United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 2707 Charles Wood

NJDEP UST Registration No. 81515-47 thru 49

April 2001

UNDERGROUND STORAGE TANK CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 2707

CHARLES WOOD NJDEP UST REGISTRATION NO. 81515-47 THRU 49

APRIL 2000

PREPARED FOR:

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

PREPARED BY:



PROJECT NO. 4936-127

TABLE OF CONTENTS

| EXECUTIVE SUMMARY | iv |
|--|-------------|
| 1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES | 1 |
| 1.1 OVERVIEW 1.2 SITE DESCRIPTION | 1 2 |
| 1.2.1 Geological/Hydrogeological Setting | 2 |
| 1.3 HEALTH AND SAFETY 1.4 REMOVAL OF UNDERGROUND STORAGE TANK | 4 4 |
| 1.4.1 General Procedures 1.4.2 Underground Storage Tank Excavation and Cleaning | 4 4 |
| 1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL 1.6 MANAGEMENT OF EXCAVATED SOILS | 5 5 |
| 2.0 SITE INVESTIGATION ACTIVITIES | 6 |
| 2.1 OVERVIEW 2.2 FIELD SCREENING/MONITORING 2.3 SOIL SAMPLING | 6 6 6 |
| 3.0 CONCLUSIONS AND RECOMMENDATIONS | 7 |
| 3.1 SOIL SAMPLING RESULTS 3.2 CONCLUSIONS AND RECOMMENDATIONS | 7 7 |

i le la

r n - : ⊑ ii

F B : • H

r ji

TABLE OF CONTENTS (CONTINUED)

TABLES

Table 1 Summary of Post-Excavation Sampling Activities

Table 2 Post-Excavation Soil Sampling Results

FIGURES

Figure 1 Site Location Map

Figure 2 Site Map

Figure 3 Cross Sectional View

Figure 4 Soil Sampling Location Map

APPENDICES

Appendix A NJDEP UST Report Certification Form

Appendix B Waste Manifest

Appendix C UST Disposal Certificate

Appendix D Soil Analytical Data Package

EXECUTIVE SUMMARY

UST Closure

Between September 10, 1998, and September 15, 1998, three fiberglass underground storage tanks (USTs) were closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) underground storage tank procedures at the Charles Wood area of the U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The USTs, NJDEP Registration Nos. 81515-47 thru 49 (Fort Monmouth ID No. 2707), were located southwest of Building 2707. UST Nos. 81515-47 and 48 were both 4,000-gallon USTs while UST No. 81515-49 was a 10,000-gallon UST. All three USTs were never used.

Site Assessment

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual*. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. No holes or punctures were noted in the UST and no evidence of potentially contaminated soils was observed surrounding the tank. No soil samples were collected since the USTs were never used. Groundwater was not encountered.

Site Restoration

Following the removal of the USTs, the excavation was backfilled to grade with crushed stone, sand, and native backfill and restored to its original condition.

Conclusions and Recommendations

No further action is proposed in regard to the closure and site assessment of UST Nos. 81515-47 thru 49 at Building 2707.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

Three underground storage tanks (USTs), New Jersey Department of Environmental Protection (NJDEP) Registration Nos. 81515-47 thru 49, were closed at Building 2707 at the Charles Wood area of U.S. Army Fort Monmouth, Fort Monmouth, New Jersey, between September 10, 1998, and September 15, 1998. Refer to site location map on Figure 1. This report presents the results of the Department of Public Works (DPW) implementation of the UST Decommissioning/Closure Plan approved by the NJDEP.

Decommissioning activities for UST Nos. 81515-47 thru 49 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted onsite for inspection. The decommissioning activities were conducted by DPW personnel who are registered and certified by the NJDEP for performing UST closure activities. Closure of UST Nos. 81515-47 thru 49 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 Nos. 81515-47 thru 49 are included in Appendices A and B, respectively.

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

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

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

1.2 SITE DESCRIPTION

FI

Building 2707 is located in the Charles Wood area of the Fort Monmouth Army Base. UST Nos. 81515-47 thru 49 were located southwest of Building 2707. A site map is provided on Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 2707. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Charles Wood area.

Regional Geology

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

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

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

Local Geology

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

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

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

Hydrogeology

f: E1

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

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

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

Shallow groundwater is locally influenced within the Charles Wood area by the following factors:

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

Due to the fluvial nature of the overburden deposits (i.e., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. Building 2707 is located approximately 400 feet south of an unnamed stream that runs from east to west through the Charles Wood area. Based on the Charles Wood area topography, the groundwater flow in the area of Building 2707 is anticipated to be to the north.

1.3 HEALTH AND SAFETY

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

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

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

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST, and the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 25 gallons of liquid from the UST and its associated piping were transported by Casie Protank to Casie Ecology Oil Salvage, Inc. facility, a NJDEP-approved petroleum recycling and disposal company located in Vineland, New Jersey. Refer to Appendix B for the waste manifest.

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. No holes or punctures were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. No evidence of contamination was observed. Soil screening was also performed along the piping run associated with the UST closure. Contamination was noted along the piping length and appeared to be from a former above ground tank. Approximately 5 cubic yards of potentially contaminated soil were removed from the excavated area and stored at the Fort Monmouth petroleum contaminated soil staging area. Soil samples, which were collected after the removal of the potentially contaminated soil, contained TPHC concentrations ranging from non-detect to 357.42 mg/kg. Groundwater was not encountered.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported to Mazza and Sons, Inc., Metal Recyclers. See Appendix C for a copy of the UST disposal certificate and Appendix F for photographs of the UST. The transportation of the UST was in compliance with all applicable regulations and laws.

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

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

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on OVA air monitoring and TPHC analysis results from the post-excavation soil samples, approximately 5 cubic yards of potentially contaminated soil were removed from the UST excavation.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Investigation Activities:

• Subsurface Evaluator: Charles Appleby Employer: U.S. Army, Fort Monmouth

Phone Number: (732) 532-0989 NJDEP Certification No.: 2056

2.2 FIELD SCREENING/MONITORING

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

2.3 SOIL SAMPLING

No soil samples were collected from the site since all three USTs were never used.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

No soil samples were collected from the site since all three USTs were never used.

3.2 CONCLUSIONS AND RECOMMENDATIONS

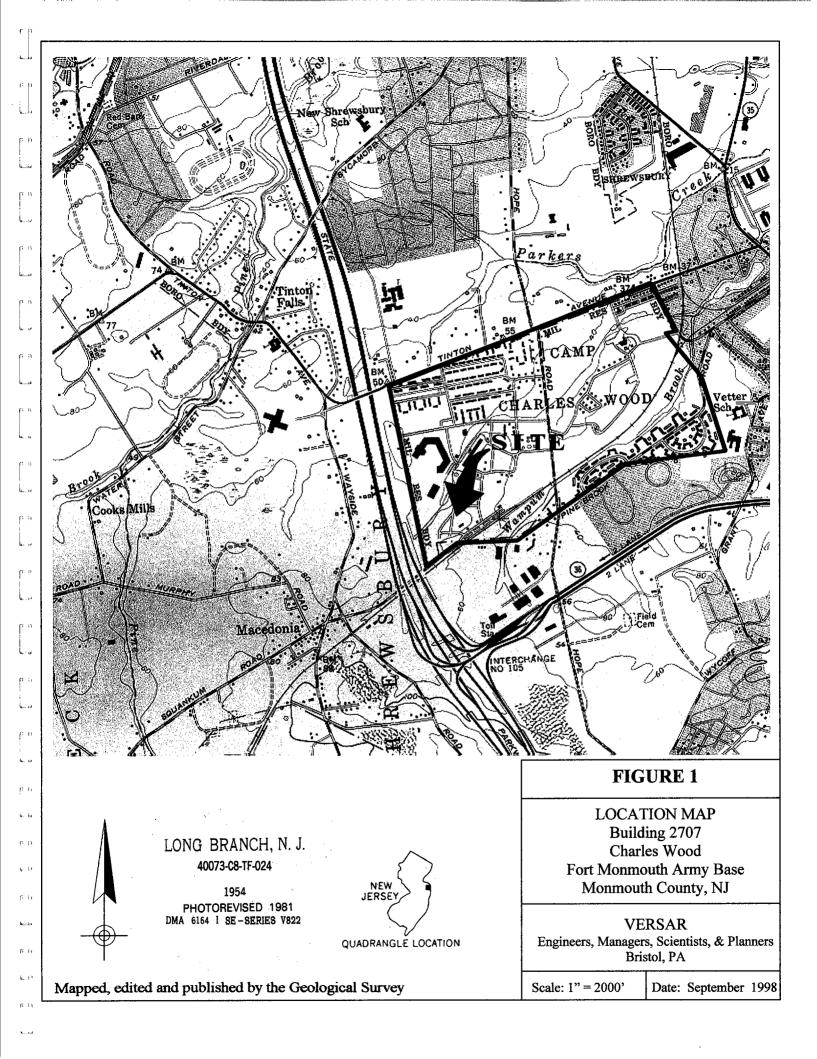
No further action is proposed in regard to the closure and site assessment of UST Nos. 81515-47 thru 49 at Building 2707.

