - 04	283C-D	↓	1317	↓	↓						" .14	8	↓
18 - 05	283C-DUP	↓	—	↓	↓						" .19	—	FIELD DUPLICATE
05 - 06	283C-TB	↓	—	METHANOL	1	↓					" .20	—	TRIP BLANK
NOTE: OVA (#AS2114) CALIBRATED w/95 ppm CH ₄ & ZERO (0) AIR @ 1250 HRS. ON 9-15-97 by G. DIMARTINIS.													
Relinquished by (signature):		Date/Time: 9-16-97 1410		Received by (signature):		Date/Time: 9/16/97		Relinquished by (signature):		Date/Time:		Received by (signature):	
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Relinquished by (signature):		Date/Time:		Received by (signature):	
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: DEDICATED SAMPLING TOOLS USED.							
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.													

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

Client: U.S. Army
..05

Lab ID #: 2992.01-

DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Sample Received: 9/16/97
Analysis Start: 9/19/97
Analysis Completed: 9/19/97

Site: Fort Monmouth
Bldg. 283

Matrix: Soil

Method of Analysis: Std. Methods 18th, Method 3111B
Method of Digestion: E.P.A. SW-846, Method 3051

TEST PARAMETER: Lead

Laboratory I.D. #	Sample Location	RESULT (mg/Kg)	MDL (mg/Kg)
2992.01	283C-A	3.35	1.34
2992.02	283C-B	ND	1.30
2992.03	283C-D	2.83	1.41
2992.04	283C-E	1.36	1.36
2992.05	283C-DUP	ND	1.32

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



Daniel K. Wright
Laboratory Director

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
96-1262
Bldg. 283-C

Project # 3008
Date Rec.09/23/97
Date Comp.09/25/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OOA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

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

PHC Conformance/Non-conformance Summary Report

No Yes

1. Method Detection Limits provided.

— ✓

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

✓ —

3. Matrix Spike Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

— ✓

4. Duplicate Results Summary Meet Criteria.

(If not met, list the sample and corresponding recovery which falls outside the acceptable range).

✓

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

— NA —

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

— ✓ —

7. Analysis holding time met.

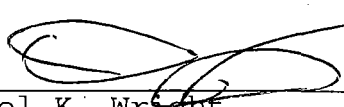
— ✓ —

(If not met, list number of days exceeded for each sample)

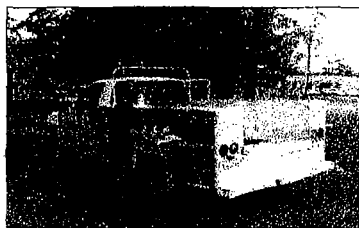
Additional Comments: _____

Laboratory Authentication Statement

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



Daniel K. Wright
Laboratory Manager



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DPW-ENV</u>		Project No: <u>96-1262</u>		Analysis Parameters										Comments:		
Phone #:		Location: <u>B. 283C</u>												* = SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:																
Samplers Name / Company: <u>GARY D. MARTINIS - TUS</u>				Sample #											Remarks / Preservation Method	
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	VOA #10	TPHC	Q. SOLIDS	MUSSELL	LEAD	VOA # 970922	OVA				
11-3008 .01	283C-A	9-22-97	1349	SOIL	2	X	X	X	X	X	.01	10	EXC. FLOOR @ 13.0'*			
13-02	B	↓	1357								.02	30	↓			
16-03	C	↓	1405								.03	70	SIDE WALL @ 6.5'			
11-04	D	↓	1413								.04	100	↓			
6-05	E	9-23-97	0823								.05	30	EXC. FLOOR @ 13.0'			
8-06	F	↓	0838								.06	50	SIDE WALL @ 6.5'			
7-07	G	↓	0846								.07	65	↓			
2-08	DUP	—	—	↓	↓						.09	—	FIELD DUPLICATE			
09	TB	9-22-97	—	METHANOL	1	↓	↓	↓	↓	↓	.10	—	TRIP BLANK			

NOTE: OVA (#A52114) CALIBRATED w/ 95ppm CH₄ + ZERO (0) AIR @ 1330 HRS. ON 9/22/97 by G. D. MARTINIS.
- OVA CALIBRATION CHECKED @ 0800 HRS ON 9-23-97.

Relinquished by (signature): <u>[Signature]</u>	Date/Time: <u>9-23-97 1100</u>	Received by (signature): <u>[Signature]</u>	Relinquished by (signature):	Date/Time:	Received by (signature):
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.

Remarks: DEDICATED SAMPLING TOOLS USED.

[illegible]

Lab. ID # :	3008
Date Rec'd:	23-Sep-97
Analysis Start:	24-Sep-97
Analysis Complete:	25-Sep-97

UST Reg. #:
Closure #:
DICAR #:
Location #: B.283C

[illegible]

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Daniel K. Wright

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

Laboratory Manager or Environmental Consultant's Signature

Date 1/20/98

Laboratory Certification #13461

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

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260
96-1262
Bldg. 283C

Project # 3008
Date Rec. 09/23/97
Date Compl. 09/25/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

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

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

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	<u>Y</u>
2. Retention times for chromatograms provided	<u>Y</u>
3. GC/MS Tune Specifications	
a. BFB Meet Criteria	<u>Y</u>
b. DFTPP Meet Criteria	<u>Y</u>
4. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series	<u>Y</u>
5. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	<u>Y</u>
6. GC/MS Calibration Requirements	
a. Calibration Check Compounds Meet Criteria	<u>Y</u>
b. System Performance Check Compounds Meet Criteria	<u>Y</u>
7. Blank Contamination - If yes, List compounds and concentrations in each blank:	<u>N</u>
a. VOA Fraction _____	
b. B/N Fraction _____	
c. Acid Fraction _____	
8. Surrogate Recoveries Meet Criteria	<u>Y</u>
If not met, list those compounds and their recoveries which fall outside the acceptable range:	
a. VOA Fraction _____	
b. B/N Fraction _____	
c. Acid Fraction _____	
If not met, were the calculations checked and the results qualified as "estimated"?	
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	<u>Y</u>
a. VOA Fraction _____	
b. B/N Fraction _____	
c. Acid Fraction _____	

GC/MS Analysis Conformance/Non-Conformance Summary (cont.)

Indicate
Yes, No, N/A

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

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

✓

11. Extraction Holding Time Met

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

✓

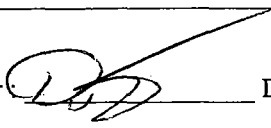
12. Analysis Holding Time Met

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

✓

Additional Comments:

Laboratory Manager



Date:

1-20-96



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DPW-ENV</u>		Project No: <u>96-1262</u>		Analysis Parameters								Comments:		
Phone #:		Location: <u>B.283C</u>		VOA # 970922- OVA TPHC PC SOLIDS MUNSELL LEAD								* = SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:		Samplers Name / Company: <u>GARY D. MARTINIS - TVS</u>		Sample #									Remarks / Preservation Method	
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	VOA+10	TPHC	PC SOLIDS	MUNSELL	LEAD	VOA #	OVA		
3008 .01	283C-A	9-22-97	1349	SOIL	2	X	X	X	X	X	.01	10	EXC. FLOOR @ 13.0'*	
.02	B	↓	1357	↓	↓	↓	↓	↓	↓	↓	.02	30	↓	
.03	C	↓	1405	↓	↓	↓	↓	↓	↓	↓	.03	70	SIDE WALL @ 6.5'	
.04	D	↓	1413	↓	↓	↓	↓	↓	↓	↓	.04	100	↓	
.05	E	9-23-97	0823	↓	↓	↓	↓	↓	↓	↓	.05	30	EXC. FLOOR @ 13.0'	
.06	F	↓	0838	↓	↓	↓	↓	↓	↓	↓	.06	50	SIDE WALL @ 6.5'	
.07	G	↓	0846	↓	↓	↓	↓	↓	↓	↓	.07	65	↓	
.08	DUP	—	—	↓	↓	↓	↓	↓	↓	↓	.09	—	FIELD DUPLICATE	
.09	TB	9-22-97	—	METHANOL	1	↓	↓	↓	↓	↓	.10	—	TRIP BLANK	
NOTE: OVA (#AS2114) CALIBRATED w/PSspan CH₄ + ZERO(O₂) AIR @ 1330 HRS. ON 9/22/97 by G. D. MARTINIS. - OVA CALIBRATION CHECKED @ 0800 HRS ON 9-23-97.														
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):				
		9-23-97 1100												
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):				
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:								
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.								

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit

J : Compound identified below detection limit

B : Compound in both sample and blank

D : Results from dilution of sample

U : Compound searched for but not detected

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02017.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 0 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02017.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 0 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.01

Sample wt/vol: 12.2 (g/ml) G Lab File ID: V02021.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 25.5 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	1900	U
107131	Acrylonitrile	1900	U
75650	tert-Butyl alcohol	3600	U
1634044	Methyl-tert-Butyl ether	830	U
108203	Di-isopropyl ether	550	U
	Dichlorodifluoromethane	1100	U
74-87-3	Chloromethane	280	U
75-01-4	Vinyl Chloride	830	U
74-83-9	Bromomethane	550	U
75-00-3	Chloroethane	830	U
75-69-4	Trichlorofluoromethane	550	U
75-35-4	1,1-Dichloroethene	280	U
67-64-1	Acetone	550	U
75-15-0	Carbon Disulfide	280	U
75-09-2	Methylene Chloride	550	U
156-60-5	trans-1,2-Dichloroethene	550	U
75-35-3	1,1-Dichloroethane	280	U
108-05-4	Vinyl Acetate	830	U
78-93-3	2-Butanone	830	U
	cis-1,2-Dichloroethene	280	U
67-66-3	Chloroform	280	U
75-55-6	1,1,1-Trichloroethane	280	U
56-23-5	Carbon Tetrachloride	550	U
71-43-2	Benzene	640	
107-06-2	1,2-Dichloroethane	550	U
79-01-6	Trichloroethene	280	U
78-87-5	1,2-Dichloropropane	280	U
75-27-4	Bromodichloromethane	280	U
110-75-8	2-Chloroethyl vinyl ether	550	U
10061-01-5	cis-1,3-Dichloropropene	280	U
108-10-1	4-Methyl-2-Pentanone	550	U
108-88-3	Toluene	280	U
10061-02-6	trans-1,3-Dichloropropene	550	U
79-00-5	1,1,2-Trichloroethane	550	U
127-18-4	Tetrachloroethene	280	U
591-78-6	2-Hexanone	550	U
126-48-1	Dibromochloromethane	550	U
108-90-7	Chlorobenzene	280	U
100-41-4	Ethylbenzene	550	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.01

Sample wt/vol: 12.2 (g/ml) G Lab File ID: V02021.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 25.5 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	830	U
1330-20-7	o-Xylene	550	U
100-42-5	Styrene	550	U
75-25-2	Bromoform	550	U
79-34-5	1,1,2,2-Tetrachloroethane	550	U
541-73-1	1,3-Dichlorobenzene	830	U
106-46-7	1,4-Dichlorobenzene	830	U
95-50-1	1,2-Dichlorobenzene	830	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.02

Sample wt/vol: 9.7 (g/ml) G Lab File ID: V02022.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 26.02 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2400	U
107131	Acrylonitrile	2400	U
75650	tert-Butyl alcohol	4500	U
1634044	Methyl-tert-Butyl ether	1000	U
108203	Di-isopropyl ether	700	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	350	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	700	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	700	U
75-35-4	1,1-Dichloroethene	350	U
67-64-1	Acetone	700	U
75-15-0	Carbon Disulfide	350	U
75-09-2	Methylene Chloride	700	U
156-60-5	trans-1,2-Dichloroethene	700	U
75-35-3	1,1-Dichloroethane	350	U
108-05-4	Vinyl Acetate	1000	U
78-93-3	2-Butanone	1000	U
	cis-1,2-Dichloroethene	350	U
67-66-3	Chloroform	350	U
75-55-6	1,1,1-Trichloroethane	350	U
56-23-5	Carbon Tetrachloride	700	U
71-43-2	Benzene	1100	
107-06-2	1,2-Dichloroethane	700	U
79-01-6	Trichloroethene	350	U
78-87-5	1,2-Dichloropropane	350	U
75-27-4	Bromodichloromethane	350	U
110-75-8	2-Chloroethyl vinyl ether	700	U
10061-01-5	cis-1,3-Dichloropropene	350	U
108-10-1	4-Methyl-2-Pentanone	700	U
108-88-3	Toluene	350	U
10061-02-6	trans-1,3-Dichloropropene	700	U
79-00-5	1,1,2-Trichloroethane	700	U
127-18-4	Tetrachloroethene	350	U
591-78-6	2-Hexanone	700	U
126-48-1	Dibromochloromethane	700	U
108-90-7	Chlorobenzene	350	U
100-41-4	Ethylbenzene	700	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 3008.02

Sample wt/vol: 9.7 (g/ml) G Lab File ID: V02022.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 26.02 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1000	U
1330-20-7	o-Xylene	700	U
100-42-5	Styrene	700	U
75-25-2	Bromoform	700	U
79-34-5	1,1,2,2-Tetrachloroethane	700	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.03

Sample wt/vol: 8.4 (g/ml) G Lab File ID: V02023.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 27.89 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2900	U
107131	Acrylonitrile	2900	U
75650	tert-Butyl alcohol	5300	U
1634044	Methyl-tert-Butyl ether	1200	U
108203	Di-isopropyl ether	820	U
	Dichlorodifluoromethane	1600	U
74-87-3	Chloromethane	410	U
75-01-4	Vinyl Chloride	1200	U
74-83-9	Bromomethane	820	U
75-00-3	Chloroethane	1200	U
75-69-4	Trichlorofluoromethane	820	U
75-35-4	1,1-Dichloroethene	410	U
67-64-1	Acetone	820	U
75-15-0	Carbon Disulfide	410	U
75-09-2	Methylene Chloride	820	U
156-60-5	trans-1,2-Dichloroethene	820	U
75-35-3	1,1-Dichloroethane	410	U
108-05-4	Vinyl Acetate	1200	U
78-93-3	2-Butanone	1200	U
	cis-1,2-Dichloroethene	410	U
67-66-3	Chloroform	410	U
75-55-6	1,1,1-Trichloroethane	410	U
56-23-5	Carbon Tetrachloride	820	U
71-43-2	Benzene	520	
107-06-2	1,2-Dichloroethane	820	U
79-01-6	Trichloroethene	410	U
78-87-5	1,2-Dichloropropane	410	U
75-27-4	Bromodichloromethane	410	U
110-75-8	2-Chloroethyl vinyl ether	820	U
10061-01-5	cis-1,3-Dichloropropene	410	U
108-10-1	4-Methyl-2-Pentanone	820	U
108-88-3	Toluene	410	U
10061-02-6	trans-1,3-Dichloropropene	820	U
79-00-5	1,1,2-Trichloroethane	820	U
127-18-4	Tetrachloroethene	410	U
591-78-6	2-Hexanone	820	U
126-48-1	Dibromochloromethane	820	U
108-90-7	Chlorobenzene	410	U
100-41-4	Ethylbenzene	510	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.03

Sample wt/vol: 8.4 (g/ml) G Lab File ID: V02023.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 27.89 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	2000	
1330-20-7	o-Xylene	950	
100-42-5	Styrene	820	U
75-25-2	Bromoform	820	U
79-34-5	1,1,2,2-Tetrachloroethane	820	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.04