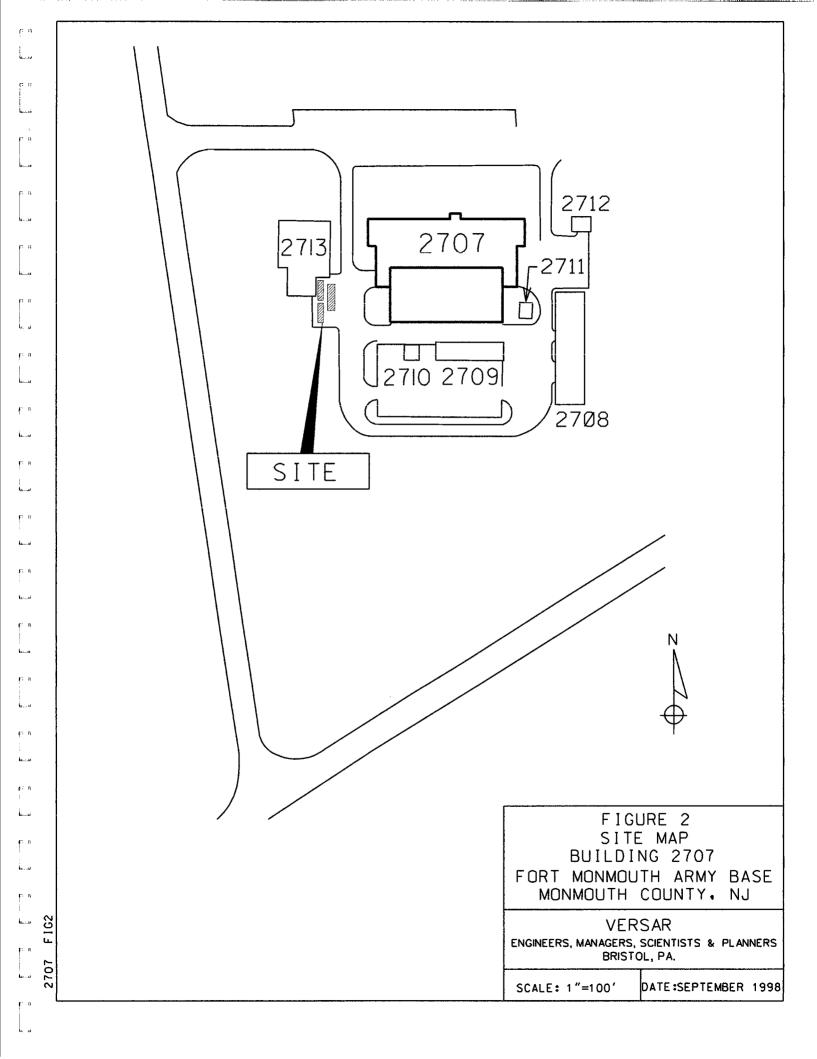
FIGURES

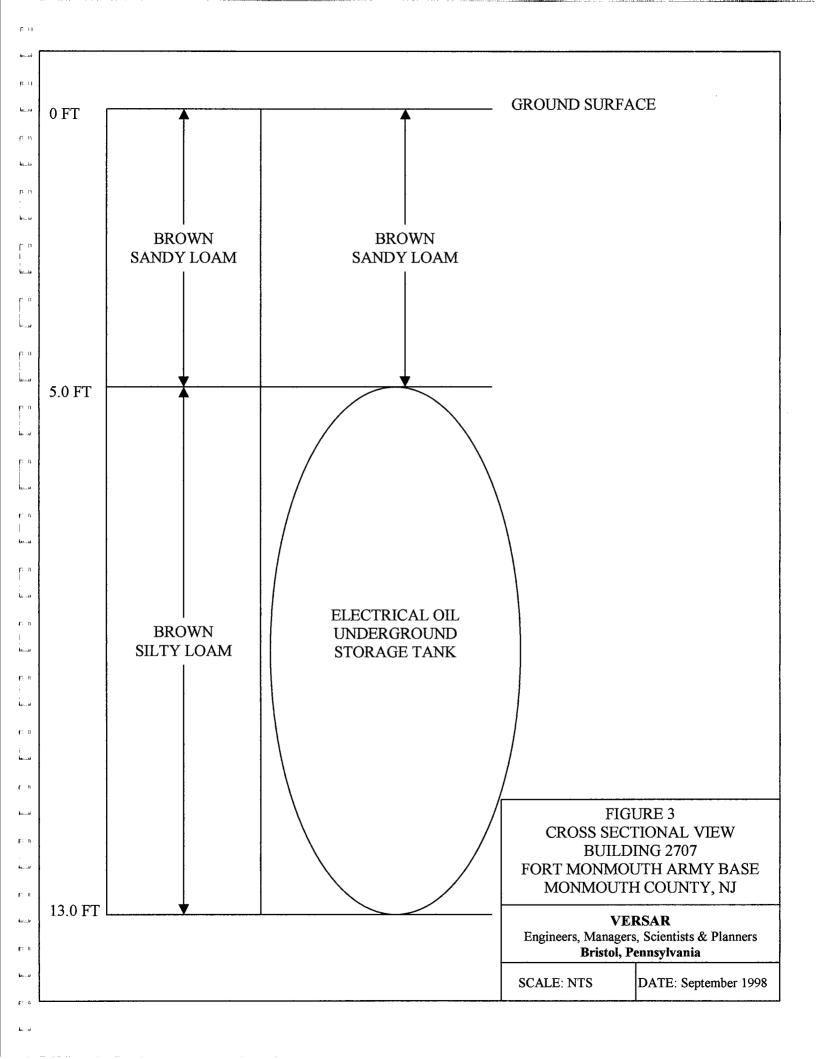
F 13

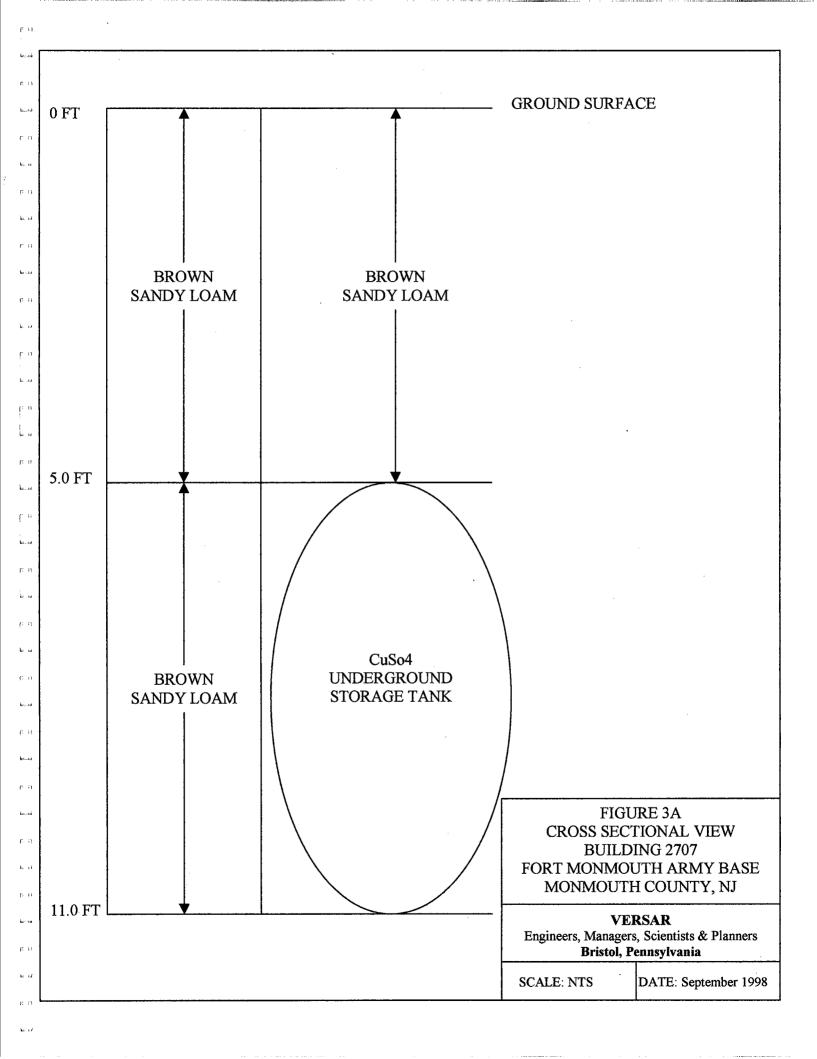
b. 14

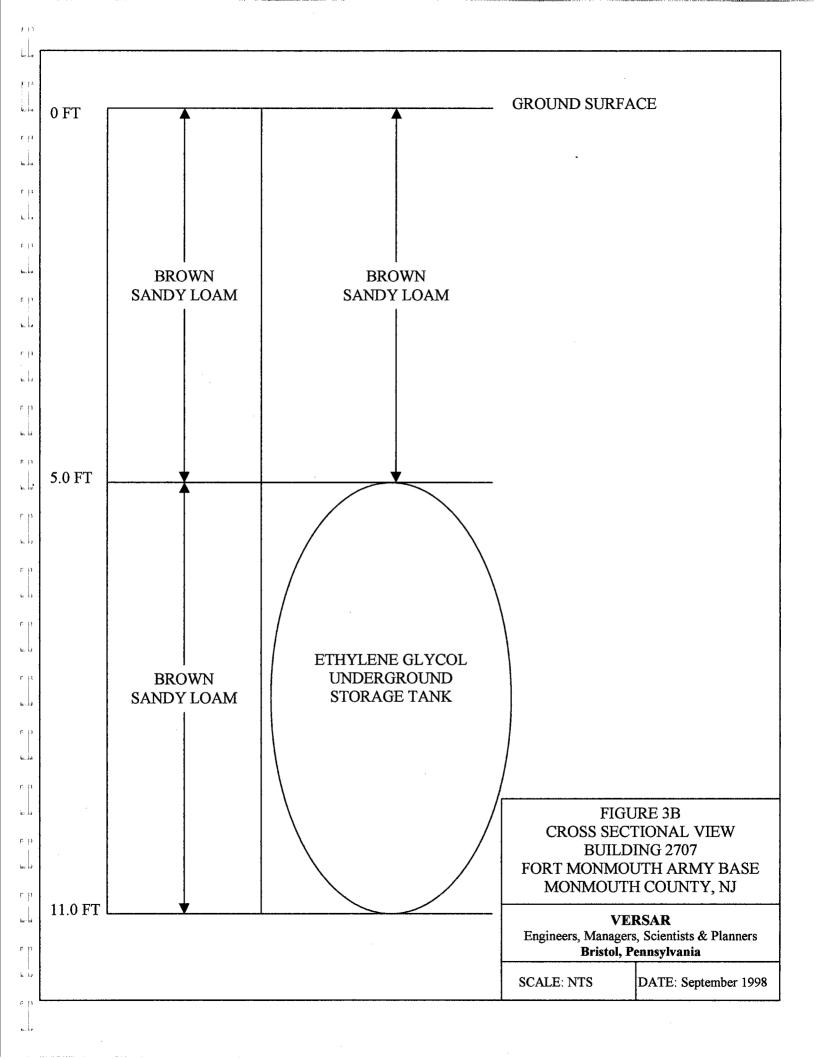
F II

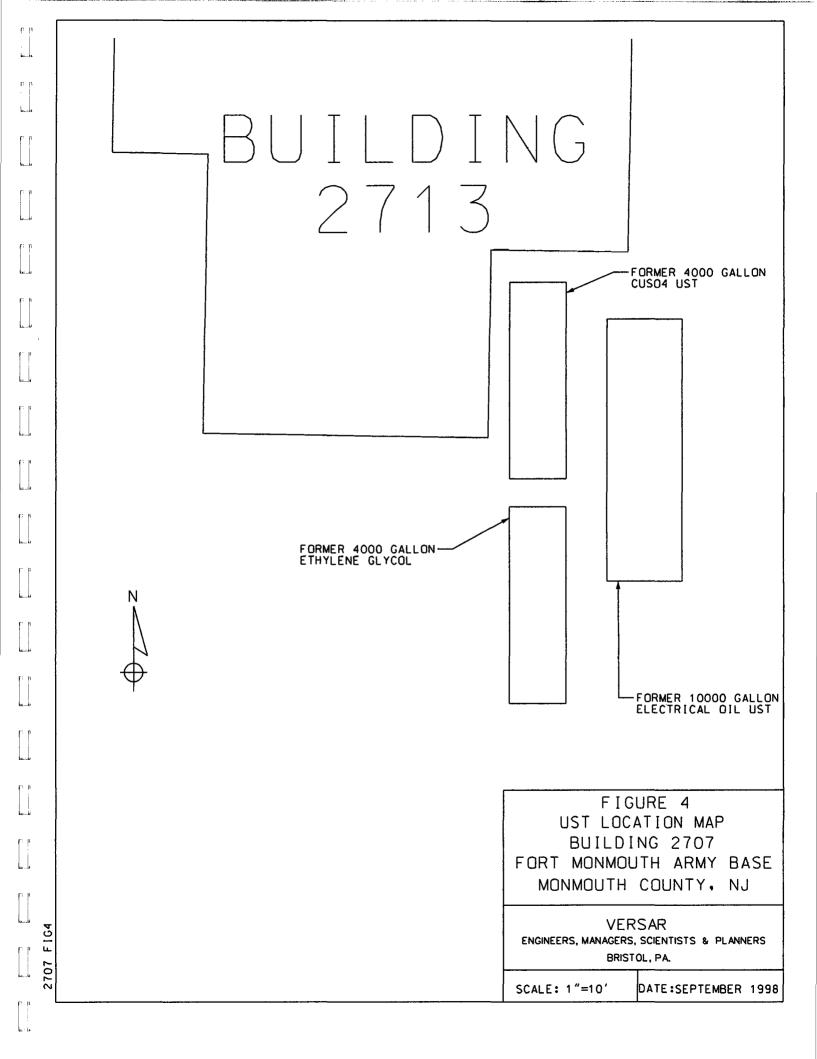












APPENDIX A

NJDEP UST Report Certification Form

f' = D

t u

New Jersey Department of Environmental Protection

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

| A. Facility Name : U.S. Army Fort Monmouth New Jersey | | | | | |
|---|---|------------------------------------|--|--|--|
| Facility Street Address : D | Facility Street Address: Directorate of Public Works Building 173 | | | | |
| Municipality: Oceanport | Cou | nty: Monmouth | | | |
| Block:L | ot(s): | Telephone Number : _732-532-6224 | | | |
| B. Owner (RP)'s Name: | | | | | |
| Street Address: | · | City : | | | |
| State: | Zip:Telephone | Number : | | | |
| C. (Check as appropriate) Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee X NA - Federal Agreement | UST Registration Number : 815 | (10 or 12 digits) | | | |
| E. Certification by the Subsurface Evaluator: The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E | | | | | |
| Firm Address: Directorate of Public Works Building 173 City: Fort Monmouth State: NJ Zip: 07703 Telephone Number: 732-532-6224 (NOTE: Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21 et seq.) | | | | | |
| F. Certification by the Responsible Party(ies) of the Facility: The following certification shall be signed [according to the requirements of N.J.A.C. 7:14B-1.7(b)]as follows: 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 For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or For a municipality, State, federal or other public agency by either a principal executive officer or ranking elected Official. "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this | | | | | |
| application and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties." | | | | | |
| Name (Print or Type): _ | James Ott | Title: Directorate of Public Works | | | |
| Signature: | | | | | |
| Company Name: | U.S. Army Fort Monmouth | Date: | | | |

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

| BLDG. #: 3707 REG. #: 81515 - 47 CLOSURE#: BRAC Auth | | |
|--|--------|--|
| DATE: | | |
| REMOVAL CONTRACTOR: SMC Inc. | | |
| CLOSURE SUPERVISOR: NJDEP CERT.#: | | |
| 10 K electrone on. | | |
| ACTIVITY | YES/ | |
| THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES | 415 | |
| THE SSE WAS ON-SITE DURING OST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES | 925 | |
| ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR) | yes | |
| A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR | NA | |
| THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED | HIS | |
| A DISCHARGE WAS REPORTED TO THE NUMBER (609-292-7172), CASE# | | |
| PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK | tUS 4 | |
| GROUNDWATER WAS ENCOUNTERED AT FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW | NA | |
| IF OVA/Hnu WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC) | NA | |
| IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN) | NA | |
| ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992 | GNE | |
| ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/FID RECORDED SITES IAW 7:26E-3.6 et seg. | | |
| ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY | NA | |
| THE SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER) | NO | |
| ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM | Roth. | |
| THE FOLLOWING DOCUMENTS WERE ADDED TO THE PROJECT FOLDER TODAY: (CIRCLE EACH) | | |
| SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, HAZ. WASTE MANIFEST, DAILY UST CLOSURE LOG, SCALED SITE MAP (SAMPLING), SRF-CLOSURE, CHAIN OF CUSTODY, SOIL ANALYTICAL RESULTS, CLEAN FILL TICKETS(IN YDS'), PHOTOGRAPHS (UST, EXCAVATION, SAMPLING POINTS) | | |
| CHECK ALL BOXES, LEAD IN CHECK ALL BOXES, LEAD | | |
| in compliance with N.J.A.C. 7:14B-9.2(b)3 and 7:26 <u>et seq</u> I am aware that | there | |
| are significant penalties for submitting false, inaccurate, or inco- information, including lines are for imprisonment. | mplete | |
| I(M) = | | |
| SIGNATURE: DATE: 7//5/ | | |
| ca\ms\ust\removal\sitessledoc | | |
| | 1 | |
| UST Resalt of Cean - Process took ho | 5 70 | |
| | | |
| be Remed so Exameter left open | | |