Sample wt/vol: 8.7 (g/ml) G Lab File ID: V02024.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 28.87 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2800		U
107131	Acrylonitrile	2800		U
75650	tert-Butyl alcohol	5200		U
1634044	Methyl-tert-Butyl ether	1200		U
108203	Di-isopropyl ether	800		U
	Dichlorodifluoromethane	1600		U
74-87-3	Chloromethane	400		U
75-01-4	Vinyl Chloride	1200		U
74-83-9	Bromomethane	800		U
75-00-3	Chloroethane	1200		U
75-69-4	Trichlorofluoromethane	800		U
75-35-4	1,1-Dichloroethene	400		U
67-64-1	Acetone	800		U
75-15-0	Carbon Disulfide	400		U
75-09-2	Methylene Chloride	800		U
156-60-5	trans-1,2-Dichloroethene	800		U
75-35-3	1,1-Dichloroethane	400		U
108-05-4	Vinyl Acetate	1200		U
78-93-3	2-Butanone	1200		U
	cis-1,2-Dichloroethene	400		U
67-66-3	Chloroform	400		U
75-55-6	1,1,1-Trichloroethane	400		U
56-23-5	Carbon Tetrachloride	800		U
71-43-2	Benzene	420		
107-06-2	1,2-Dichloroethane	800		U
79-01-6	Trichloroethene	400		U
78-87-5	1,2-Dichloropropane	400		U
75-27-4	Bromodichloromethane	400		U
110-75-8	2-Chloroethyl vinyl ether	800		U
10061-01-5	cis-1,3-Dichloropropene	400		U
108-10-1	4-Methyl-2-Pentanone	800		U
108-88-3	Toluene	400		U
10061-02-6	trans-1,3-Dichloropropene	800		U
79-00-5	1,1,2-Trichloroethane	800		U
127-18-4	Tetrachloroethene	400		U
591-78-6	2-Hexanone	800		U
126-48-1	Dibromochloromethane	800		U
108-90-7	Chlorobenzene	400		U
100-41-4	Ethylbenzene	370		J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.04

Sample wt/vol: 8.7 (g/ml) G Lab File ID: V02024.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 28.87 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1600	
1330-20-7	o-Xylene	940	
100-42-5	Styrene	800	U
75-25-2	Bromoform	800	U
79-34-5	1,1,2,2-Tetrachloroethane	800	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.05

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V02025.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 27.18 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2400	U
107131	Acrylonitrile	2400	U
75650	tert-Butyl alcohol	4500	U
1634044	Methyl-tert-Butyl ether	1000	U
108203	Di-isopropyl ether	700	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	350	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	700	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	700	U
75-35-4	1,1-Dichloroethene	350	U
67-64-1	Acetone	700	U
75-15-0	Carbon Disulfide	350	U
75-09-2	Methylene Chloride	700	U
156-60-5	trans-1,2-Dichloroethene	700	U
75-35-3	1,1-Dichloroethane	350	U
108-05-4	Vinyl Acetate	1000	U
78-93-3	2-Butanone	1000	U
	cis-1,2-Dichloroethene	350	U
67-66-3	Chloroform	350	U
75-55-6	1,1,1-Trichloroethane	350	U
56-23-5	Carbon Tetrachloride	700	U
71-43-2	Benzene	1200	
107-06-2	1,2-Dichloroethane	700	U
79-01-6	Trichloroethene	350	U
78-87-5	1,2-Dichloropropane	350	U
75-27-4	Bromodichloromethane	350	U
110-75-8	2-Chloroethyl vinyl ether	700	U
10061-01-5	cis-1,3-Dichloropropene	350	U
108-10-1	4-Methyl-2-Pentanone	700	U
108-88-3	Toluene	350	U
10061-02-6	trans-1,3-Dichloropropene	700	U
79-00-5	1,1,2-Trichloroethane	700	U
127-18-4	Tetrachloroethene	350	U
591-78-6	2-Hexanone	700	U
126-48-1	Dibromochloromethane	700	U
108-90-7	Chlorobenzene	350	U
100-41-4	Ethylbenzene	700	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.05

Sample wt/vol: 9.8 (g/ml) G Lab File ID: V02025.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 27.18 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1000	U
1330-20-7	o-Xylene	700	U
100-42-5	Styrene	700	U
75-25-2	Bromoform	700	U
79-34-5	1,1,2,2-Tetrachloroethane	700	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.06

Sample wt/vol: 8.8 (g/ml) G Lab File ID: V02026.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 26.57 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2700	U
107131	Acrylonitrile	2700	U
75650	tert-Butyl alcohol	5000	U
1634044	Methyl-tert-Butyl ether	1200	U
108203	Di-isopropyl ether	770	U
	Dichlorodifluoromethane	1500	U
74-87-3	Chloromethane	390	U
75-01-4	Vinyl Chloride	1200	U
74-83-9	Bromomethane	770	U
75-00-3	Chloroethane	1200	U
75-69-4	Trichlorofluoromethane	770	U
75-35-4	1,1-Dichloroethene	390	U
67-64-1	Acetone	770	U
75-15-0	Carbon Disulfide	390	U
75-09-2	Methylene Chloride	770	U
156-60-5	trans-1,2-Dichloroethene	770	U
75-35-3	1,1-Dichloroethane	390	U
108-05-4	Vinyl Acetate	1200	U
78-93-3	2-Butanone	1200	U
	cis-1,2-Dichloroethene	390	U
67-66-3	Chloroform	390	U
75-55-6	1,1,1-Trichloroethane	390	U
56-23-5	Carbon Tetrachloride	770	U
71-43-2	Benzene	390	U
107-06-2	1,2-Dichloroethane	770	U
79-01-6	Trichloroethene	390	U
78-87-5	1,2-Dichloropropane	390	U
75-27-4	Bromodichloromethane	390	U
110-75-8	2-Chloroethyl vinyl ether	770	U
10061-01-5	cis-1,3-Dichloropropene	390	U
108-10-1	4-Methyl-2-Pentanone	770	U
108-88-3	Toluene	390	U
10061-02-6	trans-1,3-Dichloropropene	770	U
79-00-5	1,1,2-Trichloroethane	770	U
127-18-4	Tetrachloroethene	390	U
591-78-6	2-Hexanone	770	U
126-48-1	Dibromochloromethane	770	U
108-90-7	Chlorobenzene	390	U
100-41-4	Ethylbenzene	190	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.06

Sample wt/vol: 8.8 (g/ml) G Lab File ID: V02026.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 26.57 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	500	J
1330-20-7	o-Xylene	320	J
100-42-5	Styrene	770	U
75-25-2	Bromoform	770	U
79-34-5	1,1,2,2-Tetrachloroethane	770	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.07

Sample wt/vol: 9.4 (g/ml) G Lab File ID: V02027.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 26.63 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2500	U
107131	Acrylonitrile	2500	U
75650	tert-Butyl alcohol	4700	U
1634044	Methyl-tert-Butyl ether	1100	U
108203	Di-isopropyl ether	730	U
	Dichlorodifluoromethane	1500	U
74-87-3	Chloromethane	360	U
75-01-4	Vinyl Chloride	1100	U
74-83-9	Bromomethane	730	U
75-00-3	Chloroethane	1100	U
75-69-4	Trichlorofluoromethane	730	U
75-35-4	1,1-Dichloroethene	360	U
67-64-1	Acetone	730	U
75-15-0	Carbon Disulfide	360	U
75-09-2	Methylene Chloride	730	U
156-60-5	trans-1,2-Dichloroethene	730	U
75-35-3	1,1-Dichloroethane	360	U
108-05-4	Vinyl Acetate	1100	U
78-93-3	2-Butanone	1100	U
	cis-1,2-Dichloroethene	360	U
67-66-3	Chloroform	360	U
75-55-6	1,1,1-Trichloroethane	360	U
56-23-5	Carbon Tetrachloride	730	U
71-43-2	Benzene	360	U
107-06-2	1,2-Dichloroethane	730	U
79-01-6	Trichloroethene	360	U
78-87-5	1,2-Dichloropropane	360	U
75-27-4	Bromodichloromethane	360	U
110-75-8	2-Chloroethyl vinyl ether	730	U
10061-01-5	cis-1,3-Dichloropropene	360	U
108-10-1	4-Methyl-2-Pentanone	730	U
108-88-3	Toluene	360	U
10061-02-6	trans-1,3-Dichloropropene	730	U
79-00-5	1,1,2-Trichloroethane	730	U
127-18-4	Tetrachloroethene	360	U
591-78-6	2-Hexanone	730	U
126-48-1	Dibromochloromethane	730	U
108-90-7	Chlorobenzene	360	U
100-41-4	Ethylbenzene	730	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.07

Sample wt/vol: 9.4 (g/ml) G Lab File ID: V02027.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 26.63 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1100	U
1330-20-7	o-Xylene	730	U
100-42-5	Styrene	730	U
75-25-2	Bromoform	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.08

Sample wt/vol: 9.3 (g/ml) G Lab File ID: V02028.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 24.66 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	2500	U
107131	Acrylonitrile	2500	U
75650	tert-Butyl alcohol	4600	U
1634044	Methyl-tert-Butyl ether	1100	U
108203	Di-isopropyl ether	710	U
	Dichlorodifluoromethane	1400	U
74-87-3	Chloromethane	360	U
75-01-4	Vinyl Chloride	1100	U
74-83-9	Bromomethane	710	U
75-00-3	Chloroethane	1100	U
75-69-4	Trichlorofluoromethane	710	U
75-35-4	1,1-Dichloroethene	360	U
67-64-1	Acetone	710	U
75-15-0	Carbon Disulfide	360	U
75-09-2	Methylene Chloride	710	U
156-60-5	trans-1,2-Dichloroethene	710	U
75-35-3	1,1-Dichloroethane	360	U
108-05-4	Vinyl Acetate	1100	U
78-93-3	2-Butanone	1100	U
	cis-1,2-Dichloroethene	360	U
67-66-3	Chloroform	360	U
75-55-6	1,1,1-Trichloroethane	360	U
56-23-5	Carbon Tetrachloride	710	U
71-43-2	Benzene	1200	
107-06-2	1,2-Dichloroethane	710	U
79-01-6	Trichloroethene	360	U
78-87-5	1,2-Dichloropropane	360	U
75-27-4	Bromodichloromethane	360	U
110-75-8	2-Chloroethyl vinyl ether	710	U
10061-01-5	cis-1,3-Dichloropropene	360	U
108-10-1	4-Methyl-2-Pentanone	710	U
108-88-3	Toluene	360	U
10061-02-6	trans-1,3-Dichloropropene	710	U
79-00-5	1,1,2-Trichloroethane	710	U
127-18-4	Tetrachloroethene	360	U
591-78-6	2-Hexanone	710	U
126-48-1	Dibromochloromethane	710	U
108-90-7	Chlorobenzene	360	U
100-41-4	Ethylbenzene	710	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.08

Sample wt/vol: 9.3 (g/ml) G Lab File ID: V02028.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 24.66 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	1100	U
1330-20-7	o-Xylene	710	U
100-42-5	Styrene	710	U
75-25-2	Bromoform	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.09

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02029.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 0 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3008.09

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02029.D

Level: (low/med) MED Date Received: 09/23/97

% Moisture: not dec. 0 Date Analyzed: 09/24/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02017.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 0 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3008.01
Sample wt/vol: 12.2 (g/ml) G Lab File ID: V02021.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 25.5 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	30.81	1800	J
2. 000091-57-6	Naphthalene, 2-methyl-	31.58	4500	JN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3008.02
Sample wt/vol: 9.7 (g/ml) G Lab File ID: V02022.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 26.02 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3008.03
Sample wt/vol: 8.4 (g/ml) G Lab File ID: V02023.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 27.89 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3008.04
Sample wt/vol: 8.7 (g/ml) G Lab File ID: V02024.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 28.87 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-E

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3008.05
Sample wt/vol: 9.8 (g/ml) G Lab File ID: V02025.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 27.18 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	17.24	3800	J
2.	unknown hydrocarbon	19.48	4300	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-F

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3008.06
Sample wt/vol: 8.8 (g/ml) G Lab File ID: V02026.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 26.57 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-G

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3008.07
Sample wt/vol: 9.4 (g/ml) G Lab File ID: V02027.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 26.63 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283-DUP

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3008.08
Sample wt/vol: 9.3 (g/ml) G Lab File ID: V02028.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 24.66 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3008 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3008.09
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02029.D
Level: (low/med) MED Date Received: 09/23/97
% Moisture: not dec. 0 Date Analyzed: 09/24/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

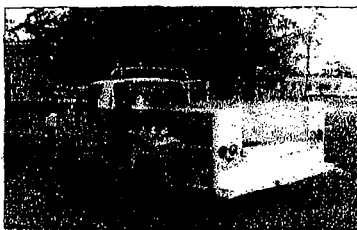
Laboratory Manager of Environmental Consultant's Signature

Date 1/22/96



Laboratory Certification # 13461

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



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DPW-ENV</u>		Project No: <u>96-1262</u>		Analysis Parameters								Comments:		
Phone #:		Location: <u>B.283C</u>										* = SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:														
Samplers Name / Company: <u>GARY D. MARTINIS - TUS</u>				Sample #										
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	VOA #	TPH	Q. SOLIDS	MUNSELL	LEAD	VOA #	QVA	Remarks / Preservation Method	
3008 .01	283C-A	9-22-97	1349	Soil	2	X	X	X	X	X	.01	10	EXC. FLOOR @ 13.0' *	
02	B	↓	1357								.02	30	↓	
03	C	↓	1405								.03	70	SIDE WALL @ 6.5'	
04	D	↓	1413								.04	100	↓	
05	E	9-23-97	0823								.05	30	EXC. FLOOR @ 13.0'	
06	F	↓	0838								.06	50	SIDE WALL @ 6.5'	
07	G	↓	0846								.07	65	↓	
08	DUP	—	—	↓	↓						.09	—	FIELD DUPLICATE	
09	TB	9-22-97	—	METHANOL	1	↓					.10	—	TRIP BLANK	
NOTE: OVA (#AS2114) CALIBRATED w/PSM CH4 + ZERO (O) AIR @ 1330 HRS. ON 9/22/97 by G. D. MARTINIS. - OVA CALIBRATION CHECKED @ 0800 HRS ON 9-23-97.														
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):				
		9-23-97 1100												
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):				
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:								
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.								

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 #: 3008.01-.12
Sample Received: 9/23/97
Analysis Start: 9/30/97
Analysis Completed: 9/30/97

Site: Ft. Monmouth
Bldg. 283-C

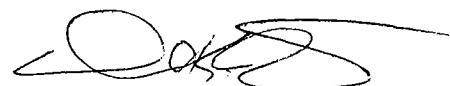
Matrix: Soils

Method of Analysis: Std. Methods 18th, Method 3111B
Method of Digestion: E.P.A. SW-846, Method 3051

TEST PARAMETER: Lead

Laboratory I.D. #	Sample Location	RESULT (mg/Kg)	MDL (mg/Kg)
3008.01	283C-A	ND	1.36
3008.02	283C-B	ND	1.33
3008.03	283C-C	ND	1.40
3008.04	283C-D	ND	1.43
3008.05	283C-E	ND	1.41
3008.06	283C-F	ND	1.34
3008.07	283C-G	ND	1.39
3008.08	283C-DUP	ND	1.34

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



Daniel K. Wright
Laboratory Director

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
96-1262
Bldg. 283-C

Project #3014
Date Rec. 09/29/97
Date Comp. 10/01/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OQA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

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

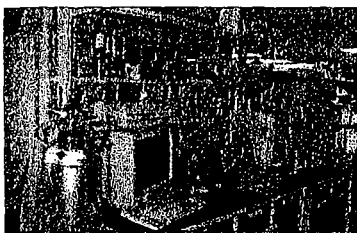
PHC Conformance/Non-conformance Summary Report

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

Laboratory Authentication Statement

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


Daniel K. Wright
Laboratory Manager



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DPL - ENU</u>		Project No: <u>96-1262</u>		Analysis Parameters							Comments:		
Phone #:		Location: <u>283C</u>									* = SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:													
Samplers Name / Company: <u>GARY DiMARTINIS - TVS</u>				Sample #								Remarks / Preservation Method	
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	VOAT10	TPHC	OG SOLIDS	LEAD	MUSSELS	VOA ID #		
81 <u>3014.01</u>	<u>283C-A</u>	<u>9-26-97</u>	<u>1336</u>	<u>SOIL</u>	<u>2</u>	X	X	X	X	X	<u>970923.05</u>	<u>10</u>	<u>Exc. Floor @ 14.0'*</u>
70 <u>02</u>	<u>-B</u>	↓	<u>1355</u>	↓	↓	↓	↓	↓	↓	↓	<u>970923.06</u>	<u>2</u>	↓
71 <u>03</u>	<u>-DUP</u>	↓	—	↓	↓	↓	↓	↓	↓	↓	<u>970923.07</u>	—	<u>FIELD DUPLICATE</u>
<u>04</u>	<u>-TB</u>	↓	—	<u>METHANOL</u>	<u>1</u>	↓					<u>970922.08</u>	—	<u>TRIP BLANK</u>
NOTE: OVA (#A51903) CALIBRATED w/ 95 ppm CH ₄ & ZERO (0) AIR @ 1315 HRS. ON 9-26-97 by G. DiMARTINIS.													
Relinquished by (signature): <u>[Signature]</u>		Date/Time: <u>9-26-97/1522</u>		Received by (signature): <u>[Signature]</u>		Date/Time: <u>9-26-97</u>		Relinquished by (signature):		Date/Time:		Received by (signature):	
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Relinquished by (signature):		Date/Time:		Received by (signature):	
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: <u>DEDICATED SAMPLING TOOLS USED.</u>							
Turnaround time: () Standard 4 wks, (X) Rush _____ Days, (X) ASAP Verbal _____ Hrs.													