| | | |

SRF Sent 9/18/98

E 11.2

ندينا

f 13

وإسعا

New Jersey Department of Environmental Protection

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

| | | | | | | |
|--|--|--|--|--|--|--|
| A. Facility Name : U.S. Army | Fort Monmouth New Jersey | | | | | |
| Facility Street Address : D | Facility Street Address: Directorate of Public Works Building 173 | | | | | |
| Municipality: Oceanport | County | : Monmouth | | | | |
| Block:L | ot(s): | Telephone Number : 732-532-6224 | | | | |
| B. Owner (RP)'s Name: | | | | | | |
| | | City : | | | | |
| State: | Zip:Telephone Nu | mber : | | | | |
| C. (Check as appropriate) Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee X_NA - Federal Agreement | | | | | | |
| E. Certification by the Subsurface Evaluator: The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E | | | | | | |
| Firm Address: Directorate o | f Public Works Building 173 | City: Fort Monmouth | | | | |
| State: NJ Z | 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.) | | | | | | |
| The following certification sh For a Corporation by a peresolution, certified as a true. For a partnership or sole presented in the peresonal state. For a municipality, State, f | ne copy by the secretary of the corporation coprietorship, by a general partner or the pederal or other public agency by either a pederal or other ped | pard of directors to sign the document. A copy of the n, shall be submitted along with the certification; or | | | | |
| application and a information, I be significant civil committing a cri | all attached documents, and that based on my believe that the submitted information is true penalties for knowingly submitting false, ime of the fourth degree if I make a written fall | inquiry of those individuals responsible for obtaining the le, accurate, and complete. I am aware that there are inaccurate, or incomplete information and that I am les statement which I do not believe to be true. I am also my statute, I am personally liable for the penalties." | | | | |
| Name (Print or Type): | James Ott | Title: Directorate of Public Works | | | | |
| Signature: | | | | | | |
| Company Name: | U.S. Army Fort Monmouth | Date: | | | | |

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

| | BLDG.#: 3707 REG.#: 8/5/5 - 49 CLOSURE#: BRAG Auth. | |
|---|--|-----------------|
| | DATE: 914/98 TOA: TOD: | |
| | GOV. SSE: Charles BPPHL NJDEP CERT.#: 3056 REMOVAL CONTRACTOR: SMC Inc. | |
| | CLOSURE SUPERVISOR: Gen Dr Markins NJDEP CERT. #: | |
| | 4K FRP WEATHER: Sun Elyporn | |
| | ACTIVITY | YES/ NO |
| | THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES | 7-5 |
| | THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES | 9-5 |
| | ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR) | 4 25 |
| | A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR Press. | NA |
| | THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHEDIC | 4=5 |
| | A DISCHARGE WAS REPORTED TO THE NJDEP (609-292-7172), CASE# | NA |
| | PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK | tus |
| | GROUNDWATER WAS ENCOUNTERED AT FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW | NA |
| IF OVA/Hnu WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC) | | |
| | IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN) | NA |
| | ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992 | NA |
| | ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/FID RECORDED SITES IAW 7:26E-3.6 et seg. | NA |
| | ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY | NA |
| | THE SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER) | NA |
| | ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM | Path. |
| | THE FOLLOWING DOCUMENTS WERE ADDED TO THE PROJECT FOLDER TODAY: (CIRCLE EACH) | |
| | SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, HAZ. WASTE MANIFEST, DAILY UST CLOSURE LOG, SCALED SITE MAP (SAMPLING), SRF-CLOSURE, CHAIN OF CUSTODY, SOIL ANALYTICAL RESULTS, CLEAN FILL TICKETS(IN YDS'), PHOTOGRAPHS (UST, EXCAVATION, SAMPLING POINTS) | |
| т. | CHECK ALL BOXES, LEAVE certify under penalty of law that tank decommissioning activities were per | |
| iı a: | compliance with N.J.A.C 7:14B-9.2(b)3 and 7:26 et seg I am aware that | there mplete |
| | IGNATURE: DATE: 9/14/9 | |
| ca | \ms\ust\removal\sitessls.dot | |
| | est Pener 1 Sel Car | |