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

Client : U.S. Army **Lab. ID # :** 3014
DPW. SELFM-PW-EV **Date Rec'd:** 26-Sep-97
Bldg. 173 **Analysis Start:** 29-Sep-97
Ft. Monmouth, NJ 07703 **Analysis Complete:** 01-Oct-97

Analysis: OQA-QAM-025 **UST Reg. #:**
Matrix: Soil **Closure #:**
Analyst: D.DEINHARDT **DICAR #:**
Ext. Meth: Shake **Location #:** 283C

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3014.01	283C-A	1.00	15.81	75.35	197	ND
3014.02	283C-B	1.00	15.80	74.34	200	ND
3014.03	283C-C	1.00	15.71	75.39	198	ND
METHOD BLANK	29-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected
MDL = Method Detection Limit


Daniel K. Wright
Laboratory Director

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

Laboratory Manager or Environmental Consultant's Signature

Date 1/20/94



Laboratory Certification #13461

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

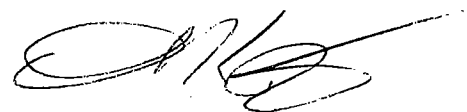
US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260
96-1262
Bldg. 283C

Project # 3014
Date Rec. 09/26/97
Date Compl. 09/29/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

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

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

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms Labeled/Compounds Identified
(Field Samples and Method Blanks)
2. Retention times for chromatograms provided
3. GC/MS Tune Specifications
 - a. BFB Meet Criteria
 - b. DFTPP Meet Criteria
4. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series
5. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series
6. GC/MS Calibration Requirements
 - a. Calibration Check Compounds Meet Criteria
 - b. System Performance Check Compounds Meet Criteria
7. Blank Contamination - If yes, List compounds and concentrations in each blank:
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____
8. Surrogate Recoveries Meet Criteria

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

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

If not met, were the calculations checked and the results qualified as "estimated"?
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
(If not met, list those compounds and their recoveries which fall outside the acceptable range)
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____

Y

Y

Y

Y

Y

Y

N

Y

Y

GC/MS Analysis Conformance/Non-Conformance Summary (cont.)

Indicate
Yes, No, N/A

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

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

11. Extraction Holding Time Met Y

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

12. Analysis Holding Time Met Y

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

Additional Comments:

Laboratory Manager : 

Date: 1-20-01



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DPLJ - ENV</u>		Project No: <u>96-1262</u>		Analysis Parameters							Comments:		
Phone #:		Location: <u>283C</u>									* = SAMPLES KEPT BELOW 4°C.		
() DERA (X) OMA () Other:		Samplers Name / Company: <u>GARY DiMARTINIS - TVS</u>		Sample #									
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	VOA 10	TPHC	% SOLIDS	LEAD	MUNSELL	VOA ID #	VOA	Remarks / Preservation Method
3014.01	283C-A	9-26-97	1336	SOIL	2	X	X	X	X	X	970923.05	10	Exc. Floor @ 14.0'*
02	-B	↓	1355	↓	↓	↓	↓	↓	↓	↓	970923.06	2	↓
03	-DUP	↓	—	↓	↓	↓	↓	↓	↓	↓	970923.07	—	FIELD DUPLICATE
04	-TB	↓	—	METHANOL	1	↓					970922.08	—	TRIP BLANK
NOTE: OVA (#A51903) CALIBRATED 1495 ppm CH ₄ + ZERO (0) AIR @ 1315 HRS. ON 9-26-97 by G. DiMARTINIS.													
Relinquished by (signature): <u>[Signature]</u>		Date/Time: <u>9-26-97/1522</u>		Received by (signature): <u>[Signature]</u>		Date/Time: <u>9-26-97</u>		Relinquished by (signature):		Date/Time:		Received by (signature):	
Relinquished by (signature):		Date/Time:		Received by (signature):		Date/Time:		Relinquished by (signature):		Date/Time:		Received by (signature):	
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: <u>DEDICATED SAMPLING TOOLS USED.</u>							
Turnaround time: () Standard 4 wks, (X) Rush _____ Days, (X) ASAP Verbal _____ Hrs.													

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02065.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 0 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

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

107028	Acrolein	1800	U
107131	Acrylonitrile	1800	U
75650	tert-Butyl alcohol	3200	U
1634044	Methyl-tert-Butyl ether	750	U
108203	Di-isopropyl ether	500	U
	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
75-35-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl Acetate	750	U
78-93-3	2-Butanone	750	U
	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
75-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	500	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	500	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	500	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	500	U
126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	500	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02065.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 0 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.01

Sample wt/vol: 8.4 (g/ml) G Lab File ID: V02067.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 24.65 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2800	U	U
107131	Acrylonitrile	2800	U	U
75650	tert-Butyl alcohol	5100	U	U
1634044	Methyl-tert-Butyl ether	1200	U	U
108203	Di-isopropyl ether	790	U	U
	Dichlorodifluoromethane	1600	U	U
74-87-3	Chloromethane	390	U	U
75-01-4	Vinyl Chloride	1200	U	U
74-83-9	Bromomethane	790	U	U
75-00-3	Chloroethane	1200	U	U
75-69-4	Trichlorofluoromethane	790	U	U
75-35-4	1,1-Dichloroethene	390	U	U
67-64-1	Acetone	790	U	U
75-15-0	Carbon Disulfide	390	U	U
75-09-2	Methylene Chloride	790	U	U
156-60-5	trans-1,2-Dichloroethene	790	U	U
75-35-3	1,1-Dichloroethane	390	U	U
108-05-4	Vinyl Acetate	1200	U	U
78-93-3	2-Butanone	1200	U	U
	cis-1,2-Dichloroethene	390	U	U
67-66-3	Chloroform	390	U	U
75-55-6	1,1,1-Trichloroethane	390	U	U
56-23-5	Carbon Tetrachloride	790	U	U
71-43-2	Benzene	390	U	U
107-06-2	1,2-Dichloroethane	790	U	U
79-01-6	Trichloroethene	390	U	U
78-87-5	1,2-Dichloropropane	390	U	U
75-27-4	Bromodichloromethane	390	U	U
110-75-8	2-Chloroethyl vinyl ether	790	U	U
10061-01-5	cis-1,3-Dichloropropene	390	U	U
108-10-1	4-Methyl-2-Pentanone	790	U	U
108-88-3	Toluene	390	U	U
10061-02-6	trans-1,3-Dichloropropene	790	U	U
79-00-5	1,1,2-Trichloroethane	790	U	U
127-18-4	Tetrachloroethene	390	U	U
591-78-6	2-Hexanone	790	U	U
126-48-1	Dibromochloromethane	790	U	U
108-90-7	Chlorobenzene	390	U	U
100-41-4	Ethylbenzene	790	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.01

Sample wt/vol: 8.4 (g/ml) G Lab File ID: V02067.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 24.65 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		1200	U
1330-20-7	o-Xylene		790	U
100-42-5	Styrene		790	U
75-25-2	Bromoform		790	U
79-34-5	1,1,2,2-Tetrachloroethane		790	U
541-73-1	1,3-Dichlorobenzene		1200	U
106-46-7	1,4-Dichlorobenzene		1200	U
95-50-1	1,2-Dichlorobenzene		1200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.02

Sample wt/vol: 8.5 (g/ml) G Lab File ID: V02068.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 25.66 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2800	U	U
107131	Acrylonitrile	2800	U	U
75650	tert-Butyl alcohol	5100	U	U
1634044	Methyl-tert-Butyl ether	1200	U	U
108203	Di-isopropyl ether	790	U	U
	Dichlorodifluoromethane	1600	U	U
74-87-3	Chloromethane	400	U	U
75-01-4	Vinyl Chloride	1200	U	U
74-83-9	Bromomethane	790	U	U
75-00-3	Chloroethane	1200	U	U
75-69-4	Trichlorofluoromethane	790	U	U
75-35-4	1,1-Dichloroethene	400	U	U
67-64-1	Acetone	790	U	U
75-15-0	Carbon Disulfide	400	U	U
75-09-2	Methylene Chloride	790	U	U
156-60-5	trans-1,2-Dichloroethene	790	U	U
75-35-3	1,1-Dichloroethane	400	U	U
108-05-4	Vinyl Acetate	1200	U	U
78-93-3	2-Butanone	1200	U	U
	cis-1,2-Dichloroethene	400	U	U
67-66-3	Chloroform	400	U	U
75-55-6	1,1,1-Trichloroethane	400	U	U
56-23-5	Carbon Tetrachloride	790	U	U
71-43-2	Benzene	400	U	U
107-06-2	1,2-Dichloroethane	790	U	U
79-01-6	Trichloroethene	400	U	U
78-87-5	1,2-Dichloropropane	400	U	U
75-27-4	Bromodichloromethane	400	U	U
110-75-8	2-Chloroethyl vinyl ether	790	U	U
10061-01-5	cis-1,3-Dichloropropene	400	U	U
108-10-1	4-Methyl-2-Pentanone	790	U	U
108-88-3	Toluene	400	U	U
10061-02-6	trans-1,3-Dichloropropene	790	U	U
79-00-5	1,1,2-Trichloroethane	790	U	U
127-18-4	Tetrachloroethene	400	U	U
591-78-6	2-Hexanone	790	U	U
126-48-1	Dibromochloromethane	790	U	U
108-90-7	Chlorobenzene	400	U	U
100-41-4	Ethylbenzene	790	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.02

Sample wt/vol: 8.5 (g/ml) G Lab File ID: V02068.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 25.66 Date Analyzed: 09/29/97

GC Column: Rbx502.2 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes	1200	U	U
1330-20-7	o-Xylene	790	U	U
100-42-5	Styrene	790	U	U
75-25-2	Bromoform	790	U	U
79-34-5	1,1,2,2-Tetrachloroethane	790	U	U
541-73-1	1,3-Dichlorobenzene	1200	U	U
106-46-7	1,4-Dichlorobenzene	1200	U	U
95-50-1	1,2-Dichlorobenzene	1200	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.03

Sample wt/vol: 9.0 (g/ml) G Lab File ID: V02069.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 75.39 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	7900		U
107131	Acrylonitrile	7900		U
75650	tert-Butyl alcohol	15000		U
1634044	Methyl-tert-Butyl ether	3400		U
108203	Di-isopropyl ether	2300		U
	Dichlorodifluoromethane	4500		U
74-87-3	Chloromethane	1100		U
75-01-4	Vinyl Chloride	3400		U
74-83-9	Bromomethane	2300		U
75-00-3	Chloroethane	3400		U
75-69-4	Trichlorofluoromethane	2300		U
75-35-4	1,1-Dichloroethene	1100		U
67-64-1	Acetone	2300		U
75-15-0	Carbon Disulfide	2600		
75-09-2	Methylene Chloride	2300		U
156-60-5	trans-1,2-Dichloroethene	2300		U
75-35-3	1,1-Dichloroethane	1100		U
108-05-4	Vinyl Acetate	3400		U
78-93-3	2-Butanone	3400		U
	cis-1,2-Dichloroethene	1100		U
67-66-3	Chloroform	1100		U
75-55-6	1,1,1-Trichloroethane	1100		U
56-23-5	Carbon Tetrachloride	2300		U
71-43-2	Benzene	1100		U
107-06-2	1,2-Dichloroethane	2300		U
79-01-6	Trichloroethene	1100		U
78-87-5	1,2-Dichloropropane	1100		U
75-27-4	Bromodichloromethane	1100		U
110-75-8	2-Chloroethyl vinyl ether	2300		U
10061-01-5	cis-1,3-Dichloropropene	1100		U
108-10-1	4-Methyl-2-Pentanone	2300		U
108-88-3	Toluene	1100		U
10061-02-6	trans-1,3-Dichloropropene	2300		U
79-00-5	1,1,2-Trichloroethane	2300		U
127-18-4	Tetrachloroethene	1100		U
591-78-6	2-Hexanone	2300		U
126-48-1	Dibromochloromethane	2300		U
108-90-7	Chlorobenzene	1100		U
100-41-4	Ethylbenzene	2300		U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.03

Sample wt/vol: 9.0 (g/ml) G Lab File ID: V02069.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 75.39 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	3400	U
1330-20-7	o-Xylene	2300	U
100-42-5	Styrene	2300	U
75-25-2	Bromoform	2300	U
79-34-5	1,1,2,2-Tetrachloroethane	2300	U
541-73-1	1,3-Dichlorobenzene	3400	U
106-46-7	1,4-Dichlorobenzene	3400	U
95-50-1	1,2-Dichlorobenzene	3400	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.04

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02066.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 0 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3014.04

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02066.D

Level: (low/med) MED Date Received: 09/26/97

% Moisture: not dec. 0 Date Analyzed: 09/29/97

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02065.D
Level: (low/med) MED Date Received: 09/26/97
% Moisture: not dec. 0 Date Analyzed: 09/29/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3014 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3014.01
Sample wt/vol: 8.4 (g/ml) G Lab File ID: V02067.D
Level: (low/med) MED Date Received: 09/26/97
% Moisture: not dec. 24.65 Date Analyzed: 09/29/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3014.02
Sample wt/vol: 8.5 (g/ml) G Lab File ID: V02068.D
Level: (low/med) MED Date Received: 09/26/97
% Moisture: not dec. 25.66 Date Analyzed: 09/29/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-DUP

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3014 Location: 283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3014.03
Sample wt/vol: 9.0 (g/ml) G Lab File ID: V02069.D
Level: (low/med) MED Date Received: 09/26/97
% Moisture: not dec. 75.39 Date Analyzed: 09/29/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3014 Location: 283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3014.04
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02066.D
Level: (low/med) MED Date Received: 09/26/97
% Moisture: not dec. 0 Date Analyzed: 09/29/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

Laboratory Manager of Environmental Consultant's Signature _____
Date 1/29/2014

Laboratory Certification # 13461

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



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: <u>DPLJ - ENV</u>				Project No: <u>96-1262</u>		Analysis Parameters						Comments:	
Phone #:				Location: <u>283C</u>		VOCs	TPHC	% SOLIDS	LEAD	MURBELL	UOA ID #	OVA	* = SAMPLES KEPT BELOW 4°C.
() DERA (X) OMA () Other:													
Samplers Name / Company: <u>GARY DiMARTINIS - TVS</u>						Sample #							Remarks / Preservation Method
Lab Sample ID	Sample Location	Date	Time	Type	bottles								
<u>3014.01</u>	<u>283C-A</u>	<u>9-26-97</u>	<u>1336</u>	<u>SOIL</u>	<u>2</u>	X	X	X	X	X	<u>970923.05</u>	<u>10</u>	<u>Exc. Floor @ 14.0' *</u>
<u>02</u>	<u>-B</u>		<u>1355</u>								<u>970923.06</u>	<u>2</u>	
<u>03</u>	<u>-DUP</u>										<u>970923.07</u>		<u>FIELD DUPLICATE</u>
<u>04</u>	<u>-TB</u>			<u>METHANOL</u>	<u>1</u>						<u>970922.08</u>		<u>TRIP BLANK</u>
NOTE: OVA (#A51903) CALIBRATED w/ 95 ppm CH ₄ + ZERO (0) AIR @ 1315 HRS. ON 9-26-97 by G. DiMARTINIS.													
Relinquished by (signature): <u>[Signature]</u>		Date/Time: <u>9-26-97/1522</u>		Received by (signature): <u>[Signature]</u>		Relinquished by (signature):		Date/Time:		Received by (signature):			
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):			
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks: <u>DEDICATED SAMPLING TOOLS USED.</u>							
Turnaround time: () Standard 4 wks, (X) Rush Days, (X) ASAP Verbal Hrs.													