SRF sent 9/19/98 07

r : 1

New Jersey Department of Environmental Protection

Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

| A. Facility Name: U.S. Army Fort Monmouth New Jersey | | | | |
|---|--|-----------------------------|--|--|
| Facility Street Address : Directorate of Public Works Building 173 | | | | |
| Municipality: Oceanport | County: Monmor | uth | | |
| Block:Lot(s):Telephone Number : 732-532-6224 | | | | |
| _ | | | | |
| | (| | | |
| State: | Zip: Telephone Number : | | | |
| C. (Check as appropriate) Site Investigation Report (SIR) \$500 Fee Remedial Investigation Report (RIR) \$1000 Fee X NA – Federal Agreement | D. (Complete all that apply) Assigned Case Manager: Ian Curtis, Federal Case Manager: Ian Curtis, | (7 digits)(10 or 12 digits) | | |
| E. Certification by the Subsurface Evaluator: The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E | | | | |
| (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: 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 For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or 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): | | | | |
| Signature: | | | | |
| Company Name: | U.S. Army Fort Monmouth | Date: | | |

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

| BLDG. #: 3707 REG. #: 81515 - 48 CLOSURE#: BRAC AUCH. | |
|---|------------|
| DATE: 4/10/48 TOA: TOD: | |
| GOV. SSE: NJDEP CERT.#: \(\frac{\partial}{\partial}\) REMOVAL CONTRACTOR: SMC Inc. | |
| CLOSURE SUPERVISOR: Denois NUDEP CERT.#: WEATHER: Sum that | |
| WEATHER: Sun tot | |
| ACTIVITY / | YES/ NO |
| THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES | 4-5 |
| THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES | 4-5 |
| ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR) | 525 |
| A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR | NA |
| THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED | JUS. |
| A DISCHARGE WAS REPORTED TO THE NJDEP (609-292-7172), CASE# | NA |
| PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK | 705 |
| GROUNDWATER WAS ENCOUNTERED AT FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW | NA |
| IF OVA/Hnu WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC) | NA |
| IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN) | NA |
| ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992 | NA |
| ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/FID RECORDED SITES IAW 7:26E-3.6 et seq. | NA |
| ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY | NA |
| THE SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER) | NO |
| ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM | Beth |
| 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) | |
| SIGNATURE: DATE: | ormed |
| ca\ms\ust\removal\sitessls.doc | |
| UST Romand and defficulty due to wearls. And Clinited Capace. of Excessister. Benowd and Placed in Parky Cost Auch | Ź |
| disposar (Cut And placed in Dungsty) | |
| All produit / chen Pipy is detter doubt halled. | |
| Indentitial Probe Senson foul in UST. SRF Sent 91 | 19/9800 |

r - 5

L is

APPENDIX B

Waste Manifest

Waste Manifest

Not Available

APPENDIX C
UST Disposal Certificate

DEPARTMENT OF THE ARMY

Headquarters, U.S. Army Garrison Fort Monmouth Fort Monmouth, New Jersey 07703 - 5101



REPLY TO ATTENTION OF

Directorate of Public Works

Date: October 6, 1998

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

Re:

Non-Hazardous waste disposal

Dumpster number: # 2065ADK

Contract number: DAAB07-96-C-8252

Size: 20 cubic yards

Dear Sirs:

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

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

Sincerely,

James Ott, 🙉

Director, Public Works

Attachments: None



MONMOUTH COUNTY RECLAMATION CENTER

TINTON FALLS, NJ

MAILING ADDRESS: "6000 ASBURY AVE. NEPTUNE, NJ 07753

MARP508937 MAKPAL COMPANY PO 80% 188 LINCROFT

NJ 07738

CUSTOMER COPY

FACILITY I.D. NO. 1336F18F01

RECEIPT DOCUMENT NUMBER

Ø1723947

MARP508937 MARPAL COMPANY PO BOX 198

LINGROFT 7810°

NJ 07738

Escrow Level: 2400.00

| DATE | ENTRY TIME | OPER. | DATTIME | OPER. | OPER.

| 2065AU | L | 110ff en 20 | XX89HD | TUS | (2 | 500 Ares | lormal |
|----------|----|--|---------------------|------------------------------|-----------------|------------------|---------|
| QUANTITY | WC | Large Sky Service (1966) | DESCRIPTION/ORIGIN: | | UNITS | CONSUMT PRICE SE | MAMOUNT |
| 2.9100 | | Bulky Waste MONMOUTH COUN EATONTOWN BO | (MRF) | | Tons Og. Ød: | 88.15 | 256 3E |
| | | | | N P W. J. See and a | | | , |

I heraby certify that the information portulated prothing in mile to the best ा किया किया है।

SIGNATURE

81806.32 ***

==

DOCUMENT

256.52

APPENDIX D

Soil Analytical Data Package

APPENDIX D

Soil Analytical Data Package

FORT MONMOUTH ENVIRONMENTAL

TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

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

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

NJDEP LABORATORY CERTIFICATION # 13461



ANALYTICAL DATA REPORT
Fort Monmouth Environmental Laboratory
ENVIROMENTAL DIVISION
Fort Monmouth, New Jersey
PROJECT: #98-0001/BLDG, 2707

BLDG. 2707/Acetone Tank

| Field Location No. & Location | Laboratory Sample ID# | Matrix | Date and Time Of Collection | Date Received |
|-------------------------------|-----------------------|--------|-----------------------------|---------------|
| 2707-A | 3829.01 | Soil | 26-Aug-98 11:00 | 08/26/98 |
| 2707-B | 3829.02 | Soil | 26-Aug-98 11:04 | 08/26/98 |
| 2707-C | 3829.03 | Soil | 26-Aug-98 11:11 | 08/26/98 |
| 2707-D | 3829.04 | Soil | 26-Aug-98 11:14 | 08/26/98 |
| 2707-E | 3829.05 | Soil | 26-Aug-98 11:19 | 08/26/98 |
| Dup. | 3829.06 | Soil | 26-Aug-98 | 08/26/98 |
| TB | 3829.07 | Soil | 26-Aug-98 | 08/26/98 |

ANALYSIS: FORT MONMOUTH ENVIROMENTAL LAB VOA+15, % SOLIDS

Daniel Wright/Date
Laboratory Director

10/15/48

ENCLOSURE: CHAIN OF CUSTODY RESULTS

Table of Contents

| Section | Pages |
|---|-------|
| Cover Sheet | 1 |
| Table of Contents | 2 |
| Method Summary | 3 |
| Conformance/Non-Conformance | 4-5 |
| Chain of Custody | 6-7 |
| Qualifiers | 8 |
| Results Summary | 9A-24 |
| Tentatively Identified Compound Summary | 25-32 |
| Initial Calibration Summary | 33-34 |
| Continuing Calibration Summary | 35-36 |
| Tune Summary | 37-40 |
| Blank Summary | 41 |
| MS/MSD Results Summary | 42 |
| Internal Standard Summary | 43 |
| Surrogate Summary | 44 |
| Raw Sample Data | 45-60 |
| Laboratory Deliverable Checklist | 61 |

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/ |
|----|--|-------------------------|
| i. | Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks) | yes yes |
| 2. | Retention times for chromatograms provided | Yes |
| 3. | GC/MS Tune Specifications | .* |
| | a. BFB Meet Criteria b. DFTPP Meet Criteria | YES YES |
| 4. | GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series | ¥S |
| 5. | GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series | yes |
| 5. | GC/MS Calibration Requirements | |
| | a. Calibration Check Compounds Meet Criteriab. System Performance Check Compounds Meet Criteria | yes Yes |
| 7. | Blank Contamination - If yes, List compounds and concentrations in each blank: | No |
| | a. VOA Fraction b. B/N Fraction c. Acid Fraction | |
| 8. | Surrogate Recoveries Meet Criteria | yes |
| | If not met, list those compounds and their recoveries which fall outside the acceptable range: | 1 |
| | 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) | yes |
| | 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 | 485 |
| 11. Extraction Holding Time Met | NA |
| 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: | Yes |
| Additional Comments: | |
| | |
| Laboratory Manager: Date: 10/15/49 | |

NJDEP Certification #13461

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

Chain of Custody Record

| Customer: Charle | s Appleby | Project No: | | -000 | | . L | | | Ana | lysis Paramete | rs | | Comments: |
|---------------------------|--------------------------------|--|--|---------|------------|----------|--------|---------|-----------|--|-----------|----------|-------------------------------|
| Phone #: X26224 | | Location: | 2707 | ALE | 70ME JK | | | S | | | | | * = Samples Kept <4 Celsius |
| ()DERA (X)OMA | UST Assessment | UST# 8/5 | | | | | | SOLIDS | -15 | | | | |
| Samplers Name / | Company : Gary DiMa | rtinis TVS | | Sam | ple | # | HC | | Y-V | | ··· | Y. | |
| Lab Sample I.D. | Sample Location | Date | Time | Тур | e bo | ttles | | % | × | VOA ID N | umber | 0 | Remarks / Preservation Method |
| 3829. 01 | 2767-A | 8-26-98 | 1150 | Sa | 14 | 2 | | \geq | \bowtie | | | NO | CENTER LINE @ 10.0'* |
| 02 | \mathcal{B} | | 1104 | | | \sqcup | | | | | | ND | V |
| 03 | C | | 1111 | | | Ш | | | | | | ND | SIDEWALL @ 9.5' |
| 94 | D | | 1114 | | | | | | | | | ND | 4 |
| 05 | E | | 1119 | | | | | | | | ····· | NO | Piping RUN@ 3.0' |
| 06 | Dup | | | V | \ | 4 | | | | | | _ | FIELD DUPLICATE |
| 67 | TB | V | | METH | ANGL | 1 | | V | V | | | _ | TRIP BLANK |
| ` | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | ` | | | | _ | | | | | | | |
| | | | | <u></u> | _ | \perp | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | ************************************** | | | |
| / Mote: OV/ | A(#A51903) Calibrated | With 95 p | pm Meth | ane a | & Ze | ro A | ir @ | 10 | y5 | _on <u>8-2</u> | 3-98 | by | Gary DiMartinis |
| Relinquished by signatur | Date/Time: | Received by (| signature): | | Re | elinqu | uished | by (sig | nature) | : Date/Tim | e: Receiv | ved by (| (signature): |
| My North | 826-98 530 | J. Sle | llul | , | | | | | | | | | |
| Relinquished by (signatur | e): Date/Time: / | Received by (| ignature); | | Re | linqu | uished | by (sig | nature): | Date/Tim | e: Receiv | ved by (| signature): |
| Report Type: (_)Full, 🔌R | leduced, (_)Standard, (_)Scree | n / non-certifie | ed | | | 1 | Remari | ks: | | Dedi | cated Sar | mpling | Tools Used |
| Turnaround time: 😂 Standa | ard 4 wks, (_)Rush Days, | ample Location Date Time Type bottles | | | | | | | | | | | |
| | | | No Stoewall @ 9.5' 111 ND Stoewall @ 9.5' 111 ND Piping Run @ 3.8' Field Duplicate Trup Blank No Mith 95 ppm Methane & Zero Air @ 105 on 8-25-95 by Gary DiMartinis Province Pr | | | | | | | | | | |

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY NJDEPE # 13461

Definition of Qualifiers

MDL: Method Detection Limit

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

D : Results from dilution of sample

U : Compound searched for but not detected

Volatiles

FIELD ID.

VBLK93 NJDEP # 13461 Lab Name: **FMETL** 980001 Case No.: 3829 Location: B.2707 SDG No.: Project: SOIL Lab Sample ID: VBLK93 Matrix: (soil/water) 10.0 (g/ml) G Lab File ID: Sample wt/vol: V04524.D Level: (low/med) **MED** Date Received: 08/26/98 Date Analyzed: 09/02/98 % Moisture: not dec. 0 GC Column: Rtx502.2 ID: 0.25 Dilution Factor: 1.0 Soil Extract Volume: 25000 Soil Aliquot Volume: 50 (uL)

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-------|------|
| 107028 | Acrolein | 1800 | U |
| 107131 | Acrylonitrile | 1800 | U |
| 75650 | tert-Butyl alcohol | 3200 | U |
| 1634044 | Methyl-tert-Butyl ether | 750 | U |
| 108203 | Di-isopropyl ether | 500 | U |
| | Dichlorodifluoromethane | 1000 | U |
| 74-87-3 | Chloromethane . | 250 | U |
| 75-01-4 | Vinyl Chloride | 750 | U |
| 74-83-9 | Bromomethane | 500 | U |
| 75-00-3 | Chloroethane | 750 | U |
| 75-69-4 | Trichlorofluoromethane | 500 | U |
| 75-35-4 | 1,1-Dichloroethene | 250 | U |
| 67-64-1 | Acetone | 500 | U |
| 75-15-0 | Carbon Disulfide | 250 | /_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 | כ |
| 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 | Ü |

FIELD ID.

| Lab Name: | FMETL | | | NJDEP# 13461 | VBLK93 |
|-----------------|----------|---------|----------------|--------------------|-----------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: |
| Matrix: (soil/v | water) | SOIL | <u>-</u> | Lab Sample ID: | VBLK93 |
| Sample wt/vo | ol: | 10.0 | (g/ml) G | Lab File ID: | V04524.D |
| Level: (low/r | ned) | MED | | Date Received: | 08/26/98 |
| % Moisture: | not dec. | 0 | | Date Analyzed: | 09/02/98 |
| GC Column: | Rtx502 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 |
| Soil Extract \ | /olume: | 25000 | (uL) | Soil Aliquot Volu | me: 50 (u |

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

| F | ΕĹ | D. | ID. |
|---|----|----|-----|
| | | | |

| Lab Name: | FMETL_ | | | NJDEP# 13461 | _ A | |
|-----------------|----------|---------|----------------|--------------------|---------------|------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/v | vater) | SOIL | | Lab Sample ID: | 3829.01 | |
| Sample wt/vo | ol: | 10.8 | (g/ml) G | Lab File ID: | V04531.D | |
| Level: (low/n | ned) | MED | · | Date Received: | 08/26/98 | |
| % Moisture: 1 | not dec. | 9.02 | ···· | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx502 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract V | /olume: | 25000 | (uL) | Soil Aliquot Volu | me: <u>50</u> | (uL) |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-------|---|
| 107028 | Acrolein | 1800 | U |
| 107131 | Acrylonitrile | 1800 | U |
| 75650 | tert-Butyl alcohol | 3300 | Ū |
| 1634044 | Methyl-tert-Butyl ether | 760 | U |
| 108203 | Di-isopropyl ether | 510 | U |
| | Dichlorodifluoromethane | 1000 | U |
| 74-87-3 | Chloromethane | 250 | U |
| 75-01-4 | Vinyl Chloride | 760 | U |
| 74-83-9 | Bromomethane | 510 | U |
| 75-00-3 | Chloroethane | 760 | U |
| 75-69-4 | Trichlorofluoromethane | 510 | U |
| 75-35-4 | 1,1-Dichloroethene | 250 | U |
| 67-64-1 | Acetone | 510 | U |
| 75-15-0 | Carbon Disulfide | 250 | U |
| 75-09-2 | Methylene Chloride | . 510 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 510 | U |
| 75-35-3 | 1,1-Dichloroethane | 250 | U |
| 108-05-4 | Vinyl Acetate | 760 | U |
| 78-93-3 | 2-Butanone | 760 | U |
| | cis-1,2-Dichloroethene | 250 | ט |
| 67-66-3 | Chloroform | 250 | U |
| 75-55-6 | 1,1,1-Trichloroethane | 250 | U |
| 56-23-5 | Carbon Tetrachloride | 510 | U |
| 71-43-2 | Benzene | 250 | U |
| 107-06-2 | 1,2-Dichloroethane | 510 | U |
| 79-01-6 | Trichloroethene | 250 | U |
| 78-87-5 | 1,2-Dichloropropane | 250 | U |
| 75-27-4 | Bromodichloromethane | 250 | U |
| 110-75-8 | 2-Chloroethyl vinyl ether | 510 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 250 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 510 | U |
| 108-88-3 | Toluene | 250 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 510 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 510 | U |
| 127-18-4 | Tetrachloroethene | 250 | Ū |
| 591-78-6 | 2-Hexanone | 510 | Ū |
| 126-48-1 | Dibromochloromethane | 510 | Ü |
| 108-90-7 | Chlorobenzene | 250 | U |
| 100-41-4 | Ethylbenzene | 510 | Ü |

| • |
|---|
| |

| Lab Name: | FMETL | | | | NJDEP# 13461 | A | |
|----------------|----------|---------|----------------|------|--------------------|----------------|------|
| Project: | 980001 | | Case No.: | 3829 | Location: B.2707 S | SDG No.: | |
| Matrix: (soil/ | water) | SOIL | | | Lab Sample ID: | 3829.01 | _ |
| Sample wt/vo | ol: | 10.8 | (g/ml) | G | Lab File ID: | V04531.D | _ |
| Level: (iow/r | ned) | MED | | | Date Received: | 08/26/98 | _ |
| % Moisture: | not dec. | 9.02 | | | Date Analyzed: | 09/02/98 | _ |
| GC Column: | Rtx502 | 2.2 ID: | <u>0.25</u> (m | nm) | Dilution Factor: | 1.0 | |
| Soil Extract \ | /olume: | 25000 | (uL) | | Soil Aliquot Volu | ume: <u>50</u> | (uL) |

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

| FIELD ID. | |
|-----------|--|
| В | |

| Lab Name: | FMETL | | · | NJDEP# 13461 | _ |
|-----------------|----------|---------|------------------|--------------------|-------------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: |
| Matrix: (soil/v | vater) | SOIL | | Lab Sample ID: | 3829.02 |
| Sample wt/vo | oł: | 12.1 | (g/ml) G | Lab File ID: | V04532.D |
| Level: (low/n | ned) | MED | | Date Received: | 08/26/98 |
| % Moisture: | not dec. | 12.24 | | Date Analyzed: | 09/02/98 |
| GC Column: | Rtx50 | 2.2 ID: | <u>0.25</u> (mm) | Dilution Factor: | 1.0 |
| Soil Extract \ | /olume: | 25000 | ·(uL) | Soil Aliquot Volu | ıme: 50 (uL |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------------|---------------------------|-------|----------|
| 107028 | Acrolein | 1600 | U |
| 107131 | Acrylonitrile | 1600 | U |
| 75650 | tert-Butyl alcohol | 3100 | U |
| 1634044 | Methyl-tert-Butyl ether | 710 | U |
| 108203 | Di-isopropyl ether | 470 | U |
| | Dichlorodifluoromethane | 940 | _U |
| 74-87-3 | Chloromethane | 240 | U |
| 75-01-4 | Vinyl Chloride | 710 | U |
| 74-83-9 | Bromomethane | 470 | U |
| 75-00-3 | Chloroethane | 710 | U |
| 75-69-4 | Trichlorofluoromethane | 470 | U |
| 75-35-4 | 1,1-Dichloroethene | 240 | <u> </u> |
| 67-64-1 | Acetone | 470 | U |
| 75-15-0 | Carbon Disulfide | 240 | U |
| 75-0 9- 2 | Methylene Chloride | 470 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 470 | U |
| 75-35-3 | 1,1-Dichloroethane | 240 | U |
| 108-05-4 | Vinyl Acetate | 710 | U |
| 78-93-3 | 2-Butanone | 710 | U |
| | cis-1,2-Dichloroethene | 240 | U |
| 67-66-3 | Chloroform | 240 | U |
| 75-55-6 | 1,1,1-Trichloroethane | 240 | U |
| 56-23-5 | Carbon Tetrachloride | 470 | U |
| 71-43-2 | Benzene | 240 | U |
| 107-06-2 | 1,2-Dichloroethane | 470 | U |
| 79-01-6 | Trichloroethene | 240 | U |
| 78-87-5 | 1,2-Dichloropropane | 240 | U |
| 75-27-4 | Bromodichloromethane | 240 | U |
| 110-75-8 | 2-Chloroethyl vinyl ether | 470 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 240 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 470 | U_U |
| 108-88-3 | Toluene | 240 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 470 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 470 | U |
| 127-18-4 | Tetrachloroethene | 240 | U |
| 591-78-6 | 2-Hexanone | 470 | U |
| 126-48-1 | Dibromochloromethane | 470 | U |
| 108-90-7 | Chlorobenzene | 240 | U |
| 100-41-4 | Ethylbenzene | 470 | U |