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 #: 3014.01-.03
Sample Received: 9/26/97
Analysis Start: 9/30/97
Analysis Completed: 9/30/97

Site: Ft. Monmouth
Bldg. 283-C

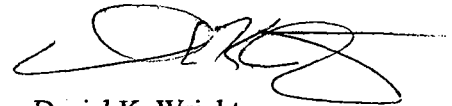
Matrix: Soils

Method of Analysis: Std. Methods 18th, Method 3111B
Method of Digestion: E.P.A. SW-846, Method 3051

TEST PARAMETER: Lead

Laboratory I.D. #	Sample Location	RESULT (mg/Kg)	MDL (mg/Kg)
3014.01	283C-A	ND	1.33
3014.02	283C-B	ND	1.35
3014.03	283C-DUP	ND	1.33

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



Daniel K. Wright
Laboratory Director

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Total Petroleum Hydrocarbons
96-1262
Bldg. 283-C

Project #3032
Date Rec. 10/06/97
Date Comp. 10/08/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method OQA-QAM-025-10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

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

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

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

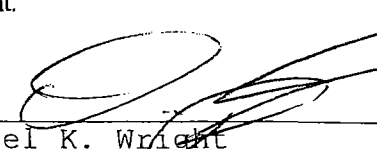
The final concentration of Total Petroleum Hydrocarbons is calculated using percent solid, sample weight and concentration.

PHC Conformance/Non-conformance Summary Report

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

Laboratory Authentication Statement

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


Daniel K. Wright
Laboratory Manager

Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: DPW-ENV		Project No: 96-1262		Analysis Parameters						Comments: *= SAMPLES KEPT BELOW 4°C.			
Phone #:		Location: B. 283C		VOA+10	TPHC	Pb SOLIDS	LEAD	MUNSELL	VOA ID#			OVA	
() DERA (X) OMA () Other:		Samplers Name / Company: GARY DIMARTINIS-TVS								Sample #	Remarks / Preservation Method		
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles								
3032 01	283C-A	10-3-97	1501	SOIL	2	X	X	X	X	X	971003.01	ND	Piping Run @ 1.0' *
02	B		1509								.02	ND	
03	C		1520								.03	ND	
04	D		1531								.04	ND	
05	DUP		—								.05	—	FIELD DUPLICATE
06	TB		—	METHANOL	1	X					.06	—	TRIP BLANK
07	X	10-3-97	1355	UNK.	1			X				—	UNKNOWN SOLID
						-Possibly LEAD RESIDUE FROM INSIDE GAS PIPING.							
NOTE: OVA (#AS2114) CALIBRATED w/ 95 ppm CH ₄ & ZERO(0) AIR @ 1445 HRS. on 10-3-97 by G. DIMARTINIS.													
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):			
<i>[Signature]</i>		10-6-97 1053		<i>[Signature]</i>									
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):			
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:							
Turnaround time: (X) Standard 4 wks, () Rush Days, () ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.							

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

Client : U.S. Army Lab. ID # : 3031
DPW. SELFM-PW-EV Date Rec'd: 06-Oct-97
Bldg. 173 Analysis Start: 06-Oct-97
Ft. Monmouth, NJ 07703 Analysis Complete: 08-Oct-97

Analysis: OQA-QAM-025 UST Reg. #:
Matrix: Soil Closure #:
Analyst: D.DEINHARDT DICAR #:
Ext. Meth: Shake Location #: B.283C

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3032.01	283C-A	1.00	15.75	82.99	180	ND
3032.02	283C-B	1.00	14.97	84.85	185	ND
3032.03	283C-C	1.00	15.03	84.66	185	ND
3032.04	283C-D	1.00	15.49	86.26	176	ND
3032.05	283C-DUP	1.00	15.51	82.50	184	ND
METHOD BLANK	6-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected
MDL = Method Detection Limit


Daniel K. Wright
Laboratory Director

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

Laboratory Manager or Environmental Consultant's Signature

Date 1/10/93

Laboratory Certification #13461

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

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260
96-1262
B.283C

Project # 3032
Date Rec. 10/06/97
Date Compl. 10/07/97
Released by:



Daniel K. Wright
Laboratory Director

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Method Summary

NJDEP Method 8260

Gas Chromatographic Determination of Volatiles in Soil

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

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

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

Indicate
Yes, No, N/A

1. Chromatograms Labeled/Compounds Identified
(Field Samples and Method Blanks)
2. Retention times for chromatograms provided
3. GC/MS Tune Specifications
 - a. BFB Meet Criteria
 - b. DFTPP Meet Criteria
4. GC/MS Tuning Frequency - Performed every 24 hours for 600
series and 12 hours for 8000 series
5. GC/MS Calibration - Initial Calibration performed before
sample analysis and continuing calibration performed within
24 hours of sample analysis for 600 series and 12 hours for 8000 series
6. GC/MS Calibration Requirements
 - a. Calibration Check Compounds Meet Criteria
 - b. System Performance Check Compounds Meet Criteria
7. Blank Contamination - If yes, List compounds and concentrations in each blank:
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____
8. Surrogate Recoveries Meet Criteria

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

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

If not met, were the calculations checked and the results
qualified as "estimated"?
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
(If not met, list those compounds and their recoveries which fall
outside the acceptable range)
 - a. VOA Fraction _____
 - b. B/N Fraction _____
 - c. Acid Fraction _____

Y

Y

Y

Y

Y

Y

Y

N

Y

Y

GC/MS Analysis Conformance/Non-Conformance Summary (cont.)

Indicate
Yes, No, N/A

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

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

11. Extraction Holding Time Met Y

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

12. Analysis Holding Time Met Y

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

Additional Comments:

Laboratory Manager: DB Date: 1-20-94

Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: DPW-ENV				Project No: 96-1262		Analysis Parameters						Comments:	
Phone #:				Location: B. 283C								* = SAMPLES KEPT BELOW 4°C.	
() DERA (X) OMA () Other:													
Samplers Name / Company: GARY DiMARTINIS - TVS				Sample #									
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	UOA+10	TPHC	66 SOLIDS	LEAD	MUNSELL	VOA ID #	OVA	Remarks / Preservation Method
3032 01	283C-A	10-3-97	1501	SOIL	2	X	X	X	X	X	971003.01	ND	Piping Run @ 1.0' *
02	B		1509								.02	ND	
03	C		1520								.03	ND	
04	D		1531								.04	ND	
05	DUP		—								.05	—	FIELD DUPLICATE
06	TB		—	METHANOL	1	X					.06	—	TRIP BLANK
07	X	10-3-97	1355	UNK.	1				X			—	UNKNOWN SOLID
						- POSSIBLY LEAD RESIDUE FROM INSIDE GAS PIPING.							
NOTE: OVA (#A52114) CALIBRATED w/ 95 ppm CH ₄ & ZERO (0) AIR @ 1445 HRS. on 10-3-97						by G. DiMARTINIS.							
Relinquished by (signature):				Date/Time:		Received by (signature):				Date/Time:		Received by (signature):	
				10-6-97 1053									
Relinquished by (signature):				Date/Time:		Received by (signature):				Date/Time:		Received by (signature):	
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:							
Turnaround time: (X) Standard 4 wks, () Rush Days, () ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.							

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

Definition of Qualifiers

MDL : Method Detection Limit

J : Compound identified below detection limit

B : Compound in both sample and blank

D : Results from dilution of sample

U : Compound searched for but not detected

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02161.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 0 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
71-43-2	Benzene	250	U	
108-88-3	Toluene	250	U	
100-41-4	Ethylbenzene	500	U	
1330-20-7	m+p-Xylenes	750	U	
1330-20-7	o-Xylene	500	U	
107028	Acrolein	1800	U	
107131	Acrylonitrile	1800	U	
75650	tert-Butyl alcohol	3200	U	
1634044	Methyl-tert-Butyl ether	750	U	
108203	Di-isopropyl ether	500	U	
	Dichlorodifluoromethane	1000	U	
74-87-3	Chloromethane	250	U	
75-01-4	Vinyl Chloride	750	U	
74-83-9	Bromomethane	500	U	
75-00-3	Chloroethane	750	U	
75-69-4	Trichlorofluoromethane	500	U	
75-35-4	1,1-Dichloroethene	250	U	
67-64-1	Acetone	500	U	
75-15-0	Carbon Disulfide	250	U	
75-09-2	Methylene Chloride	500	U	
156-60-5	trans-1,2-Dichloroethene	500	U	
75-35-3	1,1-Dichloroethane	250	U	
108-05-4	Vinyl Acetate	750	U	
78-93-3	2-Butanone	750	U	
	cis-1,2-Dichloroethene	250	U	
67-66-3	Chloroform	250	U	
75-55-6	1,1,1-Trichloroethane	250	U	
56-23-5	Carbon Tetrachloride	500	U	
107-06-2	1,2-Dichloroethane	500	U	
79-01-6	Trichloroethene	250	U	
78-87-5	1,2-Dichloropropane	250	U	
75-27-4	Bromodichloromethane	250	U	
110-75-8	2-Chloroethyl vinyl ether	500	U	
10061-01-5	cis-1,3-Dichloropropene	250	U	
108-10-1	4-Methyl-2-Pentanone	500	U	
10061-02-6	trans-1,3-Dichloropropene	500	U	
79-00-5	1,1,2-Trichloroethane	500	U	
127-18-4	Tetrachloroethene	250	U	
591-78-6	2-Hexanone	500	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02161.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 0 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

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

126-48-1	Dibromochloromethane	500	U
108-90-7	Chlorobenzene	250	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.01

Sample wt/vol: 8.9 (g/ml) G Lab File ID: V02163.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 17.01 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
71-43-2	Benzene	340	U	
108-88-3	Toluene	340	U	
100-41-4	Ethylbenzene	680	U	
1330-20-7	m+p-Xylenes	1000	U	
1330-20-7	o-Xylene	680	U	
107028	Acrolein	2400	U	
107131	Acrylonitrile	2400	U	
75650	tert-Butyl alcohol	4400	U	
1634044	Methyl-tert-Butyl ether	1000	U	
108203	Di-isopropyl ether	680	U	
	Dichlorodifluoromethane	1400	U	
74-87-3	Chloromethane	340	U	
75-01-4	Vinyl Chloride	1000	U	
74-83-9	Bromomethane	680	U	
75-00-3	Chloroethane	1000	U	
75-69-4	Trichlorofluoromethane	680	U	
75-35-4	1,1-Dichloroethene	340	U	
67-64-1	Acetone	680	U	
75-15-0	Carbon Disulfide	340	U	
75-09-2	Methylene Chloride	680	U	
156-60-5	trans-1,2-Dichloroethene	680	U	
75-35-3	1,1-Dichloroethane	340	U	
108-05-4	Vinyl Acetate	1000	U	
78-93-3	2-Butanone	1000	U	
	cis-1,2-Dichloroethene	340	U	
67-66-3	Chloroform	340	U	
75-55-6	1,1,1-Trichloroethane	340	U	
56-23-5	Carbon Tetrachloride	680	U	
107-06-2	1,2-Dichloroethane	680	U	
79-01-6	Trichloroethene	340	U	
78-87-5	1,2-Dichloropropane	340	U	
75-27-4	Bromodichloromethane	340	U	
110-75-8	2-Chloroethyl vinyl ether	680	U	
10061-01-5	cis-1,3-Dichloropropene	340	U	
108-10-1	4-Methyl-2-Pentanone	680	U	
10061-02-6	trans-1,3-Dichloropropene	680	U	
79-00-5	1,1,2-Trichloroethane	680	U	
127-18-4	Tetrachloroethene	340	U	
591-78-6	2-Hexanone	680	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.01

Sample wt/vol: 8.9 (g/ml) G Lab File ID: V02163.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 17.01 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

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

126-48-1	Dibromochloromethane	680	U
108-90-7	Chlorobenzene	340	U
100-42-5	Styrene	680	U
75-25-2	Bromoform	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.02

Sample wt/vol: 9.9 (g/ml) G Lab File ID: V02164.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 15.15 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
71-43-2	Benzene	300	U	U
108-88-3	Toluene	300	U	U
100-41-4	Ethylbenzene	600	U	U
1330-20-7	m+p-Xylenes	900	U	U
1330-20-7	o-Xylene	600	U	U
107028	Acrolein	2100	U	U
107131	Acrylonitrile	2100	U	U
75650	tert-Butyl alcohol	3900	U	U
1634044	Methyl-tert-Butyl ether	900	U	U
108203	Di-isopropyl ether	600	U	U
	Dichlorodifluoromethane	1200	U	U
74-87-3	Chloromethane	300	U	U
75-01-4	Vinyl Chloride	900	U	U
74-83-9	Bromomethane	600	U	U
75-00-3	Chloroethane	900	U	U
75-69-4	Trichlorofluoromethane	600	U	U
75-35-4	1,1-Dichloroethene	300	U	U
67-64-1	Acetone	600	U	U
75-15-0	Carbon Disulfide	300	U	U
75-09-2	Methylene Chloride	600	U	U
156-60-5	trans-1,2-Dichloroethene	600	U	U
75-35-3	1,1-Dichloroethane	300	U	U
108-05-4	Vinyl Acetate	900	U	U
78-93-3	2-Butanone	900	U	U
	cis-1,2-Dichloroethene	300	U	U
67-66-3	Chloroform	300	U	U
75-55-6	1,1,1-Trichloroethane	300	U	U
56-23-5	Carbon Tetrachloride	600	U	U
107-06-2	1,2-Dichloroethane	600	U	U
79-01-6	Trichloroethene	300	U	U
78-87-5	1,2-Dichloropropane	300	U	U
75-27-4	Bromodichloromethane	300	U	U
110-75-8	2-Chloroethyl vinyl ether	600	U	U
10061-01-5	cis-1,3-Dichloropropene	300	U	U
108-10-1	4-Methyl-2-Pentanone	600	U	U
10061-02-6	trans-1,3-Dichloropropene	600	U	U
79-00-5	1,1,2-Trichloroethane	600	U	U
127-18-4	Tetrachloroethene	300	U	U
591-78-6	2-Hexanone	600	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.02

Sample wt/vol: 9.9 (g/ml) G Lab File ID: V02164.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 15.15 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
126-48-1	Dibromochloromethane	600	U	U
108-90-7	Chlorobenzene	300	U	U
100-42-5	Styrene	600	U	U
75-25-2	Bromoform	600	U	U
79-34-5	1,1,2,2-Tetrachloroethane	600	U	U
541-73-1	1,3-Dichlorobenzene	900	U	U
106-46-7	1,4-Dichlorobenzene	900	U	U
95-50-1	1,2-Dichlorobenzene	900	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.03

Sample wt/vol: 9.1 (g/ml) G Lab File ID: V02165.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 15.34 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
71-43-2	Benzene	320	U	U
108-88-3	Toluene	320	U	U
100-41-4	Ethylbenzene	650	U	U
1330-20-7	m+p-Xylenes	970	U	U
1330-20-7	o-Xylene	650	U	U
107028	Acrolein	2300	U	U
107131	Acrylonitrile	2300	U	U
75650	tert-Butyl alcohol	4200	U	U
1634044	Methyl-tert-Butyl ether	970	U	U
108203	Di-isopropyl ether	650	U	U
	Dichlorodifluoromethane	1300	U	U
74-87-3	Chloromethane	320	U	U
75-01-4	Vinyl Chloride	970	U	U
74-83-9	Bromomethane	650	U	U
75-00-3	Chloroethane	970	U	U
75-69-4	Trichlorofluoromethane	650	U	U
75-35-4	1,1-Dichloroethene	320	U	U
67-64-1	Acetone	650	U	U
75-15-0	Carbon Disulfide	320	U	U
75-09-2	Methylene Chloride	650	U	U
156-60-5	trans-1,2-Dichloroethene	650	U	U
75-35-3	1,1-Dichloroethane	320	U	U
108-05-4	Vinyl Acetate	970	U	U
78-93-3	2-Butanone	970	U	U
	cis-1,2-Dichloroethene	320	U	U
67-66-3	Chloroform	320	U	U
75-55-6	1,1,1-Trichloroethane	320	U	U
56-23-5	Carbon Tetrachloride	650	U	U
107-06-2	1,2-Dichloroethane	650	U	U
79-01-6	Trichloroethene	320	U	U
78-87-5	1,2-Dichloropropane	320	U	U
75-27-4	Bromodichloromethane	320	U	U
110-75-8	2-Chloroethyl vinyl ether	650	U	U
10061-01-5	cis-1,3-Dichloropropene	320	U	U
108-10-1	4-Methyl-2-Pentanone	650	U	U
10061-02-6	trans-1,3-Dichloropropene	650	U	U
79-00-5	1,1,2-Trichloroethane	650	U	U
127-18-4	Tetrachloroethene	320	U	U
591-78-6	2-Hexanone	650	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.03