| F | IEL | .D | ID | |
|---|-----|----|----|--|
| | | | | |

| Lab Name: | FMETL | | | _ NJDEP# _13461 | В | |
|----------------|----------|---------|----------------|--------------------|----------|-----|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | | Lab Sample ID: | 3829.02 | |
| Sample wt/v | ol: | 12.1 | (g/ml) G | Lab File ID: | V04532.D | _ |
| Level: (low/i | med) | MED | | Date Received: | 08/26/98 | _ |
| % Moisture: | not dec. | 12.24 | | Date Analyzed: | 09/02/98 | _ |
| GC Column: | Rtx50 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | _ |
| Soil Extract ' | Volume: | 25000 | (uL) | Soil Aliquot Volu | ıme: 50 | uL) |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|-----------|---------------------------|-------|---|
| 1330-20-7 | m+p-Xylenes | 710 | U |
| 1330-20-7 | o-Xylene | 470 | U |
| 100-42-5 | Styrene | 470 | U |
| 75-25-2 | Bromoform | 470 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 470 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 710 | Ū |
| 106-46-7 | 1,4-Dichlorobenzene | 710 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 710 | U |

| | רובנט וט. |
|-----|-----------|
| | |
| - 1 | С |

| Lab Name: | FMETL | | | NJDEP# 13461 | _ |
|----------------|----------|---------|-----------------|--------------------|-------------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: |
| Matrix: (soil/ | water) | SOIL | | Lab Sample ID: | 3829.03 |
| Sample wt/v | ol: | 11.0 | (g/ml) <u>G</u> | _ Lab File ID: | V04533.D |
| Level: (low/ | med) | MED | | Date Received: | 08/26/98 |
| % Moisture: | not dec. | 8.25 | | Date Analyzed: | 09/02/98 |
| GC Column: | Rtx50 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 |
| Soil Extract | Volume: | 25000 | (uL) | Soil Aliquot Volu | ıme: 50 (ul |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-------|----|
| 107028 | Acrolein | 1700 | U |
| 107131 | Acrylonitrile | 1700 | Ū |
| 75650 | tert-Butyl alcohol | 3200 | U |
| 1634044 | Methyl-tert-Butyl ether | 740 | U |
| 108203 | Di-isopropyl ether | 490 | U |
| | Dichlorodifluoromethane | 990 | Ü |
| 74-87-3 | Chloromethane | 250 | U |
| 75-01-4 | Vinyl Chloride | 740 | U |
| 74-83-9 | Bromomethane | 490 | U |
| 75-00-3 | Chloroethane | 740 | U |
| 75-69-4 | Trichlorofluoromethane | 490 | J |
| 75-35-4 | 1,1-Dichloroethene | 250 | ט |
| 67-64-1 | Acetone | 490 | U |
| 75-15-0 | Carbon Disulfide | 250 | U |
| 75-09-2 | Methylene Chloride | 490 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 490 | U |
| 75-35-3 | 1,1-Dichloroethane | 250 | U |
| 108-05-4 | Vinyl Acetate | 740 | U |
| 78-93-3 | 2-Butanone | 740 | U |
| | cis-1,2-Dichloroethene | 250 | U |
| 67-66-3 | Chloroform | 250 | U |
| 75-55-6 | 1,1,1-Trichloroethane | 250 | U |
| 56-23-5 | Carbon Tetrachloride | 490 | U |
| 71-43-2 | Benzene | 250 | U |
| 107-06-2 | 1,2-Dichloroethane | 490 | U |
| 79-01-6 | Trichloroethene | 250 | U_ |
| 78-87-5 | 1,2-Dichloropropane | 250 | U |
| 75-27-4 | Bromodichloromethane | 250 | U |
| 110-75-8 | 2-Chloroethyl vinyl ether | 490 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 250 | Ū |
| 108-10-1 | 4-Methyl-2-Pentanone | 490 | U |
| 108-88-3 | Toluene | 250 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 490 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 490 | U |
| 127-18-4 | Tetrachloroethene | 250 | U |
| 591-78-6 | 2-Hexanone | 490 | Ü |
| 126-48-1 | Dibromochloromethane | 490 | Ü |
| 108-90-7 | Chlorobenzene | 250 | Ü |
| 100-90-7 | Ethylbenzene | 490 | Ü |

| F | IEL | D I | D. | |
|-----|-----|-----|----|-------|
| _ | | | | _ |
| - 1 | | | _ | |

| Lab Name: | FMETL | | | NJDEP# 13461 | С | |
|----------------|----------|---------|-----------------|--------------------|----------|------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | | Lab Sample ID: | 3829.03 | |
| Sample wt/v | ol: | 11.0 | (g/ml) <u>G</u> | Lab File ID: | V04533.D | |
| Level: (low/i | med) | MED | | Date Received: | 08/26/98 | |
| % Moisture: | not dec. | 8.25 | | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx50 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract | Volume: | 25000 | (uL) | Soil Aliquot Volu | ıme: 50 | (uL) |

| CAS NO. | COMPOUND (ri | g/L or ug/Kg) | UG/KG | | Q |
|-----------|------------------------|---------------|-------|---|-----|
| 1330-20-7 | m+p-Xylenes | | 74 | 0 | U |
| 1330-20-7 | o-Xylene | | 49 | 0 | U |
| 100-42-5 | Styrene | | 49 | 0 | U |
| 75-25-2 | Bromoform | | 49 | 0 | _ U |
| 79-34-5 | 1,1,2,2-Tetrachloroeth | nane | 49 | 0 | Ü |
| 541-73-1 | 1,3-Dichlorobenzene | | 74 | 0 | Ū |
| 106-46-7 | 1,4-Dichlorobenzene | | 74 | 0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 74 | 0 | U |

| | FIELD ID. | |
|-----|-------------|--|
| - [| | |
| | D | |

| Lab Name: | FMETL | | | NJDEP # 13461 | D |
|-----------------|----------|---------|-----------------|--------------------|------------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: |
| Matrix: (soil/w | vater) | SOIL | | Lab Sample ID: | 3829.04 |
| Sample wt/vo | ol: | 11.7 | (g/ml) <u>G</u> | Lab File ID: | V04534.D |
| Level: (low/n | ned) | MED | | Date Received: | 08/26/98 |
| % Moisture: r | not dec. | 3.74 | · | Date Analyzed: | 09/02/98 |
| GC Column: | Rtx502 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 |
| Soil Extract V | olume: | 25000 | (uL) | Soil Aliquot Volu | me: 50 (uL |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-------|----------|
| 107028 | Acrolein | 1600 | U |
| 107131 | Acrylonitrile | 1600 | U |
| 75650 | tert-Butyl alcohol | 2900 | Ū |
| 1634044 | Methyl-tert-Butyl ether | 670 | U |
| 108203 | Di-isopropyl ether | 450 | U |
| | Dichlorodifluoromethane | 890 | U |
| 74-87-3 | Chloromethane | 220 | U |
| 75-01-4 | Vinyl Chloride | 670 | U |
| 74-83-9 | Bromomethane | 450 | U |
| 75-00-3 | Chloroethane | 670 | U |
| 75-69-4 | Trichlorofluoromethane | 450 | U |
| 75-35-4 | 1,1-Dichloroethene | 220 | U |
| 67-64-1 | Acetone | 450 | U |
| 75-15-0 | Carbon Disulfide | 220 | <u> </u> |
| 75-09-2 | Methylene Chloride | 450 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 450 | U |
| 75-35-3 | 1,1-Dichloroethane | 220 | U |
| 108-05-4 | Vinyl Acetate | 670 | U |
| 78-93-3 | 2-Butanone | 670 | U |
| | cis-1,2-Dichloroethene | 220 | U |
| 67-66-3 | Chloroform | 220 | U |
| 75-55-6 | 1,1,1-Trichloroethane | 220 | U |
| 56-23-5 | Carbon Tetrachloride | 450 | U |
| 71-43-2 | Benzene | 220 | U |
| 107-06-2 | 1,2-Dichloroethane | 450 | U |
| 79-01-6 | Trichloroethene | 220 | U |
| 78-87-5 | 1,2-Dichloropropane | 220_ | υ |
| 75-27-4 | Bromodichloromethane | 220 | U |
| 110-75-8 | 2-Chloroethyl vinyl ether | 450 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 220 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 450 | U |
| 108-88-3 | Toluene | 220 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 450 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 450 | U |
| 127-18-4 | Tetrachloroethene | 220 | U |
| 591-78-6 | 2-Hexanone | 450 | U |
| 126-48-1 | Dibromochloromethane | 450 | Ū |
| 108-90-7 | Chlorobenzene | 220 | U |
| 100-41-4 | Ethylbenzene | 450 | Ū |

| ۲ | IELD | ID. | |
|---|------|-----|---|
| Γ | | | _ |

| Lab Name: | FMETL | | | NJDEP # 13461 | D | |
|----------------|----------|---------|----------------|--------------------|----------|-----|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | | Lab Sample iD: | 3829.04 | |
| Sample wt/v | oł: | 11.7 | (g/ml) G | Lab File ID: | V04534.D | |
| Level: (low/i | med) | MED | | Date Received: | 08/26/98 | |
| % Moisture: | not dec. | 3.74 | | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx50 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract | Volume: | 25000 | (uL) | Soil Aliquot Volu | me: 50 | (uL |