Sample wt/vol: 9.1 (g/ml) G Lab File ID: V02165.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 15.34 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
126-48-1	Dibromochloromethane	650	U	
108-90-7	Chlorobenzene	320	U	
100-42-5	Styrene	650	U	
75-25-2	Bromoform	650	U	
79-34-5	1,1,2,2-Tetrachloroethane	650	U	
541-73-1	1,3-Dichlorobenzene	970	U	
106-46-7	1,4-Dichlorobenzene	970	U	
95-50-1	1,2-Dichlorobenzene	970	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 3032.04

Sample wt/vol: 8.9 (g/ml) G Lab File ID: V02166.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 13.74 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

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

71-43-2	Benzene	330	U
108-88-3	Toluene	330	U
100-41-4	Ethylbenzene	650	U
1330-20-7	m+p-Xylenes	980	U
1330-20-7	o-Xylene	650	U
107028	Acrolein	2300	U
107131	Acrylonitrile	2300	U
75650	tert-Butyl alcohol	4200	U
1634044	Methyl-tert-Butyl ether	980	U
108203	Di-isopropyl ether	650	U
	Dichlorodifluoromethane	1300	U
74-87-3	Chloromethane	330	U
75-01-4	Vinyl Chloride	980	U
74-83-9	Bromomethane	650	U
75-00-3	Chloroethane	980	U
75-69-4	Trichlorofluoromethane	650	U
75-35-4	1,1-Dichloroethene	330	U
67-64-1	Acetone	650	U
75-15-0	Carbon Disulfide	330	U
75-09-2	Methylene Chloride	650	U
156-60-5	trans-1,2-Dichloroethene	650	U
75-35-3	1,1-Dichloroethane	330	U
108-05-4	Vinyl Acetate	980	U
78-93-3	2-Butanone	980	U
	cis-1,2-Dichloroethene	330	U
67-66-3	Chloroform	330	U
75-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	650	U
107-06-2	1,2-Dichloroethane	650	U
79-01-6	Trichloroethene	330	U
78-87-5	1,2-Dichloropropane	330	U
75-27-4	Bromodichloromethane	330	U
110-75-8	2-Chloroethyl vinyl ether	650	U
10061-01-5	cis-1,3-Dichloropropene	330	U
108-10-1	4-Methyl-2-Pentanone	650	U
10061-02-6	trans-1,3-Dichloropropene	650	U
79-00-5	1,1,2-Trichloroethane	650	U
127-18-4	Tetrachloroethene	330	U
591-78-6	2-Hexanone	650	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.04

Sample wt/vol: 8.9 (g/ml) G Lab File ID: V02166.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 13.74 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
126-48-1	Dibromochloromethane	650	U	
108-90-7	Chlorobenzene	330	U	
100-42-5	Styrene	650	U	
75-25-2	Bromoform	650	U	
79-34-5	1,1,2,2-Tetrachloroethane	650	U	
541-73-1	1,3-Dichlorobenzene	980	U	
106-46-7	1,4-Dichlorobenzene	980	U	
95-50-1	1,2-Dichlorobenzene	980	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.05

Sample wt/vol: 8.6 (g/ml) G Lab File ID: V02167.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 17.5 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
71-43-2	Benzene	350	U	
108-88-3	Toluene	350	U	
100-41-4	Ethylbenzene	710	U	
1330-20-7	m+p-Xylenes	1100	U	
1330-20-7	o-Xylene	710	U	
107028	Acrolein	2500	U	
107131	Acrylonitrile	2500	U	
75650	tert-Butyl alcohol	4600	U	
1634044	Methyl-tert-Butyl ether	1100	U	
108203	Di-isopropyl ether	710	U	
	Dichlorodifluoromethane	1400	U	
74-87-3	Chloromethane	350	U	
75-01-4	Vinyl Chloride	1100	U	
74-83-9	Bromomethane	710	U	
75-00-3	Chloroethane	1100	U	
75-69-4	Trichlorofluoromethane	710	U	
75-35-4	1,1-Dichloroethene	350	U	
67-64-1	Acetone	710	U	
75-15-0	Carbon Disulfide	350	U	
75-09-2	Methylene Chloride	710	U	
156-60-5	trans-1,2-Dichloroethene	710	U	
75-35-3	1,1-Dichloroethane	350	U	
108-05-4	Vinyl Acetate	1100	U	
78-93-3	2-Butanone	1100	U	
	cis-1,2-Dichloroethene	350	U	
67-66-3	Chloroform	350	U	
75-55-6	1,1,1-Trichloroethane	350	U	
56-23-5	Carbon Tetrachloride	710	U	
107-06-2	1,2-Dichloroethane	710	U	
79-01-6	Trichloroethene	350	U	
78-87-5	1,2-Dichloropropane	350	U	
75-27-4	Bromodichloromethane	350	U	
110-75-8	2-Chloroethyl vinyl ether	710	U	
10061-01-5	cis-1,3-Dichloropropene	350	U	
108-10-1	4-Methyl-2-Pentanone	710	U	
10061-02-6	trans-1,3-Dichloropropene	710	U	
79-00-5	1,1,2-Trichloroethane	710	U	
127-18-4	Tetrachloroethene	350	U	
591-78-6	2-Hexanone	710	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283-DUP

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.05

Sample wt/vol: 8.6 (g/ml) G Lab File ID: V02167.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 17.5 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
126-48-1	Dibromochloromethane	710	U	U
108-90-7	Chlorobenzene	350	U	U
100-42-5	Styrene	710	U	U
75-25-2	Bromoform	710	U	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U	U
541-73-1	1,3-Dichlorobenzene	1100	U	U
106-46-7	1,4-Dichlorobenzene	1100	U	U
95-50-1	1,2-Dichlorobenzene	1100	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.06

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02162.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 0 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
71-43-2	Benzene	250	U	U
108-88-3	Toluene	250	U	U
100-41-4	Ethylbenzene	500	U	U
1330-20-7	m+p-Xylenes	750	U	U
1330-20-7	o-Xylene	500	U	U
107028	Acrolein	1800	U	U
107131	Acrylonitrile	1800	U	U
75650	tert-Butyl alcohol	3200	U	U
1634044	Methyl-tert-Butyl ether	750	U	U
108203	Di-isopropyl ether	500	U	U
	Dichlorodifluoromethane	1000	U	U
74-87-3	Chloromethane	250	U	U
75-01-4	Vinyl Chloride	750	U	U
74-83-9	Bromomethane	500	U	U
75-00-3	Chloroethane	750	U	U
75-69-4	Trichlorofluoromethane	500	U	U
75-35-4	1,1-Dichloroethene	250	U	U
67-64-1	Acetone	500	U	U
75-15-0	Carbon Disulfide	250	U	U
75-09-2	Methylene Chloride	500	U	U
156-60-5	trans-1,2-Dichloroethene	500	U	U
75-35-3	1,1-Dichloroethane	250	U	U
108-05-4	Vinyl Acetate	750	U	U
78-93-3	2-Butanone	750	U	U
	cis-1,2-Dichloroethene	250	U	U
67-66-3	Chloroform	250	U	U
75-55-6	1,1,1-Trichloroethane	250	U	U
56-23-5	Carbon Tetrachloride	500	U	U
107-06-2	1,2-Dichloroethane	500	U	U
79-01-6	Trichloroethene	250	U	U
78-87-5	1,2-Dichloropropane	250	U	U
75-27-4	Bromodichloromethane	250	U	U
110-75-8	2-Chloroethyl vinyl ether	500	U	U
10061-01-5	cis-1,3-Dichloropropene	250	U	U
108-10-1	4-Methyl-2-Pentanone	500	U	U
10061-02-6	trans-1,3-Dichloropropene	500	U	U
79-00-5	1,1,2-Trichloroethane	500	U	U
127-18-4	Tetrachloroethene	250	U	U
591-78-6	2-Hexanone	500	U	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461

Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3032.06

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02162.D

Level: (low/med) MED Date Received: 10/06/97

% Moisture: not dec. 0 Date Analyzed: 10/07/97

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
126-48-1	Dibromochloromethane	500	U	
108-90-7	Chlorobenzene	250	U	
100-42-5	Styrene	500	U	
75-25-2	Bromoform	500	U	
79-34-5	1,1,2,2-Tetrachloroethane	500	U	
541-73-1	1,3-Dichlorobenzene	750	U	
106-46-7	1,4-Dichlorobenzene	750	U	
95-50-1	1,2-Dichlorobenzene	750	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

Daily Blank

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: Daily Blank
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02161.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 0 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-A

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3032.01
Sample wt/vol: 8.9 (g/ml) G Lab File ID: V02163.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 17.01 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-B

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3032.02
Sample wt/vol: 9.9 (g/ml) G Lab File ID: V02164.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 15.15 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-C

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3032.03
Sample wt/vol: 9.1 (g/ml) G Lab File ID: V02165.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 15.34 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-D

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3032.04
Sample wt/vol: 8.9 (g/ml) G Lab File ID: V02166.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 13.74 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283-DUP

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 3032.05
Sample wt/vol: 8.6 (g/ml) G Lab File ID: V02167.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 17.5 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283C-TB

Lab Name: FMETL NJDEP # 13461
Project: 961262 Case No.: 3032 Location: B.283C SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 3032.06
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V02162.D
Level: (low/med) MED Date Received: 10/06/97
% Moisture: not dec. 0 Date Analyzed: 10/07/97
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

Laboratory Manager of Environmental Consultant's Signature

Date 12/18/95

Laboratory Certification # 13461

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

Fort Monmouth Environmental Testing Laboratory

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

NJDEP Certification #13461

Chain of Custody Record

Customer: DPW-ENV				Project No: 96-1262		Analysis Parameters						Comments: * = SAMPLES KEPT BELOW 4°C.	
Phone #:				Location: B. 283C									
() DERA (X) OMA () Other:				Samplers Name / Company: GARY D. MARTINIS - TUS		Sample #							Remarks / Preservation Method
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles	VOA+10	TPHC	% SOLIDS	LEAD	MUNISIL	VOA ID #	VOA	
303201	283C-A	10-3-97	1501	SOIL	2	X	X	X	X	X	971003.01	ND	Piping Run @ 1.0' *
02	B		1509								.02	ND	
03	C		1520								.03	ND	
04	D		1531								.04	ND	
05	DUP		—								.05	—	FIELD DUPLICATE
06	TB		—	METHANOL	1	X					.06	—	TRIP BLANK
07	X	10-3-97	1555	UNK.	1				X			—	UNKNOWN SOLID
						— Possibly LEAD RESIDUE FROM INSIDE GAS PIPING.							
NOTE: OVA (#AS2114) CALIBRATED w/95 ppm CH ₄ + ZERO(0) AIR @ 1445 HRS. on 10-3-97 by G. DIMARTINIS.													
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):			
		10-6-97 1053		ZCA. DR									
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:		Received by (signature):			
Report Type: () Full, (X) Reduced, () Standard, () Screen / non-certified						Remarks:							
Turnaround time: (X) Standard 4 wks, () Rush Days, () ASAP Verbal Hrs.						DEDICATED SAMPLING TOOLS USED.							

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

Client: U.S. Army
.05,07

Lab ID #:3032.01-

DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Sample Received: 10/03/97
Analysis Start: 10/09/97
Analysis Completed: 10/10/97

Site: Ft. Monmouth
Bldg. 283C

Matrix: Soils

Method of Analysis: Std. Methods 18th, Method 3111B
Method of Digestion: E.P.A. SW-846, Method 3051

TEST PARAMETER: Lead

Laboratory I.D. #	Sample Location	RESULT (mg/Kg)	MDL (mg/Kg)
3032.01	283C-A	6.66	1.33
3032.02	283C-B	ND	1.33
3032.03	283C-C	12.66	1.41
3032.04	283C-D	1.99	1.33
3032.05	283C-DUP	4.50	1.29
3032.07	283C-X	4997.44	1.03

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



Daniel K. Wright
Laboratory Director

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260 Soil / 624 Aq
Bldg. 283

Project # 3693
Date Rec. 07/01/98
Date Compl. 07/14/98
Released by:

 8/4/98
Daniel K. Wright / Date
Laboratory Director

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

VBK83

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3693 Location: Bldg28 SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: VBK83

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V04266.D

Level: (low/med) MED Date Received: 07/01/98

% Moisture: not dec. 0 Date Analyzed: 07/09/98

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

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

CONCENTRATION UNITS:

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

VBK83

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3693 Location: Bldg28 SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: VBK83

Sample wt/vol: 10.0 (g/ml) G Lab File ID: V04266.D

Level: (low/med) MED Date Received: 07/01/98

% Moisture: not dec. 0 Date Analyzed: 07/09/98

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	750	U
1330-20-7	o-Xylene	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

VBK83

Lab Name: FMETL NJDEP # 13461
Project: _____ Case No.: 3693 Location: Bldg28 SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: VBK83
Sample wt/vol: 10.0 (g/ml) G Lab File ID: V04266.D
Level: (low/med) MED Date Received: 07/01/98
% Moisture: not dec. 0 Date Analyzed: 07/09/98
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283-B-1

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3693 Location: Bldg28 SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3693.04

Sample wt/vol: 9.9 (g/ml) G Lab File ID: V04272.D

Level: (low/med) MED Date Received: 07/01/98

% Moisture: not dec. 25.27 Date Analyzed: 07/09/98

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	2400	U	
107131	Acrylonitrile	2400	U	
75650	tert-Butyl alcohol	4400	U	
1634044	Methyl-tert-Butyl ether	1000	U	
108203	Di-isopropyl ether	670	U	
	Dichlorodifluoromethane	1300	U	
74-87-3	Chloromethane	340	U	
75-01-4	Vinyl Chloride	1000	U	
74-83-9	Bromomethane	670	U	
75-00-3	Chloroethane	1000	U	
75-69-4	Trichlorofluoromethane	670	U	
75-35-4	1,1-Dichloroethene	340	U	
67-64-1	Acetone	670	U	
75-15-0	Carbon Disulfide	340	U	
75-09-2	Methylene Chloride	670	U	
156-60-5	trans-1,2-Dichloroethene	670	U	
75-35-3	1,1-Dichloroethane	340	U	
108-05-4	Vinyl Acetate	1000	U	
78-93-3	2-Butanone	1000	U	
	cis-1,2-Dichloroethene	340	U	
67-66-3	Chloroform	340	U	
75-55-6	1,1,1-Trichloroethane	340	U	
56-23-5	Carbon Tetrachloride	670	U	
71-43-2	Benzene	380		
107-06-2	1,2-Dichloroethane	670	U	
79-01-6	Trichloroethene	340	U	
78-87-5	1,2-Dichloropropane	340	U	
75-27-4	Bromodichloromethane	340	U	
110-75-8	2-Chloroethyl vinyl ether	670	U	
10061-01-5	cis-1,3-Dichloropropene	340	U	
108-10-1	4-Methyl-2-Pentanone	670	U	
108-88-3	Toluene	2700		
10061-02-6	trans-1,3-Dichloropropene	670	U	
79-00-5	1,1,2-Trichloroethane	670	U	
127-18-4	Tetrachloroethene	340	U	
591-78-6	2-Hexanone	670	U	
126-48-1	Dibromochloromethane	670	U	
108-90-7	Chlorobenzene	340	U	
100-41-4	Ethylbenzene	7700		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID.