| CAS NO. | COMPOUND (ug/L or ug/K | g) <u>UG/KG</u> | Q |
|-----------|---------------------------|-----------------|----|
| 1330-20-7 | m+p-Xylenes | 670 | U |
| 1330-20-7 | o-Xylene | 450 | U |
| 100-42-5 | Styrene | 450 | U |
| 75-25-2 | Bromoform | 450 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 450 | J |
| 541-73-1 | 1,3-Dichlorobenzene | 670 | حا |
| 106-46-7 | 1,4-Dichlorobenzene | 670 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 670 | U |

| ILICED | U. | | |
|-------------|----|---|---|
| · · · · · · | | ' | - |
| | | | |
| ŀ | F | | |

| Lab Name: | FMETL | | | NJDEP# 13461 | E | Ì |
|----------------|----------|---------|----------------|--------------------|----------|-----|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | | Lab Sample ID: | 3829.05 | |
| Sample wt/v | ol: | 10.4 | (g/ml) G | _ Lab File ID: | V04535.D | |
| Level: (low/r | ned) | MED | | Date Received: | 08/26/98 | |
| % Moisture: | not dec. | 11.99 | | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx502 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract \ | Volume: | 25000 | (uL) | Soil Aliquot Volu | ıme: 50 | (uL |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|-----------|---------------------------|-------|---|
| 1330-20-7 | m+p-Xylenes | 820 | U |
| 1330-20-7 | o-Xylene | 550 | U |
| 100-42-5 | Styrene | 550 | Ü |
| 75-25-2 | Bromoform | 550 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 550 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 820 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 820 | U |
| 95-50-1 | 1.2-Dichlorobenzene | 820 | U |

| FIEL | D ID |
|------|------|
|------|------|

| Lab Name: | FMETL | | | | NJDEP# | 13461 | DUP |
|-----------------|----------|---------|----------------|------|----------|--------------------|----------|
| Project: | 980001 | , | Case No.: | 3829 | Location | n: <u>B.2707</u> S | DG No.: |
| Matrix: (soil/v | vater) | SOIL | | | Lai | b Sample ID: | 3829.06 |
| Sample wt/vo | ol: | 10.0 | (g/ml) | G | Lal | b File ID: | V04536.D |
| Level: (low/n | ned) | MED | | | Da | te Received: | 08/26/98 |
| % Moisture: | not dec. | 11.33 | | | Da | te Analyzed: | 09/02/98 |
| GC Column: | Rtx502 | 2.2 ID: | <u>0.25</u> (m | m) | Dil | ution Factor: | 1.0 |
| Soil Extract V | /olume: | 25000 | (uL) | | So | il Aliquot Volu | ıme: 50 |

| 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 | 840 | U |
| 108203 | Di-isopropyl ether | 560 | U |
| | Dichlorodifluoromethane | 1100 | U |
| 74-87-3 | Chloromethane | 280 | U |
| 75-01-4 | Vinyl Chloride | 840 | U |
| 74-83-9 | Bromomethane | 560 | U_ |
| 75-00-3 | Chloroethane | 840 | U |
| 75-69-4 | Trichlorofluoromethane | 560 | U |
| 75-35-4 | 1,1-Dichloroethene | 280 | U |
| 67-64-1 | Acetone | 560 | U |
| 75-15-0 | Carbon Disulfide | 280 | U |
| 75-09-2 | Methylene Chloride | 560 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 560 | U_ |
| 75-35-3 | 1,1-Dichloroethane | 280 | U |
| 108-05-4 | Vinyl Acetate | 840 | U |
| 78-93-3 | 2-Butanone | 840 | U |
| | cis-1,2-Dichloroethene | 280 | υ |
| 67-66-3 | Chloroform | 280 | U |
| 75-55-6 | 1,1,1-Trichloroethane | 280 | U |
| 56-23-5 | Carbon Tetrachloride | 560 | U |
| 71-43-2 | Benzene | 280 | υ |
| 107-06-2 | 1,2-Dichloroethane | 560 | 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 | 560 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 280 | υ |
| 108-10-1 | 4-Methyl-2-Pentanone | 560 | U |
| 108-88-3 | Toluene | 280 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 560 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 560 | U |
| 127-18-4 | Tetrachloroethene | 280 | U |
| 591-78-6 | 2-Hexanone | 560 | U |
| 126-48-1 | Dibromochloromethane | 560 | U |
| 108-90-7 | Chlorobenzene | 280 | U |
| 100-41-4 | Ethylbenzene | 560 | Ü |

| FIE | LD | ID. |
|-----|----|-----|
| _ | | |

| | | | | | l DUP | i |
|----------------|----------|-------------|-----------------|--------------------|----------|------|
| Lab Name: | FMETL | | | NJDEP# 13461 | | |
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/ | vater) | SOIL | | Lab Sample ID: | 3829.06 | |
| Sample wt/vo | ol: | 10.0 | (g/ml) <u>G</u> | Lab File ID: | V04536.D | |
| Level: (low/r | ned) | MED | | Date Received: | 08/26/98 | |
| % Moisture: | not dec. | 11.33 | | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx50 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract \ | Volume: | 25000 | (uL) | Soil Aliquot Volu | me: 50 | (uL) |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|-----------|---------------------------|-------|-----|
| 1330-20-7 | m+p-Xylenes | 840 | U |
| 1330-20-7 | o-Xylene | 560 | U |
| 100-42-5 | Styrene | 560 | U |
| 75-25-2 | Bromoform | 560 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 560 | _ U |
| 541-73-1 | 1,3-Dichlorobenzene | 840 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 840 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 840 | U |

| FIELD I |
|---------|
|---------|

| Lab Name: | FMETL | | | NJDEP# 13461 | ТВ |
|----------------|----------|---------|------------------|--------------------|-------------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: |
| Matrix: (soil/ | water) | SOIL | | Lab Sample ID: | 3829.07 |
| Sample wt/v | ol: | 10.0 | (g/ml) G | Lab File ID: | V04537.D |
| Level: (low/i | med) | MED | | Date Received: | 08/26/98 |
| % Moisture: | not dec. | 0 | | Date Analyzed: | 09/02/98 |
| GC Column: | Rtx50 | 2.2 ID: | <u>0.25</u> (mm) | Dilution Factor: | 1.0 |
| Soil Extract ' | Volume: | 25000 | (of) | Soil Aliquot Volu | ime: 50 (ul |

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-------|---|
| 107028 | Acrolein | 1800 | U |
| 107131 | Acrylonitrile | 1800 | U |
| 75650 | tert-Butyl alcohol | 3200 | U |
| 1634044 | Methyl-tert-Butyl ether | 750 | U |
| 108203 | Di-isopropyl ether | 500 | U |
| | Dichlorodifluoromethane | 1000 | U |
| 74-87-3 | Chloromethane | 250 | U |
| 75-01-4 | Vinyl Chloride | 750 | U |
| 74-83-9 | Bromomethane | 500 | U |
| 75-00-3 | Chloroethane | 750 | U |
| 75-69-4 | Trichlorofluoromethane | 500 | U |
| 75-35-4 | 1,1-Dichloroethene | 250 | U |
| 67-64-1 | Acetone | 500 | U |
| 75-15-0 | Carbon Disulfide | 250 | 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 | J |
| | cis-1,2-Dichloroethene | 250 | ט |
| 67-66-3 | Chloroform | 250 | ט |
| 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 | Ū |

FIELD ID.

| Lab Name: | FMETL | | | NJDEP # 13461 | IB |
|-----------------|----------|---------|------------------|--------------------|-------------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: |
| Matrix: (soil/w | vater) | SOIL | | Lab Sample ID: | 3829.07 |
| Sample wt/vo | ol: | 10.0 | (g/ml) <u>G</u> | _ Lab File ID: | V04537.D |
| Level: (low/n | ned) | MED | | Date Received: | 08/26/98 |
| % Moisture: r | not dec. | 0 | | Date Analyzed: | 09/02/98 |
| GC Column: | Rtx50 | 2.2 ID: | <u>0.25</u> (mm) | Dilution Factor: | 1.0 |
| Soil Extract V | olume: | 25000 | (uL) | Soil Aliquot Volu | ıme: 50 (uL |

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

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

| | | | | | | | VDI 1700 | |
|----------------|----------|---------|------------------|-----------------|------------|-------------|--------------|-------------|
| Lab Name: | FMETL | | | NJDEP# | 13461 | [| VBLK93 | · |
| Project: | 980001 | | Case No.: 3829 | Location: | B.2707 | SDC | 3 No.: | |
| Matrix: (soil/ | water) | SOIL | | Lab | Sample II | D: <u>V</u> | BLK93 | _ |
| Sample wt/v | ol: | 10.0 | (g/ml) G | Lab | File ID: | V | 04524.D | _ |
| Level: (low/ | med) | MED | | Date | e Receive | d: <u>0</u> | 8/26/98 | |
| % Moisture: | not dec. | 0 | | Date | e Analyze | d: <u>0</u> | 9/02/98 | |
| GC Column: | Rtx50 | 2.2 ID: | <u>0.25</u> (mm) | Dilu | tion Facto | r: <u>1</u> | .0 | |
| Soil Extract | Volume: | 25000 | (uL) | Soil | Aliquot Vo | olume | e: <u>50</u> | _ (uL) |
| | | | | CONCENTRATI | ON UNIT | S: | | |
| Number TIC | s found: | 0 | | (ug/L or ug/Kg) | UG/K | G | | |
| CAS NO. | | COMP | OUND | | RT | EST. | . CONC. | Q |

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID.

| Lab Name: | FMETL | · | NJDEP# 13 | 3461 | _ A | |
|----------------|----------|--------------------------|-----------------|-------------|----------------|--------|
| Project: | 980001 | Case No.: 3829 | Location: | B.2707 S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | Lab S | ample ID: | 3829.01 | _ |
| Sample wt/ve | ol: | 10.8 (g/ml) G | Lab F | ile ID: | V04531.D | - |
| Level: (low/r | ned) | MED | Date F | Received: | 08/26/98 | _ |
| % Moisture: | not dec. | 9.02 | Date / | Analyzed: | 09/02/98 | _ |
| GC Column: | Rtx50 | 2.2 ID: <u>0.25</u> (mm) | Dilutio | n Factor: | 1.0 | _ |
| Soil Extract \ | Volume: | 25000 (uL) | Soil A | liquot Volu | ime: <u>50</u> | _ (uL) |
| | | | CONCENTRATIO | N UNITS: | | |
| Number TIC | s found: | 0 | (ug/L or ug/Kg) | UG/KG | | |
| CAS NO. | | COMPOUND | F | RT E | ST. CONC. | Q |

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| 1 | _ | _ | _ | | |
|---|---|-------|---|------|--|
| ı | | | В | | |

FIELD ID.

| | | | | • | 1 | В | ı |
|----------------|----------|-------------|--------------|---------------------|-----------------|--------------|------|
| Lab Name: | FMETL | | | NJDEP # 13461 | L | | |
| Project: | 980001 | Cas | se No.: 3829 | Location: B.2707 | SDG | No.: | |
| Matrix: (soil/ | water) | SOIL | _ | Lab Sample I | D: 38 | 29.02 | |
| Sample wt/ve | ol: | 12.1 | (g/ml) G | Lab File ID: | V |)4532.D | |
| Level: (low/ | med) | MED | _ | Date Receive | ed: <u>08</u> | 3/26/98 | |
| % Moisture: | not dec. | 12.24 | | Date Analyze | d: <u>09</u> | 0/02/98 | |
| GC Column: | Rtx50 | 2.2 ID: 0.2 | 25 (mm) | Dilution Factor | or: <u>1.</u> 0 | 0 | |
| Soil Extract | Volume: | 25000 | _ (uL) | Soil Aliquot V | olume/ | e: <u>50</u> | (uL) |
| | • | | · c | ONCENTRATION UNIT | S: | | • |
| | | | h | ıg/L or ug/Kg) UG/ł | (G | | |
| Number TIC | s found: | 1 | | | | | |

| | | | • | |
|---------|---------------------|-------|------------|---|
| CAS NO. | COMPOUND | RT | EST. CONC. | Q |
| 1. | unknown hydrocarbon | 14.24 | 1500 | J |

| FI | EL | .D | ID | |
|----|----|----|----|--|
| | | | | |
| | | | | |

| Lab Name: | FMETL | | NJDEP # 13461 | |
|----------------|----------|-------------------------|--------------------------------|----------------|
| Project: | 980001 | Case No.: 3 | 3829 Location: B.2707 SDG No.: | · |
| Matrix: (soil/ | water) | SOIL | Lab Sample ID: 3829.03 | |
| Sample wt/v | ol: | 11.0 (g/ml) | G Lab File ID: V04533.D | |
| Level: (low/ | med) | MED | Date Received: 08/26/98 | |
| % Moisture: | not dec. | 8.25 | Date Analyzed: 09/02/98 | _ _ |
| GC Column: | Rtx50 | 2.2 ID: <u>0.25</u> (mr | m) Dilution Factor: 1.0 | |
| Soil Extract | Volume: | 25000 (uL) | Soil Aliquot Volume: 50 | (uL) |
| | | | CONCENTRATION UNITS: | |
| Number TIC | s found: | <u> </u> | (ug/L or ug/Kg) <u>UG/KG</u> | |
| CAS NO. | | COMPOUND | RT EST. CONC. | Q |

| LIEF | J. | ĮŲ, | |
|------|----|-----|-------|
| | | | |
| | | | _ |
| | | | |

| Lab Name: | FMETL | | NJDEP # 13461 | D | |
|----------------|----------|-------------------|--|---------------|-----|
| Project: | 980001 | Case No.: 382 | | DG No.: | |
| Matrix: (soil/ | water) | SOIL | Lab Sample ID: | 3829.04 | |
| Sample wt/v | ol: | 11.7 (g/ml) G | Lab File ID: | V04534.D | |
| Level: (low/r | med) | MED | Date Received: | 08/26/98 | |
| % Moisture: | not dec. | 3.74 | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx50 | 2.2 ID: 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract | Volume: | 25000 (uL) | Soil Aliquot Volu | me: <u>50</u> | (uL |
| Number TIC | s found: | 0 | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | | |
| CAS NO. | | COMPOUND | RT ES | ST, CONC. | Q |

| - | FIELD ID. | • |
|---|-----------|-------|
| | E | _ |

| Lab Name: | FMETL | | NJDEP# 13 | 3461 | | |
|----------------|---------------|-----------------------|-----------------|-------------|---------------|------|
| Project: | 980001 | Case No.: 38 | 29 Location: E | B.2707 SI | DG No.: | |
| Matrix: (soil/ | water) S | SOIL | Lab Sa | ample ID: | 3829.05 | _ |
| Sample wt/v | ol: <u>1</u> | 10.4 (g/ml) <u>G</u> | Lab Fi | ile ID: | V04535.D | _ |
| Level: (low/ | med) <u>M</u> | MED | Date F | Received: | 08/26/98 | |
| % Moisture: | not dec. 1 | 11.99 | Date A | Analyzed: | 09/02/98 | |
| GC Column: | Rtx502.2 | 2 ID: <u>0.25</u> (mm |) Dilutio | n Factor: | 1.0 | _ |
| Soil Extract | Volume: 2 | 5000 (uL) | Soil A | liquot Volu | me: <u>50</u> | (uL) |
| | | | CONCENTRATIO | N UNITS: | | |
| Number TiC | s found: | 0 | (ug/L or ug/Kg) | UG/KG | | |
| CAS NO. | | COMPOUND | F | RT ES | ST. CONC. | Q |

TENTATIVELY IDENTIFIED COMPOUNDS

| FIEL | D ID. |
|------|-------|
|------|-------|

| Lab Name: | FMETL | | NJDEP# 13461 | DUP | |
|----------------|----------|--------------------------|--|---------------|------|
| Project: | 980001 | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | Lab Sample ID: | 3829.06 | |
| Sample wt/ve | ol: | 10.0 (g/ml) G | Lab File ID: | V04536.D | |
| Level: (low/r | med) | MED | Date Received: | 08/26/98 | |
| % Moisture: | not dec. | 11.33 | Date Analyzed: | 09/02/98 | - |
| GC Column: | Rtx50 | 2.2 ID: <u>0.25</u> (mm) | Dilution Factor: | 1.0 | |
| Soil Extract | Volume: | 25000 (uL) | Soil Aliquot Volu | me: <u>50</u> | (uL) |
| Number TIC | s found: | ·0 | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | | |
| CAS NO. | | COMPOUND | RT ES | ST. CONC. | Q |

| FIEL | DID. |
|------|------|
|------|------|

| Lab Nissass | CAACTI | | N IDED # 40404 | TB | - [|
|----------------|----------|-------------------|--|----------------|-------------|
| Lab Name: | FMETL | | NJDEP# <u>13461</u> | _ L | |
| Project: | 980001 | Case No.: 382 | 9 Location: <u>B.2707</u> S | DG No.: | |
| Matrix: (soil/ | water) | SOIL | Lab Sample ID: | 3829.07 | |
| Sample wt/ve | ol: | 10.0 (g/ml) G | Lab File ID: | V04537.D | _ |
| Level: (low/r | med) | MED | Date Received: | 08/26/98 | _ |
| % Moisture: | not dec. | 0 | Date Analyzed: | 09/02/98 | _ |
| GC Column: | Rtx50 | 2.2 ID: 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract \ | Volume: | 25000 (uL) | Soil Aliquot Volu | me: <u>50</u> | _ (uL) |
| Number TIC | s found: | 0 | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | | |
| CAS NO. | | COMPOUND | RT ES | ST. CONC. | Q |

| FIELD ID. | • |
|-------------|----------|
| | |
| E | : |

| Lab Name: | FMETL | | | NJDEP# 13461 | _ _ |] |
|----------------------|----------|---------|-----------------|--------------------|------------|----------|
| Project: | 980001 | | Case No.: 3829 | Location: B.2707 S | DG No.: | |
| Matrix: (soil/v | vater) | SOIL | | Lab Sample ID: | 3829.05 | |
| Sample wt/vo | ol: | 10.4 | (g/ml) <u>G</u> | Lab File ID: | V04535.D | |
| Level: (low/n | ned) | MED | | Date Received: | 08/26/98 | - |
| % Moisture: r | not dec. | 11.99 | | Date Analyzed: | 09/02/98 | |
| GC Column: | Rtx502 | 2.2 ID: | 0.25 (mm) | Dilution Factor: | 1.0 | |
| Soil Extract Volume: | | 25000 | (uL) | Soil Aliquot Volu | ıme: 50 | _ (uL) |

CONCENTRATION UNITS:

| CAS NO. | COMPOUND (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-------|---|
| 107028 | Acrolein | 1900 | U |
| 107131 | Acrylonitrile | 1900 | Ū |
| 75650 | tert-Butyl alcohol | 3600 | U |
| 1634044 | Methyl-tert-Butyl ether | 820 | U |
| 108203 | Di-isopropyl ether | 550 | U |
| | Dichlorodifluoromethane | 1100 | U |
| 74-87-3 | Chloromethane | 270 | U |
| 75-01-4 | Vinyl Chloride | 820 | U |
| 74-83-9 | Bromomethane | 550 | C |
| 75-00-3 | Chloroethane | 820 | U |
| 75-69-4 | Trichlorofluoromethane | 550 | U |
| 75-35-4 | 1,1-Dichloroethene | 270 | U |
| 67-64-1 | Acetone | 550 | U |
| 75-15-0 | Carbon Disulfide | 270 | U |
| 75-09-2 | Methylene Chloride | 550 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 550 | U |
| 75-35-3 | 1,1-Dichloroethane | 270 | U |
| 108-05-4 | Vinyl Acetate | 820 | U |
| 78-93-3 | 2-Butanone | 820 | 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 | 550 | U |
| 71-43-2 | Benzene | 270 | U |
| 107-06-2 | 1,2-Dichloroethane | 550 | 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 | 550 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 270 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 550 | U |
| 108-88-3 | Toluene | 270 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 550 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 550 | U |
| 127-18-4 | Tetrachloroethene | 270 | U |
| 591-78-6 | 2-Hexanone | 550 | U |
| 126-48-1 | Dibromochloromethane | 550 | U |
| 108-90-7 | Chlorobenzene | 270 | U |
| 100-41-4 | Ethylbenzene | 550 | U |

LP