283-B-1

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3693 Location: Bldg28 SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3693.04

Sample wt/vol: 9.9 (g/ml) G Lab File ID: V04272.D

Level: (low/med) MED Date Received: 07/01/98

% Moisture: not dec. 25.27 Date Analyzed: 07/09/98

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

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

CONCENTRATION UNITS:

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

1330-20-7	m+p-Xylenes	28000	
1330-20-7	o-Xylene	11000	
100-42-5	Styrene	670	U
75-25-2	Bromoform	670	U
79-34-5	1,1,2,2-Tetrachloroethane	670	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

283-B-1

Lab Name: FMETL NJDEP # 13461

Project: _____ Case No.: 3693 Location: Bldg28 SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 3693.04

Sample wt/vol: 9.9 (g/ml) G Lab File ID: V04272.D

Level: (low/med) MED Date Received: 07/01/98

% Moisture: not dec. 25.27 Date Analyzed: 07/09/98

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

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

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	12.47	33000	JN
2.	unknown hydrocarbon	13.48	17000	J
3. 000110-54-3	Hexane	14.46	25000	JN
4. 000096-37-7	Cyclopentane, methyl-	17.03	21000	JN
5. 000591-76-4	Hexane, 2-methyl-	18.28	16000	JN
6. 000589-34-4	Hexane, 3-methyl-	18.84	17000	JN
7. 000110-82-7	Cyclohexane	19.26	14000	JN
8. 000108-87-2	Cyclohexane, methyl-	22.20	61000	JN
9. 000565-75-3	Pentane, 2,3,4-trimethyl-	22.76	12000	JN
10.	unknown hydrocarbon	23.15	43000	J
11.	unknown hydrocarbon	23.59	19000	J
12. 000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	24.55	30000	JN
13. 000111-65-9	Octane	24.71	41000	JN
14. 000111-84-2	Nonane	28.54	19000	JN
15. 000124-18-5	Decane	31.88	15000	JN

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 #: 3693.02-.05
Sample Received: 07/01/98
Analysis Start: 07/07/98
Analysis Completed: 07/08/98

Site: Ft. Monmouth
Building 283

Matrix: Aqueous/Soil

Method of Analysis: E.P.A SW-846, Method 7420, 7421
Method of Digestion: E.P.A SW-846, Method 3051

TEST PARAMETER: LEAD

Laboratory I.D.#	Sample Location	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
3693.02	Field Blank – S.T.	ND	10	0.5
3693.03	Field Blank – G.W.	ND	10	0.5
3693.05	B-1-G.W.-8'	9.8	10	0.5

Laboratory I.D.#	Sample Location	Result (mg/Kg)	Soil Cleanup Criteria (mg/Kg)	MDL (mg/Kg)
3693.04	B-1-90"	ND	400	2.83

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

Report of Analysis

	Lab	2-Methyl naphtha lene	Nitro benzene	Aluminum	Arsenic	Iron	Lead	Thallium	Manganese	Mercury	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l	-
NJDEP Criteria:	-	NLE	10	200	8	300	10	10	50	2	-
09/20/1999	FMETL	25.25	ND	309	4.74	2330	22.0	8.76	14.5	ND	7.20
12/27/1999	FMETL	26.28	ND	123	ND	2060	6.92	ND	44.0	0.3	6.81
03/23/2000	FMETL	7.43	ND	241	ND	2010	15.3	ND	11.9	0.2	6.38
06/28/2000	FMETL	25.10	ND	81.4	ND	2130	11.5	ND	8.31	ND	7.83
08/10/2000	FMETL	25.13	1.17	812	3.40	2060	31.9	ND	5.97	ND	6.28

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

NOTES:

Page 2 of 3.

FORT MONMOUTH

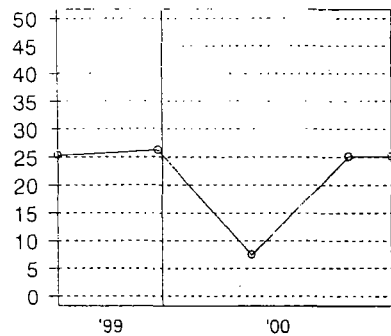
GW MONITORING
BLDG. 283

Well 1 of 3

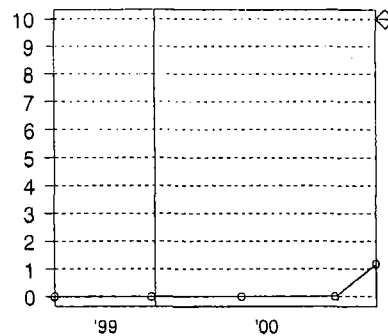


U.S. ARMY
FORT MONMOUTH
SELF-M-PW-EV

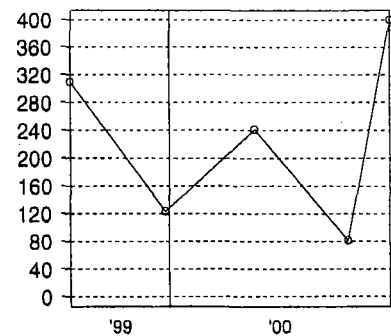
2-Methylnaphthalene
(ug/L)



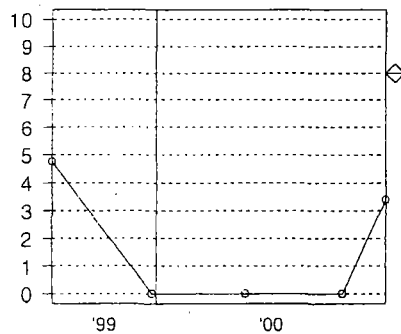
Nitrobenzene
(ug/L)



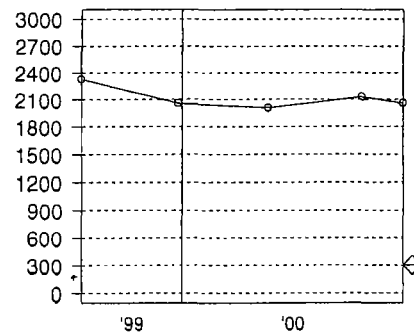
Aluminum
(ug/L)



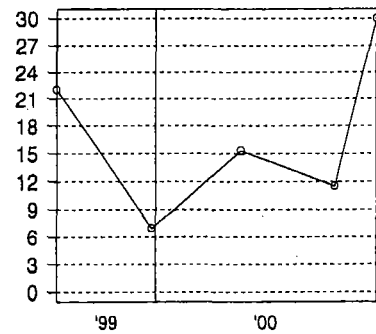
Arsenic
(ug/L)



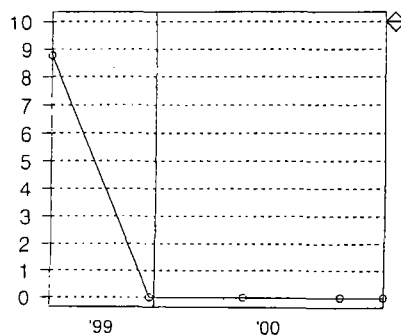
Iron
(ug/L)



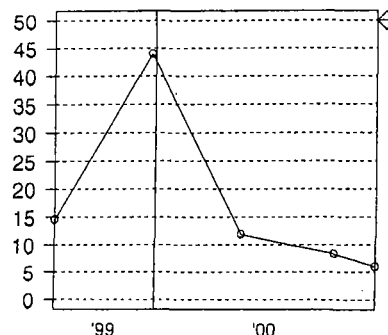
Lead
(ug/L)



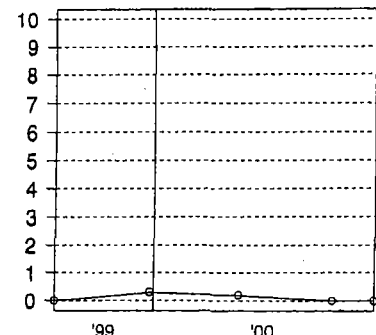
Thallium
(ug/L)



Manganese
(ug/l)



Mercury
(ug/l)



SOURCE: 0283MW02

Sampling Dates:

09/20/1999 - 08/10/2000

LEGEND:

PARAMETER

○ = Date
Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph



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

	Lab	Nickel	Selenium	Depth to Water							Notes
Units:		ug/l	ug/l	Feet							-
NJDEP Criteria:		100	50	NLE							-
09/20/1999	FMETL	4.11	6.49	7.20							7.20
12/27/1999	FMETL	3.62	4.73	6.81							6.81
03/23/2000	FMETL	6.43	7.29	6.38							6.38
06/28/2000	FMETL	6.01	4.36	7.83							7.83
08/10/2000	FMETL	ND	8.40	6.28							6.28

SOURCE: 0283MW02

Sampling Dates:

09/20/1999 - 08/10/2000

NOTES:

Page 3 of 3.

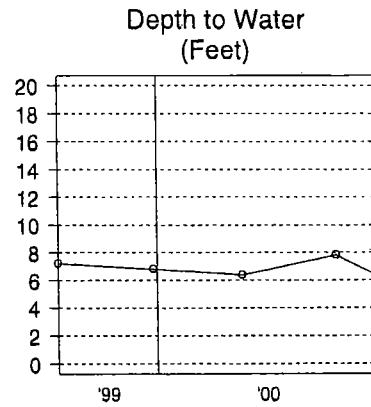
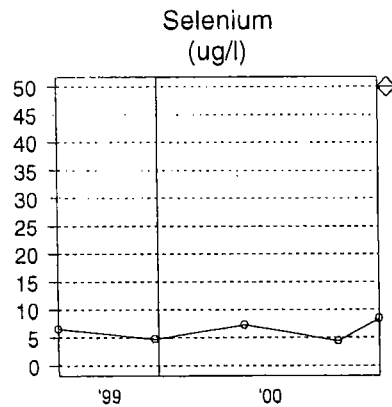
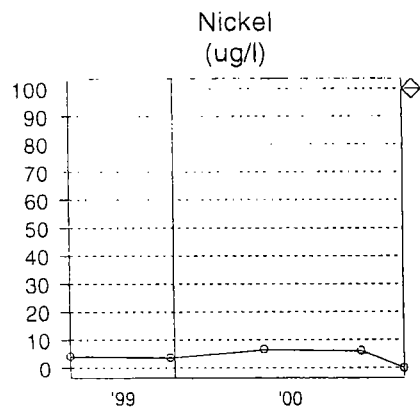
FORT MONMOUTH

**GW MONITORING
BLDG. 283**

Well 1 of 3



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



SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

LEGEND:

PARAMETER

o = Date
Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3, Graph



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

	Lab	Benzene	Aluminum	Arsenic	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	1	200	8	50	100	NLE				-
06/28/2000	FMETL	9.25	3920	ND	36.9	9.39	7.12				7.12
08/10/2000	FMETL	11.76	302	3.56	30.8	2.93	6.41				6.41

SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 08/10/2000

NOTES:

Page 1 of 1.

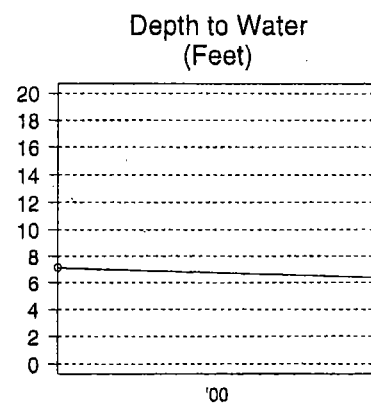
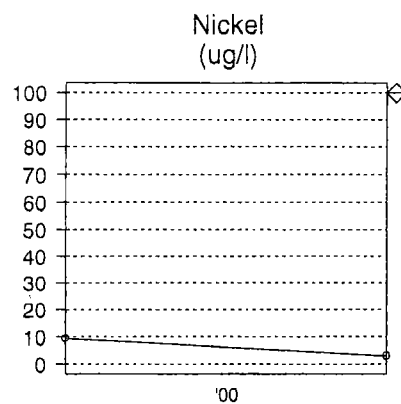
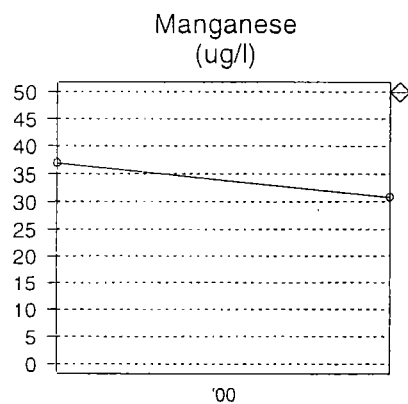
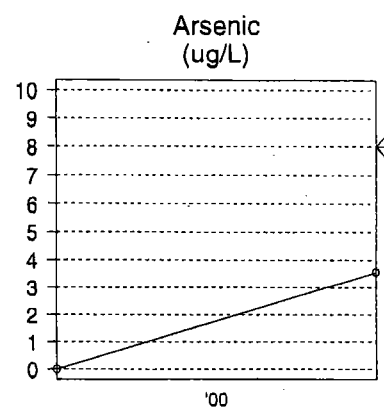
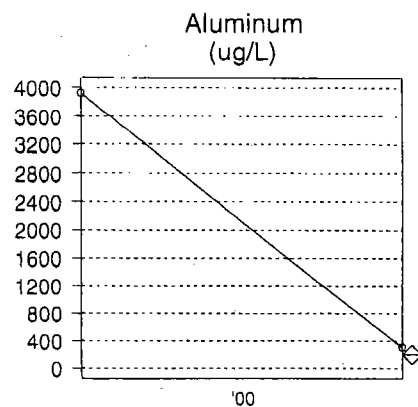
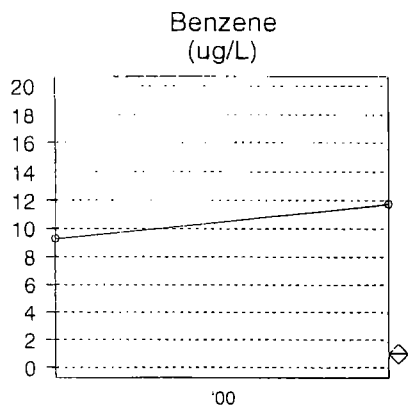
FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 3 of 3



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



SOURCE: 0283MW03

Sampling Dates:
06/28/2000 - 08/10/2000

LEGEND:

PARAMETER

o = Date
Sampled

◇ NJDEP Criteria

FORT MONMOUTH

**GW MONITORING
BLDG. 283**

Well 3 of 3, Graph



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

APPENDIX G
WELL PERMITS

APPENDIX F

GROUNDWATER ANALYTICAL DATA PACKAGE

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEPE # 13461

REPORT OF ANALYSIS

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

Project: Volatiles - EPA Method 8260 Soil / 624 Aq
Bldg. 283

Project # 3693
Date Rec. 07/01/98
Date Compl. 07/14/98
Released by:

 8/14/98
Daniel K. Wright / Date
Laboratory Director



Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

Chain of Custody Record

Customer: CHAS. APPLEBY		Project No:		Analysis Parameters								Comments:			
Phone #: 826223		Location: BLDG. 283										HNK #2 - CAL. w/- 100 ppm - ISOBUTYLENE			
() DERA () OMA () Other:															
Samplers Name / Company: MARK LAURA - T.V.S. - 07				Sample #									Remarks / Preservation Method		
Lab/Sample I.D.	Sample Location	Date	Time	Type	bottles	V O L U M E	M T B E	T B A	L E A D	% S O L I D					
3693	1 TRIP BLANK	7-1-98	—	AQ.	2	X									
	2 FIELD BLANK - S.T.	"	1022	"	3	X	X	X	X				TAKEN FROM SOIL - TUBE (HCL)		
	3 " " - G.W.	"	1027	"	3	X	X	X	X				TAKEN FROM 1" P.V.C. SCREEN (HCL)		
	4 283-B-1-90"	"	1210	SOIL	2	X			X	X			V00625 (2000 PPM)		
	5 283-B-1-G.W.-8'	"	1344	AQ	3	X	X	X	X				HCL - HNO3		
	6 TRIP BLANK	—	—	Methanol	1	X									
Relinquished by (signature): <i>Mark Laura</i>				Date/Time: 7-1-98 1400		Received by (signature): <i>J. Verschuik</i>				Relinquished by (signature):		Date/Time:		Received by (signature):	
Relinquished by (signature):				Date/Time:		Received by (signature):				Relinquished by (signature):		Date/Time:		Received by (signature):	
Report Type: () Full, () Reduced, () Standard, () Screen / non-certified						Remarks: LOT #32798-4 OZ - JAR									
Turnaround time: () Standard 4 wks, () Rush ___ Days, () ASAP Verbal ___ Hrs.															

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

Data File Name **V04293.D**
 Operator **Skelton**
 Date Acquired **14 Jul 1998 15:45**

Sample Name **3693.05**
 Field ID **283-B-1-GW-8'**
 Sample Multiplier **50**

CAS#	Compound Name	R.T.	Response	Result	GW Criteria	MDL	Qualifiers
107028	Acrolein			not detected	nle	312.50 ug/L	
107131	Acrylonitrile			not detected	nle	312.50 ug/L	
75650	tert-Butyl alcohol			not detected	nle	625.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	nle	125.00 ug/L	
108203	Di-isopropyl ether			not detected	nle	62.50 ug/L	
	Dichlorodifluoromethane			not detected	nle	181.50 ug/L	
74-87-3	Chloromethane			not detected	30	39.50 ug/L	
75-01-4	Vinyl Chloride			not detected	5	130.50 ug/L	
74-83-9	Bromomethane			not detected	10	72.50 ug/L	
75-00-3	Chloroethane			not detected	nle	110.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	65.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	37.00 ug/L	
67-64-1	Acetone			not detected	700	78.50 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	27.00 ug/L	
75-09-2	Methylene Chloride			not detected	2	83.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	25.00 ug/L	
75-35-3	1,1-Dichloroethane			not detected	70	41.50 ug/L	
108-05-4	Vinyl Acetate			not detected	nle	103.50 ug/L	
78-93-3	2-Butanone			not detected	300	103.00 ug/L	
	cis-1,2-Dichloroethene			not detected	10	32.50 ug/L	
67-66-3	Chloroform			not detected	6	21.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	40.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	60.00 ug/L	
71-43-2	Benzene	20.40	855421	2238.10 ug/L	1	25.50 ug/L	D
107-06-2	1,2-Dichloroethane			not detected	2	63.50 ug/L	
79-01-6	Trichloroethene			not detected	1	47.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	39.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	38.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	52.50 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	30.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	66.50 ug/L	
108-88-3	Toluene	25.33	463854	1084.57 ug/L	1000	36.50 ug/L	D
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	71.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	74.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	46.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	56.00 ug/L	
126-48-1	Dibromochloromethane			not detected	10	68.00 ug/L	
108-90-7	Chlorobenzene			not detected	4	33.00 ug/L	
100-41-4	Ethylbenzene	29.14	201126	396.85 ug/L	700	57.00 ug/L	D
1330-20-7	m+p-Xylenes	29.33	174741	936.96 ug/L	nle	126.50 ug/L	D
1330-20-7	o-Xylene	30.44	252345	654.05 ug/L	nle	96.00 ug/L	D
100-42-5	Styrene			not detected	100	78.50 ug/L	
75-25-2	Bromoform			not detected	4	84.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	85.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	125.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	74	154.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	137.50 ug/L	

Qualifiers

B = Compound found in related blank
 E = Value above linear range
 D = Value from dilution
 MDL = Method Detection Limit
 NLE = No Limit Established
 R.T. = Retention Time

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID

B-1-GW-8'

Lab Name: FMETL Project _____

NJDEP# 13461 Case No.: 3693 SDG No _____ Location Bldg283

Matrix: (soil/water) WATER Lab Sample ID: 3693.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB00918.D

Level: (low/med) LOW Date Received: 07/01/98

% Moisture: not dec. _____ Date Analyzed: 07/10/98

GC Column: HP5MS ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

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

Number TICs found: 15

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000096-37-7	Cyclopentane, methyl-	16.68	57	JN
2. 000110-82-7	Cyclohexane	18.90	53	JN
3. 000108-87-2	Cyclohexane, methyl-	21.86	93	JN
4.	unknown hydrocarbon	22.67	60	J
5.	unknown hydrocarbon	26.77	71	J
6.	unknown hydrocarbon	27.28	78	J
7.	unknown	29.01	720	J
8.	unknown hydrocarbon	30.26	130	J
9.	unknown hydrocarbon	30.72	56	J
10. 000620-14-4	Benzene, 1-ethyl-3-methyl-	32.22	210	JN
11. 000108-67-8	Benzene, 1,3,5-trimethyl-	32.38	82	JN
12. 000611-14-3	Benzene, 1-ethyl-2-methyl-	33.04	65	JN
13. 000095-63-6	Benzene, 1,2,4-trimethyl-	33.38	220	JN
14. 000526-73-8	Benzene, 1,2,3-trimethyl-	34.60	76	JN
15. 000496-11-7	Indane	35.44	66	JN

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 #: 3693.02-.05
Sample Received: 07/01/98
Analysis Start: 07/07/98
Analysis Completed: 07/08/98

Site: Ft. Monmouth
Building 283

Matrix: Aqueous/Soil

Method of Analysis: E.P.A SW-846, Method 7420, 7421
Method of Digestion: E.P.A SW-846, Method 3051

TEST PARAMETER: LEAD

Laboratory I.D.#	Sample Location	Result (ug/L)	GW Criteria (ug/L)	MDL (ug/L)
3693.02	Field Blank – S.T.	ND	10	0.5
3693.03	Field Blank – G.W.	ND	10	0.5
3693.05	B-1-G.W.-8'	9.8	10	0.5

Laboratory I.D.#	Sample Location	Result (mg/Kg)	Soil Cleanup Criteria (mg/Kg)	MDL (mg/Kg)
3693.04	B-1-90"	ND	400	2.83

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

Report of Analysis

MONITORING WELLS

	Lab	Aluminum	Iron	Lead	Manganese	Nickel	Depth to Water				Notes
Units:	-	ug/L	ug/L	ug/L	ug/l	ug/l	Feet				-
NJDEP Criteria:	-	200	300	10	50	100	NLE				-
06/28/2000	FMETL	2070	1450	ND	22.2	10.4	6.31				6.31
08/10/2000	FMETL	1930	739	2.38	23.8	5.91	5.54				5.54

SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 08/10/2000

NOTES:

Page 1 of 1.

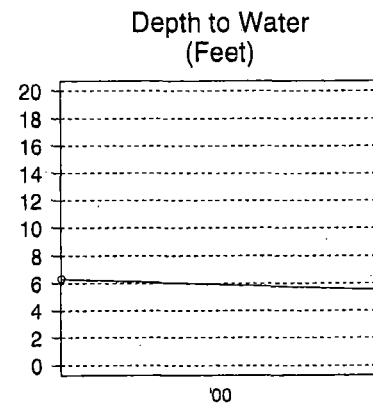
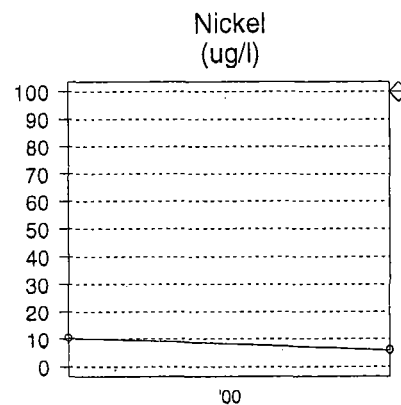
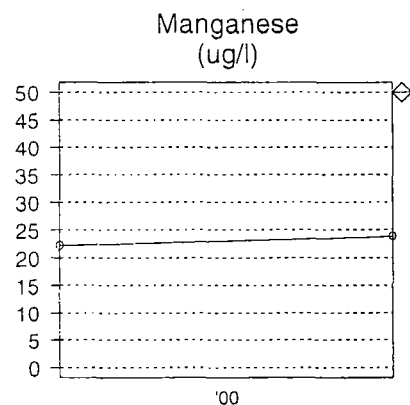
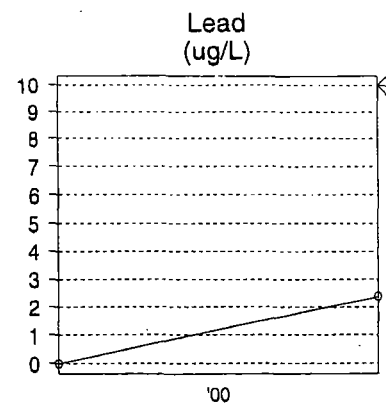
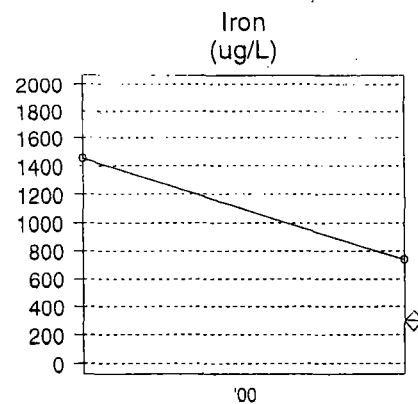
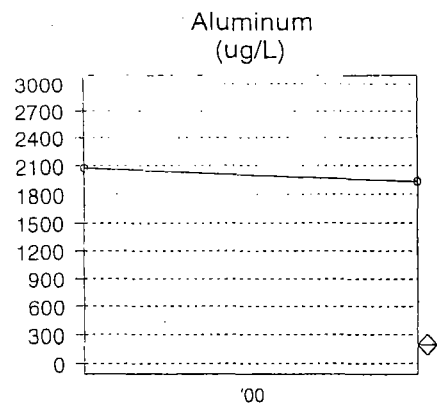
FORT MONMOUTH

**GW MONITORING
BLDG. 283**

Well 2 of 3



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



SOURCE: 0283MW01

Sampling Dates:
06/28/2000 - 08/10/2000

LEGEND:

PARAMETER

o = Date
Sampled

◇ NJDEP Criteria

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 2 of 3, Graph



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

	Lab	Acetone	Chloro methane	Benzene	Toluene	Ethyl benzene	Xylenes	Phenols	2,4-Di methyl phenol	Naphtha lene	Notes
Units:	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-
NJDEP Criteria:	-	700	30	1	1000	700	40	4000	100	NLE	-
09/20/1999	FMETL	ND	15.51	536.9	598.4	797.4	3831.4	ND	3.88	119.2	7.20
12/27/1999	FMETL	ND	ND	720.56	413.22	422.50	2125.86	ND	ND	183.38	6.81
03/23/2000	FMETL	ND	ND	827.72	511.78	725.71	4295.69	5.11	3.90	82.44	6.38
06/28/2000	FMETL	7.16	ND	908.16	663.58	1129.23	5960.70	ND	ND	174.92	7.83
08/10/2000	FMETL	15.55	ND	152.00	381.19	717.50	4009.44	ND	1.48	101.97	6.28

SOURCE: 0283MW02

Sampling Dates:
09/20/1999 - 08/10/2000

NOTES:

Page 1 of 3.

FORT MONMOUTH

GW MONITORING
BLDG. 283

Well 1 of 3



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

SOURCE: 0283MW02

Sampling Dates:

09/20/1999 - 08/10/2000

LEGEND:

PARAMETER

○ = Date
Sampled

◊ NJDEP Criteria

FORT MONMOUTH

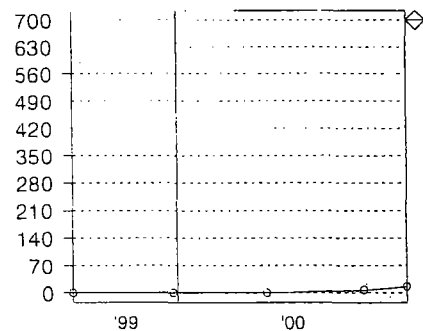
GW MONITORING
BLDG. 283

Well 1 of 3, Graph

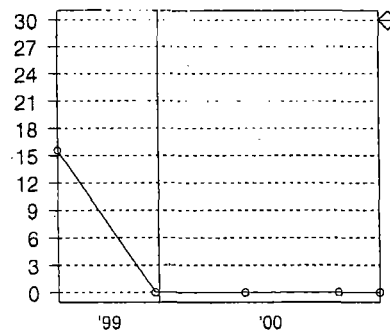


U.S. ARMY
FORT MONMOUTH
SELF-M-PW-EV

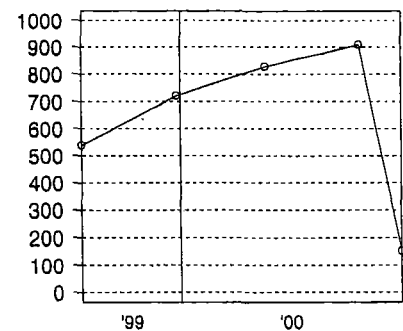
Acetone
(ug/L)



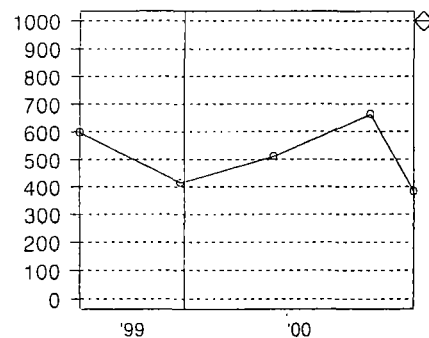
Chloromethane
(ug/L)



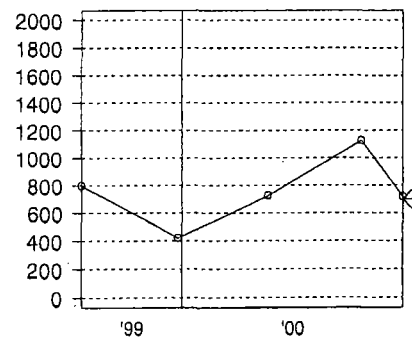
Benzene
(ug/L)



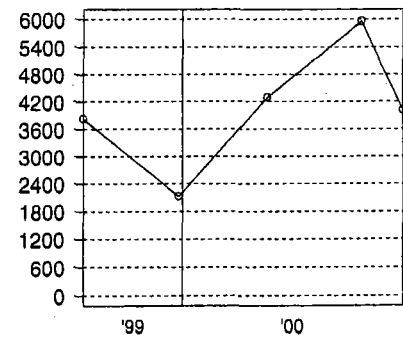
Toluene
(ug/L)



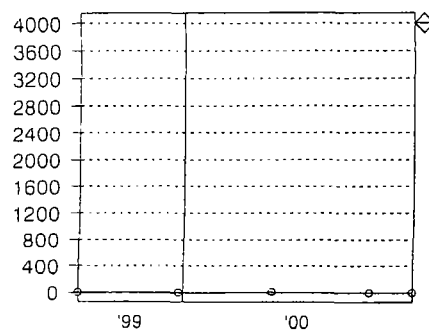
Ethylbenzene
(ug/L)



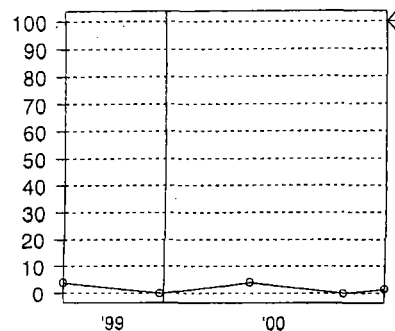
Xylenes
(ug/L)



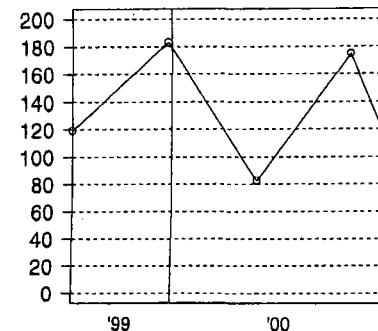
Phenols
(ug/L)



2,4-Dimethylphenol
(ug/L)



Naphthalene
(ug/L)



THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION
CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ
NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water
Allocation Section, 609-292-2957):

29-40367

This number must be permanently affixed to the
well casing.

Longitude (one tenth of a second):

West

74° 02' 43.2"

Latitude (one tenth of a second):

North

40° 18' 59.3"

Elevation of Top of Casing (cap off)

11.34

Distance from Top of Casing (cap off) to ground

0.21

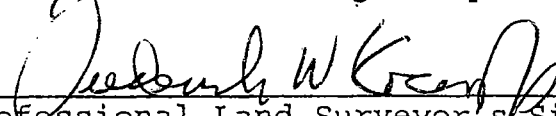
Owner's Well Number (As shown in the application
or Plans):

BLDG 283 MW-1

Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and
am familiar with the information submitted in this document and all
attachments and that, based on my inquiry of those individuals
immediately responsible for obtaining the information, I believe
the submitted information is true, accurate and complete. I am
aware that there are significant penalties for submitting false
information including the possibility of fine and imprisonment.


Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name

SEAL

N.J. Lic. # 34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit
specified ground water limits or Ground Water Quality Standards
(NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an
accuracy of one-hundredth of a second latitude and longitude. This
shall not be considered to require a major modification of the
NJPDES permit.

DWR-138-M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation
MONITORING WELL RECORD

Well Permit No. 27 30367

Atlas Sheet Coordinates 29 14 446

OWNER IDENTIFICATION - Owner U.S. ARMY

Address _____

City FT. MONMOUTH State NJ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. HW 01

County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A

Address BLDG. 2B3 / WILSON AVE.

TYPE OF WELL (as per Well Permit Categories) MONITORING

DATE WELL STARTED 7 / 15 / 01
DATE WELL COMPLETED 1 / 25 / 01

Regulatory Program Requiring Well UST Case I.D.# 97-08-78-133033

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) TECON-VINSEL Tele. # 732-532-0970

WELL CONSTRUCTION

Total depth drilled 25 ft.
Well finished to 25 ft.

Borehole diameter:
Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 0 ft.

Water level was measured using TAPE

Well was developed for 1 hours
at 3.3 gpm

Method of development WATER/FOAM PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity N/A gpm

Pump type: N/A

Drilling Fluid N/A Type of Rig CATERPILLAR

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company LUZ ENVIRONMENTAL INC.

Well Driller (Print) ROBERT J. LUCAS

Driller's Signature [Signature]

Registration No. 700 Date 1 / 1 / 01

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	5	4	PVC	SCHED 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 0.0/0)	0	25	4	PVC	SCHED 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	25			
Grout				Neat Cement Bentonite	<u>21</u> lbs. <u>6</u> lbs.

Grouting Method TREBLE

Drilling Method NSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-12.5' SANDSTONE + GRAVEL

1'-2' GRASSY SOILS GRAVEL AND SAND WITH TRACED CLAY AND

11-25' OLIVE CLAY



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

LOG OF BORING 283 MW1

(Page 1 of 1)

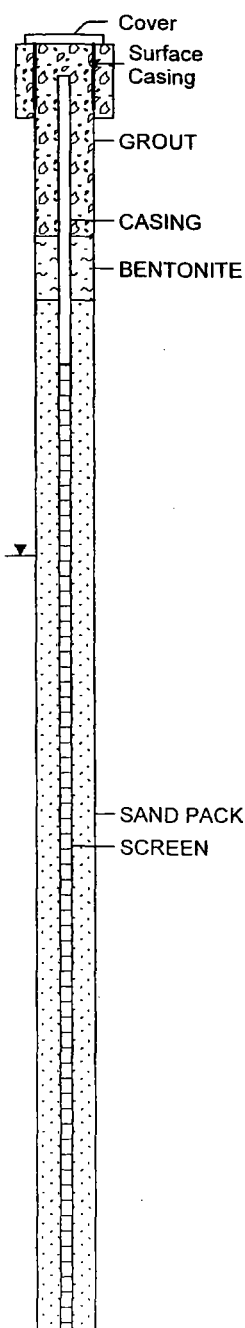
U.S. ARMY
SELF-PW-EV
JOSEPH FALLON
BLDG. 283
GROUNDWATER INVESTIGATION

DRILLING COMPANY : LUTZ ENVIRONMENTAL
DRILLER : TIM WESTOVER
DRILLING METHOD : HOLLOW STEM AUGER
HOLE DIAMETER : 11 INCH
SAMPLING METHOD : 2 IN. SPLIT SPOON

GEOLOGIST : FRANK ACCORSI
DATE COMPLETED : 03/28/00
NJDEP PERMIT NO. : 29 40 367
NJDEP COORD. : 29.14.446

Depth in FEET	Samples	Blow Count	DESCRIPTION	USCS	OVA (PPM)	Well Construction Information
0	1	9	Topsoil			WELL CASING : MATERIAL : PVC DIAMETER : 4 inch JOINTS : threaded LENGTH : 5 feet
1	2	25	FILL-CINDERS, SLAG, COAL fragments (black, brown, red)	FILL	0	WELL SCREEN : MATERIAL : PVC DIAMETER : 4 inch JOINTS : threaded OPENING : 0.010 inch LENGTH : 15 feet
2	3	27			0.7	SAND PACK : Morie #1
3	4	18			0.5	ANNULUS SEAL : bentonite
4	5	5			0.4	FLUSH MOUNT : MATERIAL : steel DIAMETER : 12 inch
5	6	6			0.4	NOTES Development of the monitoring well was performed using a submersible pump until ground water was visibly free of sediments (approximately one-half hour)
6	7	8	Brown-green/ brown med-fine SAND, and Silty CLAY	SC	0	
7	8	9			0	
8	9	3			0	
9	10	4			0	
10	11	5	Brown-orange/brown-green/brown Silty CLAY, mottled, little fine SAND, w/alternating layers of Clayey SILT		0	
11	12	7			0	
12	13	3			0	
13	14	2			0	
14	15	3			0	
15	16	5			0	
16	17	7			0	
17	18	5			0	
18	19	6			0	
19	20	8			0	
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Well: 283 MW1
Elev.:



2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

WELL NO. MW 01 COORDINATE NO. 29-14-446 PERMIT NO. 29-40367
 DATE DRILLED 3-28-2000 COUNTY MONMOUTH USE MONITOR
 LOCATION Bldg. 283 Ft. Monmouth NJ 07703
 OWNER U.S. ARMY / Ft. Monmouth ADDRESS C/O 173 EVERSIDE AVE. Ft. Monmouth NJ
 DRILLING METHOD 65" I.D. HSA SAMPLING METHOD COMPOSITE / SPONS.
 HOLE DIA. 10" TOTAL DEPTH 25'
 CASING:
 TYPE MONOFLEX FLUSHMOUNT SLOT — DIA. 4" LENGTH 5'
 SCREEN:
 TYPE MONOFLEX FLUSHMOUNT SLOT 010 DIA. 4" LENGTH 20'
 GRAVEL PACK SIZE #1 well gravel CASING SEAL CEMENT
 STATIC WATER LEVEL APPROX. 8' GEOLOGIC FORMATION UNCONSOLIDATED

[illegible]

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION
CERTIFICATION

Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ
NJPDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water
Allocation Section, 609-292-2957): 29-40887
This number must be permanently affixed to the
well casing.
Longitude (one tenth of a second): West 74° 02' 44.2"
Latitude (one tenth of a second): North 40° 18' 57.1"
Elevation of Top of Casing (cap off) 13.52
Distance from Top of Casing (cap off) to ground 0.48
Owner's Well Number (As shown in the application BLDG 283 MW-2
or Plans):
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and
am familiar with the information submitted in this document and all
attachments and that, based on my inquiry of those individuals
immediately responsible for obtaining the information, I believe
the submitted information is true, accurate and complete. I am
aware that there are significant penalties for submitting false
information including the possibility of fine and imprisonment.


Professional Land Surveyor's Signature

Frederick W. Kocen Jr.
Professional Land Surveyor's Name

SEAL

N.J. Lic. # 34008
Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit
specified ground water limits or Ground Water Quality Standards
(NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an
accuracy of one-hundredth of a second latitude and longitude. This
shall not be considered to require a major modification of the
NJPDES permit.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation
MONITORING WELL RECORD

Well Permit No. 29 - 40887

Atlas Sheet Coordinates 29 : 14 446

OWNER IDENTIFICATION - Owner U.S. ARMY

Address _____

City FT. MONMOUTH State NJ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 2

County MONMOUTH Municipality OCEANPORT BORO Lot No. N/A Block No. N/A

Address BLOG. 283

DATE WELL STARTED 7/28/99

DATE WELL COMPLETED 7/28/99

TYPE OF WELL (as per Well Permit Categories) MONITORING

Regulatory Program Requiring Well UST

Case I.D.# 97-08-28-133033

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Team-Vinnell Tele. # _____

WELL CONSTRUCTION

Total depth drilled 20 ft.

Well finished to 20 ft.

Borehole diameter:

Top 10 in.
Bottom 10 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface NA ft.

Was steel protective casing installed?

☒ Yes ☐ No

Static water level after drilling 9 ft.

Water level was measured using tape

Well was developed for 1/2 hours
at 10 gpm

Method of development sub pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity NA gpm

Pump type: NA

Drilling Fluid None Type of Rig Sinker 2800

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company INLAND POLLUTION SERVICES INC

Well Driller (Print) Michael A Komosinski

Driller's Signature [Signature]

Registration No. 02920 Date 7/28/99

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	<u>0</u>	<u>5</u>	<u>4</u>	<u>PVC</u>	<u>5-640</u>
Middle Casing (for triple cased wells only)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Outer Casing (largest diameter)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Open Hole or Screen (No. Used <u>20</u>)	<u>5</u>	<u>20</u>	<u>4</u>	<u>PVC</u>	<u>5-640</u>
Blank Casings (No. Used <u>-</u>)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Tail Piece	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Gravel Pack	<u>3</u>	<u>20</u>	<u>-</u>	<u>marble #2</u>	<u>450*</u>
Grout	<u>0</u>	<u>3</u>	<u>-</u>	<u>Neat Cement Bentonite</u>	<u>180</u> lbs.

Grouting Method Gravity

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 Clayey silty Fine sand

5-20 Silty clay Fine sand

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT

GROUND WATER MONITORING WELL CERTIFICATION - FORM B - LOCATION CERTIFICATION

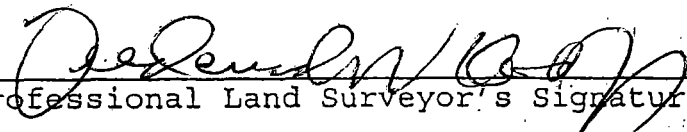
Name of Permittee: UNITED STATES ARMY
Name of Facility: FORT MONMOUTH
Location: Eatontown Borough, Monmouth county, NJ
NJDES Permit No: NJ

LAND SURVEYOR'S CERTIFICATION

Well Permit Number (As assigned by NJDEPE's Water Allocation Section, 609-292-2957): 29-41650
This number must be permanently affixed to the well casing.
Longitude (one tenth of a second): West 74° 02' 45.9"
Latitude (one tenth of a second): North 40° 18' 58.9"
Elevation of Top of Casing (cap off) 11.86
Distance from Top of Casing (cap off) to ground 0.56
Owner's Well Number (As shown in the application or Plans): BLOG 283 MCV-3
Benchmark: NJGCS Monument No. 9235
Elevation = 56.69

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.


Professional Land Surveyor's Signature

Frederick W. Kocen Jr.

Professional Land Surveyor's Name

SEAL

N.J. Lic. # 34008

Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJDES permit.

Bureau of Water Allocation
MONITORING WELL RECORD

Well Permit No. 30 - 11111

Atlas Sheet Coordinates 14 : 14 : 14

OWNER IDENTIFICATION - Owner U.S. AIR/7TH MONMOUTH
Address 200 E. RIVERSIDE AVE.
City EL. MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. _____
County D SOUTH Municipality PATOKTOWN TWP Lot No. N/A Block No. N/A
Address _____

TYPE OF WELL (as per Well Permit Categories) _____ DATE WELL COMPLETED 5/1/08
Regulatory Program Requiring Well _____ Case I.D.# 97-08-28-13003

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) LAGOM-VINGELL Tele. # 772-532-1111

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter: 2.0 in.
Top 2.0 in.
Bottom 2.0 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed?
☐ Yes ☐ No

Static water level after drilling _____ ft.

Water level was measured using 7249

Well was developed for _____ hours
at _____ gpm

Method of development synthetic 1995

Was permanent pumping equipment installed? ☐ Yes ☐ No

Pump capacity _____ gpm

Pump type: 1000

Drilling Fluid _____ Type of Rig _____

Health and Safety Plan submitted? ☐ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company _____

Well Driller (Print) _____

Driller's Signature [Signature]

Registration No. _____ Date ____/____/____

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	4	5	4	PVC	30
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used), (D/O)	3	30	4	PVC	100
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	4	30			
Grout		30		Neat Cement Bentonite	<u>77</u> lbs. <u>0</u> lbs.

Grouting Method ACI 308

Drilling Method	Notes

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

COPIES: White - DFP Canary - Driller Pink - Owner Goldenrod - Health Dept

LUTZ ENVIRONMENTAL CO., INC.

2020 CLINTON STREET • LINDEN, NEW JERSEY 07036 • (908)862-8888

BORING LOG:

WELL NO. MW 3 COORDINATE NO. 29-14-446 PERMIT NO. 29-41650
 DATE DRILLED 3-28-2000 COUNTY MONMOUTH USE MONITOR
 LOCATION Bldg. 283 FT. MONMOUTH NJ. 07703
 OWNER U.S. ARMY / FT. MONMOUTH ADDRESS 410 173 RIVERSIDE AVE. FT. MONMOUTH
 DRILLING METHOD LOGGING / HSA SAMPLING METHOD SPOONS / COMPOSITE
 HOLE DIA. 10" TOTAL DEPTH 20'
 CASING:
 TYPE MONOPLEX FLUSHMOUNT SLOT — DIA 4" LENGTH 5'
 SCREEN:
 TYPE MONOPLEX FLUSHMOUNT SLOT .010 DIA 4" LENGTH 15'
 GRAVEL PACK SIZE #1 WELL GRAVEL CASING SEAL CEMENT
 STATIC WATER LEVEL APPROX. 8" GEOLOGIC FORMATION UNCONSOLIDATED

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				11" STEEL MAX HOLE WITH 2X2 CONCRETE PAD.
		1		0'-1' → GRASS + TOP SOIL
		5		1'-20' → ORANGE/BROWN TO DARK BROWN
		PO		CLAYS, SILTS + SANDS.
		ON		
		N		
		2		
		0		
		T		
		R		
		E		
		C		
		O		
		R		
		D		
		O		
		B		
		U		
		D		
		R		
		I		
		L		
		E		
		R		
		1		



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

LOG OF BORING 283 MW3

(Page 1 of 1)

U.S. ARMY
SELF-M-PW-EV
JOSEPH FALLON
BLDG. 283
GROUNDWATER INVESTIGATION

DRILLING COMPANY : LUTZ ENVIRONMENTAL
DRILLER : TIM WESTOVER
DRILLING METHOD : HOLLOW STEM AUGER
HOLE DIAMETER : 11 INCH
SAMPLING METHOD : 2 IN. SPLIT SPOON

GEOLOGIST : FRANK ACCORSI
DATE COMPLETED : 03/28/00
NJDEP PERMIT NO. : 29 41 650
NJDEP COORD. : 29.14.446

Depth in FEET	Samples	Blow Count	DESCRIPTION	USCS	OVA (PPM)	Well Construction Information
0	1	-	asphalt			WELL CASING : MATERIAL : PVC DIAMETER : 4 inch JOINTS : threaded LENGTH : 5 feet
1	2	-	Brown coarse-med-fine SAND, some medium-fine Gravel	SW	0	
2	3	4			0	
2	4	2	Brown medium-fine SAND, little Silt			
3	5	2		SM	0	WELL SCREEN : MATERIAL : PVC DIAMETER : 4 inch JOINTS : threaded OPENING : 0.010 inch LENGTH : 20 feet
3	6	3			0	
4	7	4			0	
4	8	4	Brown-green brown fine SAND, some Silty CLAY, mottled			SAND PACK : Morie #1
5	9	5			0	ANNULUS SEAL : bentonite
5	10	7			0	FLUSH MOUNT : MATERIAL : steel DIAMETER : 12 inch
6	11	10			0	
6	12	9			0	
7	13	11			0	
7	14	12			0	
8	15	6			0	
8	16	6			0	
9	17	11			0	
9	18	12		SM	0	NOTES Development of the monitoring well was performed using a submersible pump until ground water was visible free of sediments (approximately one-half hour)
10	19	13			0	
10	20	12	Wet @ 10 ft.		0	
11	21	8			0	
11	22	8			0	
12						
13						
14						
15			Green Silty CLAY, some black fine Sand			
16						
17						
18						
19						
20				CL		
21						
22						
23						
24						
25						